

Module catalogue SuSe 25 and WiSe 25/26

M.Sc. Business Administration



Subject to change.

It is possible that changes communicated through the School's website are not immediately entered into the module catalogue

Table of Contents

TABLE OF CONTENTS	2
MODULZUORDNUNG	8
DEFINITIONS	26
PREAMBLE	27
MODULE	28
MODULBEREICH A: WIRTSCHAFTSWISSENSCHAFTLICHE METHODEN	28
<i>Fundamentals of Business Analytics</i>	28
<i>Business Research Methods</i>	30
<i>Multivariate Verfahren</i>	32
<i>Advanced Business Research Analytics and Research Methods</i>	34
MODULBEREICH B: MAJOR ACCOUNTING AND TAX.....	36
<i>Advanced International Accounting</i>	36
<i>Corporate Valuation (Unternehmensbewertung)</i>	38
<i>Immobilien & Steuern</i>	40
<i>International Accounting</i>	42
<i>International Taxation</i>	44
<i>Rechtsformwahl und M&A</i>	46
<i>Reporting of Digital Business Models</i>	48
<i>Sustainability Reporting</i>	50
<i>Tax Effects</i>	52
<i>Transfer Pricing</i>	54
<i>Value-based Management</i>	56
<i>Workshop Unternehmensbewertung</i>	58
<i>Master Thesis Colloquium</i>	60
<i>Master Thesis Colloquium</i>	62
<i>Seminar in Accounting and Tax</i>	64
<i>Seminar in Accounting and Tax (Prof. Dr. Obermaier)</i>	66
<i>Seminar in Accounting and Tax (Prof. Dr. Diller)</i>	68
<i>Seminar in Accounting and Tax (Prof. Dr. Pelger)</i>	70
<i>Data Science in Accounting and Tax</i>	72
MODULBEREICH B: MAJOR DATA SCIENCE	74
<i>Advanced Data Analytics</i>	74
<i>Artificial Intelligence and Optimization</i>	76
<i>Combinatorial Optimization</i>	78
<i>Computational Statistics – Regression in R</i>	80
<i>Computational Statistics – Statistical Learning in R</i>	82
<i>Decision Making Under Uncertainty</i>	84
<i>Deep Learning and Text Analysis in Finance</i>	86
<i>Econometric Methods</i>	88
<i>Heuristics and Approximation Methods</i>	90
<i>Network Optimization</i>	92
<i>Paneldatenanalyse</i>	94
<i>Scientific Computing and Digital Reporting with Python</i>	96
<i>Topics in Applied Econometrics</i>	98
<i>Master Thesis Colloquium</i>	100
<i>Seminar in Data Science</i>	102
<i>Seminar in Data Science (Prof. Dr. Haupt, Prof. Dr. Schnurbus)</i>	104
<i>Seminar in Data Science (Prof. Dr. Goerigk)</i>	106
<i>Seminar in Data Science (Prof. Dr. Kellner)</i>	108
MODULBEREICH B: MAJOR ENTREPRENEURSHIP.....	110

<i>5-Euro-Business</i>	110
<i>Advanced Strategic Sensitivity and Digitalization</i>	113
<i>V Branding and Marketing Communications</i>	115
<i>Consumer Behavior</i>	117
<i>Entwicklung von Managementfähigkeiten</i>	122
<i>Ethical Entrepreneurship and Stakeholder Analysis</i>	125
<i>Fundamentals of Digitalization and Digital Trends</i>	128
<i>Intercultural Entrepreneurship</i>	130
<i>Network Management in Startup Processes</i>	132
<i>Organizational Behavior und Unternehmensführung</i>	135
<i>Organizations and Innovation Strategy</i>	138
<i>Price Management</i>	140
<i>Services Marketing</i>	142
<i>Strategy for High-Tech Startups</i>	144
<i>Unternehmensverfassung</i>	146
<i>Book of the Year</i>	149
<i>Planspiel Scale Up</i>	152
<i>Master Thesis Colloquium</i>	154
<i>Master Thesis Colloquium</i>	156
<i>Master Thesis Colloquium</i>	158
<i>Seminar in Entrepreneurship</i>	160
<i>Seminar in Entrepreneurship (Prof. Dr. Häussler)</i>	162
<i>Seminar in Entrepreneurship (Prof. Dr. Bort)</i>	164
<i>Seminar in Entrepreneurship (Prof. Dr. Fiedler)</i>	166
<i>Seminar in Entrepreneurship (Prof. Dr. Jungwirth)</i>	168
<i>Seminar in Entrepreneurship (Prof. Dr. König)</i>	170
<i>Seminar in Entrepreneurship (Prof. Dr. Schumann)</i>	172
<i>Seminar in Entrepreneurship (Prof. Dr. Totzek)</i>	174
<i>Data Science in Entrepreneurship</i>	176
MODULBEREICH B: MAJOR FINANCE	178
<i>Empirical Finance</i>	180
<i>Environmental, Social and Corporate Governance Analytics</i>	182
<i>Financial Data Analytics and Machine Learning</i>	184
<i>Financial Engineering and Structured Finance</i>	186
<i>Finanzcontrolling</i>	188
<i>Quantitatives Risikomanagement</i>	190
<i>Green and Sustainable Finance</i>	192
<i>Master-Workshop Finance and Banking</i>	198
<i>Master Thesis Colloquium</i>	200
<i>Master Thesis Colloquium</i>	202
<i>Seminar in Finance</i>	204
<i>Seminar in Finance (Prof. Dr. Wagner)</i>	206
<i>Seminar in Finance (Prof. Dr. Entrop)</i>	208
<i>Seminar in Finance (Prof. Dr. Kellner)</i>	210
<i>Data Science in Finance</i>	212
MODULBEREICH B: MAJOR INFORMATION SYSTEMS AND DIGITAL BUSINESS.....	214
<i>Advanced IT-Security</i>	214
<i>Advanced Topics in Data Science</i>	216
<i>AI-Based Business Information Systems</i>	218
<i>Business Intelligence & Analytics Systems</i>	220
<i>Deep Learning and Text Analysis in Finance</i>	222
<i>Digital Markets and Online Platforms</i>	224
<i>Financial Data Analytics and Machine Learning</i>	226
<i>IT Architecture Management</i>	228
<i>IT-Services und IT-Servicemanagement</i>	230
<i>Management of Information Security and Privacy</i>	232

<i>Principles of AI Engineering</i>	234
<i>Responsible Machine Learning</i>	236
<i>Scientific Computing and Digital Reporting with Python</i>	238
<i>Strategic IT-Management (IT-Management für Fortgeschrittene)</i>	240
<i>Strategies in the Software Industry</i>	242
<i>Governance of Platforms and Ecosystems</i>	244
<i>Master Thesis Colloquium</i>	246
<i>Master Thesis Colloquium</i>	248
<i>Master Thesis Colloquium</i>	250
<i>Seminar in Information Systems and Digital Business</i>	252
<i>Seminar in Information Systems and Digital Business (Prof. Dr. Gnewuch)</i>	254
<i>Seminar in Information Systems and Digital Business (Prof. Dr. Widjaja)</i>	256
<i>Seminar in Information Systems and Digital Business (Prof. Dr. Krämer)</i>	258
<i>Seminar in Information Systems and Digital Business (Prof. Dr. Gerlach)</i>	260
<i>Data Science in Information Systems and Digital Business</i>	262
MODULBEREICH B: MAJOR MANAGEMENT AND STRATEGY	264
<i>Advanced Strategic Sensitivity and Digitalization</i>	264
<i>B2B Marketing and Sales Management</i>	266
<i>Customer Relationship Management</i>	268
<i>Empirische Methoden für Masterstudierende im Bereich Management, Personal und Information</i>	270
<i>Entwicklung von Managementfähigkeiten</i>	272
<i>Fundamentals of Digitalization and Digital Trends</i>	275
<i>Governance – Compliance und Governance Kodex (PBL)</i>	277
<i>International Cooperation and Networks</i>	280
<i>Managing and Leading Strategic Innovation and Change</i>	282
<i>Organization Theory and Sustainable Leadership</i>	284
<i>Organizational Behavior und Unternehmensführung</i>	286
<i>Organizations and Innovation Strategy</i>	289
<i>Strategy for High-Tech Startups</i>	291
<i>Strategy and Innovation in Healthcare</i>	293
<i>Practical Course: Governance</i>	295
<i>Book of the Year</i>	298
<i>Planspiel Scale Up</i>	301
<i>Wissenschaftliches Arbeiten</i>	303
<i>Master Thesis Colloquium</i>	305
<i>Master Thesis Colloquium</i>	307
<i>Master Thesis Colloquium</i>	309
<i>Seminar in Management and Strategy</i>	311
<i>Seminar in Management and Strategy (Prof. Dr. Fiedler)</i>	313
<i>Seminar in Entrepreneurship (Prof. Dr. Häussler)</i>	315
<i>Seminar in Management and Strategy (Prof. Dr. Bort)</i>	317
<i>Seminar in Management and Strategy (Prof. Dr. Häussler)</i>	319
<i>Seminar in Management and Strategy (Prof. Dr. Jungwirth)</i>	321
<i>Seminar in Management and Strategy (Prof. Dr. König)</i>	323
<i>Seminar in Management and Strategy (Prof. Dr. Schumann)</i>	325
<i>Seminar in Management and Strategy (Prof. Dr. Totzek)</i>	327
<i>Data Science in Management and Strategy</i>	329
MODULBEREICH B: MINOR ARTIFICIAL INTELLIGENCE	331
<i>Advanced Data Analytics</i>	331
<i>Artificial Intelligence and Optimization</i>	333
<i>Computational Statistics – Statistical Learning in R</i>	335
<i>Deep Learning and Text Analysis in Finance</i>	337
<i>Scientific Computing and Digital Reporting with Python</i>	339
<i>Topics in Applied Econometrics</i>	341

<i>Advanced Artificial Intelligence</i>	343
MODULBEREICH B: MINOR BUSINESS TAXATION	345
<i>Allgemeines Steuerrecht I+II</i>	345
<i>Immobilien & Steuern</i>	347
<i>International Taxation</i>	349
<i>Rechtsformwahl und M&A</i>	351
<i>Tax Effects</i>	353
<i>Transfer Pricing</i>	355
<i>Advanced Business Taxation</i>	357
MODULBEREICH B: MINOR DATA SCIENCE	359
<i>Advanced Data Analytics</i>	359
<i>Combinatorial Optimization</i>	361
<i>Computational Statistics – Regression in R</i>	363
<i>Computational Statistics – Statistical Learning in R</i>	365
<i>Decision Making Under Uncertainty</i>	367
<i>Econometric Methods</i>	369
<i>Paneldatenanalyse</i>	371
<i>Topics in Applied Econometrics</i>	373
<i>Advanced Data Science</i>	375
MODULBEREICH B: MINOR DIGITAL MANAGEMENT AND STRATEGY.....	377
<i>Advanced Strategic Sensitivity and Digitalization</i>	377
<i>Entwicklung von Managementfähigkeiten</i>	379
<i>Fundamentals of Digitalization and Digital Trends</i>	382
<i>Organizational Behavior und Unternehmensführung</i>	384
<i>Organizations and Innovation Strategy</i>	387
<i>Reporting of Digital Business Models</i>	389
<i>Strategy for High-Tech Startups</i>	391
<i>Sustainability by Digitalization</i>	393
<i>Advanced Digital Management</i>	395
MODULBEREICH B: MINOR ECONOMICS	397
<i>Advanced International Economics</i>	397
<i>Advanced International Trade</i>	400
<i>Advanced Macroeconomics</i>	402
<i>Advanced Microeconomics (Game Theory)</i>	404
<i>Behavioral Game Theory</i>	406
<i>Behavioral Public Economics</i>	408
<i>Economics of Corruption</i>	411
<i>Economics of Education</i>	413
<i>Fundamentals of International Trade</i>	417
<i>Growth, Inequality and Poverty</i>	419
<i>Health, Development and Public Policy</i>	422
<i>International Monetary Economics</i>	424
<i>Natural and Field Experiments</i>	426
<i>Neue Standorttheorien – Regional- und Stadtökonomik in Theorie und Praxis</i>	429
<i>Population Economics</i>	431
<i>Recent Topics in International Trade</i>	434
<i>Seminar in Development Economics</i>	436
<i>Seminar in Public Economics</i>	438
<i>Advanced Economics</i>	440
<i>Advanced Economics</i>	442
MODULBEREICH B: MINOR ENTREPRENEURSHIP.....	445
<i>5-Euro-Business</i>	445
<i>Fundamentals of Digitalization and Digital Trends</i>	448
<i>Intercultural Entrepreneurship</i>	450
<i>Network Management in Startup Processes</i>	452

<i>Ethical Entrepreneurship and Stakeholder Analysis</i>	455
<i>Organizations and Innovation Strategy</i>	458
<i>Strategy for High-Tech Startups</i>	460
<i>Advanced Entrepreneurship</i>	462
MODULBEREICH B: MINOR FINANCE	464
<i>Empirical Finance</i>	466
<i>Financial Data Analytics and Machine Learning</i>	468
<i>Financial Engineering and Structured Finance</i>	470
<i>Finanzcontrolling</i>	472
<i>Advanced Finance</i>	474
MODULBEREICH B: MINOR INFORMATION SYSTEMS AND DIGITAL BUSINESS.....	476
<i>AI-Based Business Information Systems</i>	476
<i>Business Intelligence & Analytics Systems</i>	478
<i>Digital Markets and Online Platforms</i>	480
<i>IT Architecture Management</i>	482
<i>IT-Services und IT-Servicemanagement</i>	484
<i>Management of Information Security and Privacy</i>	486
<i>Strategic IT-Management (IT-Management für Fortgeschrittene)</i>	488
<i>Strategies in the Software Industry</i>	490
<i>Advanced Information Systems and Digital Business</i>	492
MODULBEREICH B: MINOR MARKETING	494
<i>B2B Marketing and Sales Management</i>	494
<i>V Branding and Marketing Communications</i>	496
<i>Consumer Behavior</i>	498
<i>Customer Relationship Management</i>	500
<i>Marketing Research</i>	502
<i>V oder SE Practical Course in Marketing</i>	504
<i>Price Management</i>	506
<i>Services Marketing</i>	508
<i>Advanced Marketing</i>	510
MODULBEREICH B: MINOR OPTIMIZATION.....	512
<i>Artificial Intelligence and Optimization</i>	512
<i>Combinatorial Optimization</i>	514
<i>Data Science in Operations Management</i>	516
<i>Decision Making Under Uncertainty</i>	518
<i>Heuristics and Approximation Methods</i>	520
<i>Network Optimization</i>	522
<i>Advanced Optimization</i>	524
MODULBEREICH B: MINOR REPORTING AND CONTROLLING.....	526
<i>Advanced International Accounting</i>	526
<i>Corporate Valuation (Unternehmensbewertung)</i>	528
<i>International Accounting</i>	530
<i>Reporting of Digital Business Models</i>	532
<i>Sustainability Reporting</i>	534
<i>Value-based Management</i>	536
<i>Workshop Unternehmensbewertung</i>	538
<i>Advanced Reporting and Controlling</i>	540
<i>Advanced Reporting and Controlling – Accounting for financial instruments according to IFRS</i>	542
MODULBEREICH B: MINOR SUSTAINABILITY.....	544
<i>Environmental, Social and Corporate Governance Analytics</i>	544
<i>Green and Sustainable Finance</i>	546
<i>Organization Theory and Sustainable Leadership</i>	548
<i>Sustainability and Business Ethics: Ethische Konzepte für nachhaltiges Wirtschaften</i>	550
<i>Sustainability and Business Ethics: Shaping Transformation</i>	552
<i>Sustainability by Digitalization</i>	554
<i>Sustainability Reporting</i>	556

<i>Value-based Management</i>	558
<i>Advanced Sustainability</i>	560
MODULE FÜR M.SC. BUSINESS ADMINISTRATION VERSION 1	562
25160 <i>EU and US Banking and Financial Law</i>	562
31824 <i>Master-Seminar Real Estate Finance</i>	564
32430 <i>Evaluation of Development Policies</i>	566
32870 <i>Interactive Innovation and Public Policy Workshop</i>	568
35857 <i>Economics of Crime</i>	570
36328 <i>Lab and Field Experiments: Corruption, Conflict & Cooperation</i>	573
37040 <i>The Empirics of International Trade</i>	575
37507 <i>Data Analysis in R for Information Systems Research</i>	577
37509 <i>Cloud Anwendungsentwicklung und Applikationstest</i>	579
38566 <i>Projektseminar II in Strategie, Innovation, und Entrepreneurship</i>	581
38611 <i>Managerial Communication</i>	583
39999 <i>Masterkurs: Unternehmensführung - Unternehmensverfassung - Corporate Governance</i>	585
48500 <i>Interkulturelles Management</i>	588
5622V <i>Software-Sicherheit / System Security</i>	590
5724V <i>Safety and Security of Critical Infrastructures (ehemalig: Sicherheit in Netzen)</i>	593
5771V <i>Multimedia Databases</i>	596
5772 <i>Data Modelling and Data Processing in the Internet of Things</i>	598
5777 <i>Technologien zur Wahrung der Privatsphäre in Informationssystemen / Privacy- Preservation Technologies in Information Systems</i>	600
5845 <i>Search-Based Software Engineering</i>	602
5874V <i>IT-Sicherheitsrecht</i>	604
5881 <i>Privacy Enhancing Techniques</i>	606
5942 <i>Network Science</i>	608
5970V <i>Scaling Database Systems</i>	610
6061 <i>Introduction to Deep Learning</i>	612
6090 <i>Security of Computer and Embedded Systems / Sicherheit von Rechnern und eingebetteten Systemen</i>	614
6123 <i>Deep Learning for Natural Language and Code</i>	617
6206 <i>Data on the Web</i>	619
6210 <i>Semantic Data Integration</i>	621
5973 <i>SQL for Data Science</i>	623
<i>Seminar in Development Economics</i>	625

Modulzuordnung

Modulbereich A: Wirtschaftswissenschaftliche Methoden

Module number	Module / Course name	Coordinator	Availability
Wahlpflichtmodule			
V+Ü Fundamentals of Business Analytics			
	Fundamentals of Business Analytics	Haupt, Totzek, Schnurbus, Goerigk	WiSe + SuSe
V Business Research Methods			
	Business Research Methods	Entrop, Gerlach, Kellner, Obermaier, Pelger	WiSe + SuSe
V+Ü Multivariate Verfahren			
	Multivariate Verfahren	Schnurbus	WiSe

Überdies kann eine Veranstaltung aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Advanced Business Research Analytics and Research Methods			

Modulbereich B: Majors

Modulbereich B: Major Accounting and Tax

Wahlpflichtmodule			
V+Ü Advanced International Accounting			
	Advanced International Accounting	Pelger	SuSe
V+Ü Corporate Valuation			
	Corporate Valuation (Unternehmensbewertung)	Obermaier	WiSe
V+Ü Financial Statement Analysis			
	Tba		
V+Ü Immobilien & Steuern			
	Immobilien und Steuern	Diller	SoSe
V+Ü International Accounting			
	International Accounting	Pelger	WiSe
V+Ü International Taxation			
	International Taxation (ehemals: internationale Unternehmensbesteuerung)	Diller	WiSe
V+Ü Rechtsformwahl und M&A			
	Rechtsformwahl und M & A – Steuerliche Aspekte	Diller	SoSe

V Reporting of Digital Business Models			
	Reporting of Digital Business Models	Pelger	SuSe (not in SuSe 25)
V Sustainability Reporting			
	Sustainability Reporting	Pelger	WiSe
V+Ü Tax Effects			
	Tax Effect (ehemals: Steuerplanung und Steuerwirkung)	Diller	SuSe
V Transfer Pricing			
	Transfer Pricing	Obermaier	WiSe
V+Ü Value-based Management			
	Value-based Management (ehemals: Wertorientiertes Controlling)	Obermaier	SoSe
V Workshop Unternehmensbewertung			
	Workshop Unternehmensbewertung	Obermaier	SoSe
KO Master Thesis Colloquium			
	Master Colloquium	Diller	WiSe + SuSe

Überdies können bis zu drei Veranstaltungen aus dem folgenden Bereich eingebracht werden:

SE Seminar in Accounting and Tax			
	Master Seminar at the Chair of Business Economics, Accounting and Control	Obermaier	WiSe + SuSe
	Tax Seminar Master	Diller	WiSe
	Seminar Accounting and Auditing	Pelger	WiSe + SuSe (not in SuSe 25 and 26)

Des Weiteren können bis zu zwei Veranstaltungen aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Data Science in Accounting and Tax			
	All courses from the major in Data Science are eligible.		

Modulbereich B: Major Data Science

Wahlpflichtmodule			
V+Ü Advanced Data Analytics			
	Advanced Data Analytics	Haupt, Fritsch	WiSe
V+Ü Approximate Dynamic Programming (Reinforcement Learning)			
	Tba		
V+Ü Artificial Intelligence and Optimization			
	Artificial Intelligence and Optimization	Goerigk	WiSe
V+Ü Combinatorial Optimization			
	Combinatorial Optimization	Goerigk	SuSe

V Computational Statistics - Regression in R			
	Computational Statistics – Regression in R	Schnurbus	WiSe (+SuSe)
V Computational Statistics – Statistical Learning in R			
	Computational Statistics – Statistical Learning in R	Schnurbus	SuSe (+WiSe)
V+Ü Data Science in Operations Management			
	Tba		
V+Ü Decision Making under Uncertainty			
	Decision Making under Uncertainty	Goerigk	SuSe
V+Ü Deep Learning and Text Analysis in Finance			
	Deep Learning and Text Analysis in Finance	Kellner	WiSe
V+Ü Econometric Methods			
	Econometric Methods	Haupt	WiSe
V+Ü Heuristics and Approximation Methods			
	Heuristics and Approximation Methods	Goerigk	Irregular
V+Ü Network Optimization			
	Network Optimization	Goerigk	Irregular
V+Ü Paneldatenanalyse			
	Paneldatenanalyse	Haupt, Fritsch	SoSe
V Practical Course: Advanced Topics in Management Science			
	Tba		
V+Ü Scientific Computing and Digital Reporting with Python			
	Scientific Computing and Digital Reporting with Python	Kellner	SuSe
V+Ü Topics in Applied Econometrics			
	Topics in Applied Econometrics	Haupt	SuSe
KO Master Thesis Colloquium			

Überdies können bis zu drei Veranstaltungen aus dem folgenden Bereich eingebracht werden:

SE Seminar in Data Science			
	Applied Statistics (Master Seminar)	Haupt, Schnurbus	SuSe
	Masterseminar in Business Analytics	Goerigk	SuSe, WiSe
	Master seminar: Machine Learning in Finance and Economics	Kellner	SuSe, WiSe

Modulbereich B: Major Entrepreneurship

Wahlpflichtmodule			
SE 5-Euro-Business			
	5-Euro-Business Wettbewerb (für Masterstudierende)	Häussler	Irregular

SE Advanced Strategic Sensitivity and Digitalization			
	Advanced Strategic Sensitivity and Digitalization	König	Irregular
V Branding and Marketing Communications			
	Produkt-, Marken und Kommunikationsmanagement	Totzek	Dreisemesterturnus
V Consumer Behavior			
	Konsumentenverhalten	Schumann	SoSe
SE Entrepreneurship Development Programme			
	Entrepreneurship Development Programme	Diekmann	SoSe
V Entwicklung von Managementfähigkeiten			
	Developing Management Skills	Fiedler	WiSe
V+Ü Ethical Entrepreneurship and Stakeholder Analysis			
	Ethical Entrepreneurship and Stakeholder Analysis	Jungwirth	SuSe
V Fundamentals of Digitalization and Digital Trends			
	Interdisciplinary Lecture Series for Master Students: Fundamentals of Digitalization and Digital Trends	König	SuSe
SE Intercultural Entrepreneurship			
	Intercultural Entrepreneurship – Québec-Bavaria	Barmeyer	Irregular
V Network Management in Startup Processes			
	Network Management in Startup Processes	Jungwirth	WiSe
V Organizational Behavior und Unternehmensführung			
	Organizational Behavior	Fiedler	SuSe
V+Ü oder SE Organizations and Innovation Strategy			
	Organizations and Innovation Strategy	Häussler, Figge	Irregular
V+Ü Price Management			
	Price Management	Totzek	Three-semester cycle
V Services Marketing			
	Services Marketing	Schumann	WiSe
V+Ü oder SE Strategy for High-Tech Startups			
	Strategy for High-Tech Startups	Häussler, Figge	SuSe
V Unternehmensverfassung			
	Practical Course: Governance	Jungwirth	SuSe
Book of the Year			
	Book of the Year	Jungwirth	SuSe
Planspiel Scale Up			
	Planspiel Scale Up	Jungwirth	WiSe
KO Master Thesis Colloquium			
	Master Colloquium in Organization, Technology Management, and Entrepreneurship	Häussler	WiSe + SuSe

	Masterkolloquium im Fach Internationales Management und Soziales Unternehmertum	Bort	WiSe + SuSe
--	---	------	-------------

Überdies können bis zu drei Veranstaltungen aus dem folgenden Bereich eingebracht werden:

SE Seminar in Entrepreneurship			
	Masterseminar in Organization, Technology Management and Entrepreneurship	Häussler	Irregular
	Masterseminar: Advances in International Management and Social Entrepreneurship	Bort	WiSe or SuSe
	Seminar in Management, People and Information	Fiedler	Irregular
	Masterseminar „Governance – Compliance“	Jungwirth	WiSe
	Theory and Methods in Strategy, Leadership, and Innovation Research	König	WiSe + SuSe
	Master Seminar Marketing & Innovation	Schumann	WiSe + SuSe
	Masterseminar Marketing	Totzek	WiSe oder SoSe

Des Weiteren können bis zu zwei Veranstaltungen aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Data Science in Entrepreneurship			
	All courses from the major in Data Science are eligible.		

Modulbereich B: Major Finance

Wahlpflichtmodule			
V+Ü Corporate Finance and Capital Markets			
	Corporate Finance and Capital Markets	Entrop	SuSe
V Empirical Finance			
	Empirical Finance	Perras, Kinateder	SuSe
V+Ü Environmental, Social and Corporate Governance Analytics			
	Environmental, Social and Corporate Governance Analytics	Kellner	WiSe
V+Ü Financial Data Analytics and Machine Learning			
	Financial Data Analytics and Machine Learning	Kellner	SuSe
V+Ü Financial Engineering and Structured Finance			
	Financial Engineering and Structured Finance	Entrop	WiSe
V+Ü Finanzcontrolling			
	Finanzcontrolling	Wagner	SoSe
V+Ü Quantitatives Risikomanagement			
	Quantitatives Risikomanagement (ehemals Finanzcontrolling II)	Wagner	WiSe
V Green and Sustainable Finance			
	Sustainable and Green Finance	Entrop	WiSe
V Mergers & Acquisitions: International Corporate Transactions			

	Mergers & Acquisitions: Internationale Unternehmenstransaktionen	Merkel	WiSe
V+Ü Quantitative Methods in Finance			
	Quantitative Methods in Finance	Entrop	WiSe + SuSe
V Workshop Finance and Banking			
	Master-Workshop Finance and Banking	Entrop	SuSe
KO Master Thesis Colloquium			
	Kolloquium für Masterarbeiten	Wagner	WiSe + SuSe

Überdies können bis zu drei Veranstaltungen aus dem folgenden Bereich eingebracht werden:

SE Seminar in Finance			
	Master-Seminar Nachhaltiges Finanzcontrolling	Wagner	WiSe + SuSe
	Master Seminar in Finance and Banking	Entrop	WiSe + SuSe
	Master seminar: Machine Learning in Finance and Economics	Kellner	WiSe + SuSe

Des Weiteren können bis zu zwei Veranstaltungen aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Data Science in Finance			
	All courses from the major in Data Science are eligible.		

Modulbereich B: Major Information Systems and Digital Business

Wahlpflichtmodule			
V+Ü Advanced Databases			
V+Ü Advanced IT-Security			
	Advanced IT Security	Posegga	WiSe
V+Ü Advanced Topics in Data Science			
	Advanced Topics in Data Science	Granitzer	Irregular
V+Ü AI-Based Business Information Systems			
	Artificial Intelligence (AI)-Based Business Information Systems	Gnewuch	WiSe
V+Ü Business Intelligence & Analytics Systems			
	Business Intelligence & Analytics Systems	Gnewuch	SuSe
V+Ü Deep Learning and Textanalyse in Finance			
	Deep Learning and Text Analysis in Finance	Kellner	WiSe
V+Ü Digital Markets and Online Platforms			
	Digital Markets and Online Platforms	Krämer	WiSe
V+Ü Digital Service Management			

V+Ü Financial Data Analytics and Machine Learning			
	Financial Data Analytics and Machine Learning	Kellner	SuSe
V+Ü Information Management			
V+Ü IT-Architecture Management			
	IT Architecture Management	Widjaja	SuSe
V+Ü IT-Services und IT-Servicemanagement			
	IT-Services und IT-Servicemanagement	Widjaja	WiSe (not in 25/26)
V+Ü Management of Information Security and Privacy			
	Management of Information Security and Privacy	Gerlach	WiSe
V+Ü Principles of AI Engineering			
	Principles of AI Engineering	Herbold	Irregular
V+Ü Responsible Machine Learning			
	Responsible Machine Learning	Lemmerich	SuSe
V+Ü Scientific Computing and Digital Reporting with Python			
	Scientific Computing and Digital Reporting with Python	Kellner	SuSe
V+Ü Strategic IT-Management (IT-Management für Fortgeschrittene)			
	Strategic IT Management	Widjaja	WiSe
V+Ü Strategies in the Software Industry			
	Strategies in the Software Industry	Gerlach	WiSe
Governance of Platforms and Ecosystems			
	Governance of Platforms and Ecosystems	Wipusanawan	Irregular
KO Master Thesis Colloquium			
	Master Colloquium: AI-Based Information Systems	Gnewuch	SuSe + WiSe
	Master Colloquium in Internet and Telecommunications Business	Krämer	SuSe + WiSe

Überdies können bis zu drei Veranstaltungen aus dem folgenden Bereich eingebracht werden:

SE Seminar in Information Systems and Digital Business			
	Masterseminar AI-Based Information Systems	Gnewuch	SuSe (+ WiSe)
	Masterseminar Business Information Systems	Widjaja	Irregular
	Master Seminar Telecommunications and Internet Business	Krämer	SuSe, WiSe
	Masterseminar Wirtschaftsinformatik Daten- und Informationsmanagement	Gerlach	WiSe

Des Weiteren können bis zu zwei Veranstaltungen aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Data Science in Information Systems and Digital Business			
---	--	--	--

	All courses from the major in Data Science are eligible.		
--	---	--	--

Modulbereich B: Major Management and Strategy

Wahlpflichtmodule			
SE Advanced Strategic Sensitivity and Digitalization			
	Advanced Strategic Sensitivity and Digitalization	König	Irregular
V B2B Marketing and Sales Management			
	B2B Marketing and Sales Management	Totzek	Three-semester cycle
V Corporate Strategy and Innovation			
V Customer Relationship Management			
	Customer Relationship Management (ehemals: Kundenmanagement)	Schumann	WiSe
V Empirische Methoden für Masterstudierende im Bereich Management, Personal und Information			
	Empirische Methoden für Masterstudierende im Bereich Management, Personal und Information	Fiedler	WiSe + SuSe
V Entwicklung von Managementfähigkeiten			
	Developing Management Skills	Fiedler	WiSe
V Fundamentals of Digitalization and Digital Trends			
	Interdisciplinary Lecture Series for Master Students: Fundamentals of Digitalization and Digital Trends	König	SuSe
V Governance – Compliance und Governance Kodex (PBL)			
	Practical Course: Compliance	Jungwirth	WiSe
V International Cooperation and Networks			
	International Cooperation and Networks	Bort	WiSe
V Managing and Leading Strategic Innovation and Change			
	Managing and Leading Strategic Innovation and Change	König	SuSe
V Organization Theory and Sustainable Leadership			
	Organization Theory and Sustainable Leadership	Bort	SuSe
V Organizational Behavior und Unternehmensführung			
	Organizational Behavior	Fiedler	SuSe
V+Ü oder SE Organizations and Innovation Strategy			
	Organizations and Innovation Strategy	Häussler, Figge	Irregular
V Strategisches Human Ressourcen Management			
V+Ü oder SE Strategy for High-Tech Startups			
	Strategy for High-Tech Startups	Häussler, Figge	SuSe
WS Strategy and Innovation in Healthcare			

	Strategy and Innovation in Healthcare	König	Irregular
Practical Course: Governance			
	Practical Course: Governance	Jungwirth	SuSe
Book of the year			
	Book of the year	Jungwirth	SuSe
Planspiel Scale Up			
	Planspiel Scale Up	Jungwirth	WiSe
KO Wissenschaftliches Arbeiten			
	Colloquium: Scholarly Writing and Research	Fiedler	WiSe + SuSe
KO Master Thesis Colloquium			
	Master Colloquium in Organization, Technology Management, and Entrepreneurship	Häussler	WiSe + SuSe
	Masterkolloquium im Fach Internationales Management und Soziales Unternehmertum	Bort	WiSe + SuSe

Überdies können bis zu drei Veranstaltungen aus dem folgenden Bereich eingebracht werden:

SE Seminar in Management and Strategy			
	Seminar in Management, People and Information	Fiedler	Irregular
	Masterseminar: Advances in International Management and Social Entrepreneurship	Bort	WiSe or SuSe
	Masterseminar in Organization, Technology Management and Entrepreneurship	Häussler	Irregular
	Masterseminar „Governance – Compliance“	Jungwirth	WiSe
	Theory and Methods in Strategy, Leadership, and Innovation Research	König	WiSe + SoSe
	Master Seminar Marketing & Innovation	Schumann	WiSe + SoSe
	Masterseminar Marketing	Totzek	WiSe oder SoSe

Des Weiteren können bis zu zwei Veranstaltungen aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Data Science in Management and Strategy			
	All courses from the major in Data Science are eligible.		

Modulbereich B: Minors

Modulbereich B: Minor Artificial Intelligence

Wahlpflichtmodule			
V+Ü Advanced Data Analytics			
	Advanced Data Analytics	Haupt, Fritsch	WiSe
V+Ü Approximate Dynamic Programming (Reinforcement Learning)			
	Tba		

V+Ü Artificial Intelligence and Optimization			
	Artificial Intelligence and Optimization	Goerigk	WiSe
V Computational Statistics – Statistical Learning in R			
	Computational Statistics – Statistical Learning in R	Schnurbus	SuSe (+ WiSe)
V+Ü Deep Learning and Text Analysis in Finance			
	Deep Learning and Text Analysis in Finance	Kellner	WiSe
V Practical Course: Advanced Topics in Management Science			
	Tba		
V+Ü Scientific Computing and Digital Reporting with Python			
	Scientific Computing and Digital Reporting with Python	Kellner	SuSe
V+Ü Topics in Applied Econometrics			
	Topics in Applied Econometrics	Haupt	SuSe

Überdies kann eine Veranstaltung aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Advanced Artificial Intelligence			
	Advanced Artificial Intelligence	Haupt	SuSe or WiSe

Modulbereich B: Minor Business Taxation

Wahlpflichtmodule			
V Allgemeines Steuerrecht I+II			
	Allgemeines Steuerrecht I + II	Wernsmann	WiSe
V+Ü Immobilien & Steuern			
	Immobilien und Steuern	Diller	SoSe
V+Ü International Taxation			
	International Taxation (ehemals: internationale Unternehmensbesteuerung)	Diller	WiSe
V+Ü Rechtsformwahl und M&A			
	Rechtsformwahl und M & A – Steuerliche Aspekte	Diller	SoSe
V+Ü Tax Effects			
	Tax Effect (ehemals: Steuerplanung und Steuerwirkung)	Diller	SuSe
V+Ü Transfer Pricing			
	Transfer Pricing	Obermaier	WiSe

Überdies kann eine Veranstaltung aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Advanced Business Taxation			

Modulbereich B: Minor Data Science

Wahlpflichtmodule			
V+Ü Advanced Data Analytics			
	Advanced Data Analytics	Haupt, Fritsch	WiSe
V+Ü Combinatorial Optimization			
	Combinatorial Optimization	Goerigk	SuSe
V Computational Statistics – Regression in R			
	Computational Statistics – Regression in R	Schnurbus	WiSe (+SuSe)
V Computational Statistics – Statistical Learning in R			
	Computational Statistics – Statistical Learning in R	Schnurbus	SuSe (+WiSe)
V+Ü Data Science in Operations Management			
V+Ü Decision Making under Uncertainty			
	Decision Making under Uncertainty	Goerigk	SuSe
V+Ü Econometric Methods			
	Econometric Methods	Haupt	WiSe
V+Ü Paneldatenanalyse			
	Paneldatenanalyse	Haupt, Fritsch	SoSe
V+Ü Topics in Applied Econometrics			
	Topics in Applied Econometrics	Haupt	SuSe

Überdies kann eine Veranstaltung aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Advanced Data Science			

Modulbereich B: Minor Digital Management and Strategy

Wahlpflichtmodule			
SE Advanced Strategic Sensitivity and Digitalization			
	Advanced Strategic Sensitivity and Digitalization	König	Irregular
V Entwicklung von Managementfähigkeiten			
	Developing Management Skills	Fiedler	WiSe
V Fundamentals of Digitalization and Digital Trends			
	Interdisciplinary Lecture Series for Master Students: Fundamentals of Digitalization and Digital Trends	König	SuSe
V Organizational Behavior und Unternehmensführung			
	Organizational Behavior	Fiedler	SuSe
V+Ü oder SE Organizations and Innovation Strategy			
	Organizations and Innovation Strategy	Häussler, Figge	Irregular
V Reporting of Digital Business Models			

	Reporting of Digital Business Models	Pelger	SuSe (not in SuSe 25)
V+Ü oder SE Strategy for High-Tech Startups			
	Strategy for High-Tech Startups	Häussler, Figge	SuSe
V Sustainability by Digitalization			
	Sustainability by Digitalization	Fiedler	WiSe + SuSe

Überdies kann eine Veranstaltung aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Advanced Digital Management			

Modulbereich B: Minor Economics

Wahlpflichtmodule			
SE Advanced International Economics			
	Advanced International Economics	Krautheim	Irregular
V+Ü Advanced International Trade			
	Advanced International Trade	Krautheim	SuSe
V+Ü Advanced Macroeconomics			
	Advanced Macroeconomics	Graf Lambsdorff	WiSe
V+Ü Advanced Microeconomics (Game Theory)			
	Advanced Microeconomics	Bauernschuster	WiSe
V Behavioral Game Theory			
	Behavioral Game Theory	Grubiak	WiSe
V+Ü Behavioral Public Economics			
	Behavioral Public Economics	Bauernschuster	WiSe
SE Economics of Corruption			
	Seminar: The Economics of Corruption	Graf Lambsdorff, Werner	Irregular
V+Ü Economics of Education			
	Economics of Education	Bauernschuster	SuSe
SE Experimental Economics			
V+Ü Fundamentals of International Trade			
	Fundamentals of International Trade	Krautheim	WiSe
V+Ü Growth, Inequality and Poverty			
	Growth, Inequality and Poverty	Grimm	WiSe
V+Ü Health, Development and Public Policy			
	Health, Development and Public Policy	Grimm	SuSe

V+Ü International Monetary Economics			
	International Monetary Economics (Monetäre Außenwirtschaft)	Graf Lambsdorff	SuSe
V+Ü Micro Development Economics			
V+Ü Natural and Field Experiments			
	Natural and Field Experiments	Bauernschuster	WiSe
V+Ü Neue Standorttheorien – Regional- und Stadtökonomik in Theorie und Praxis			
	Standorttheorien - Regional- und Stadtökonomik in Theorie und Praxis	Farhauer	WiSe
V+Ü Population Economics			
	Population Economics	Bauernschuster	SuSe
SE Recent Topics in International Trade			
	Recent Topics in International Trade	Krautheim	Irregular
SE Seminar Advanced Macroeconomics			
SE Seminar in Development Economics			
	Seminar in Development Economics	Grimm	SuSe
SE Seminar in Public Economics			
	Seminar in Public Economics - Replicating Empirical Research	Bauernschuster	WiSe

Überdies kann eine Veranstaltung aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Advanced Economics			
	Environmental and Health Economics	Bauernschuster	SuSe

Modulbereich B: Minor Entrepreneurship

Wahlpflichtmodule			
SE 5-Euro-Business			
	5-Euro-Business Wettbewerb (für Masterstudierende)	Häussler	Irregular
SE Executive and Entrepreneurial Thinking and Communication			
V Fundamentals of Digitalization and Digital Trends			
	Interdisciplinary Lecture Series for Master Students: Fundamentals of Digitalization and Digital Trends	König	SuSe
SE Intercultural Entrepreneurship			
	Intercultural Entrepreneurship – Québec-Bavaria	Barmeyer	Irregular
V Network Management in Start-p Processes			
	Network Management in Startup Processes	Jungwirth	WiSe
V+Ü Ethical Entrepreneurship and Stakeholder Analysis			
	Ethical Entrepreneurship and Stakeholder Analysis	Jungwirth	SuSe

V+Ü oder SE Organizations and Innovation Strategy			
	Organizations and Innovation Strategy	Häussler, Figge	Irregular
V+Ü oder SE Strategy for High-Tech Startups			
	Strategy for High-Tech Startups	Häussler, Figge	SuSe

Überdies kann eine Veranstaltung aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Advanced Entrepreneurship			

Modulbereich B: Minor Finance

Wahlpflichtmodule			
V+Ü Corporate Finance and Capital Markets			
	Corporate Finance and Capital Markets	Entrop	SuSe
V+SE Empirical Finance			
	Empirical Finance	Perras, Kinateder	SuSe
V+Ü Financial Data Analytics and Machine Learning			
	Financial Data Analytics and Machine Learning	Kellner	SuSe
V+Ü Financial Engineering and Structured Finance			
	Financial Engineering and Structured Finance	Entrop	WiSe
V+Ü Finanzcontrolling			
	Finanzcontrolling	Wagner	SoSe

Überdies kann eine Veranstaltung aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Advanced Finance			

Modulbereich B: Minor Information Systems and Digital Business

Wahlpflichtmodule			
V+Ü AI-Based Business Information Systems			
	Artificial Intelligence (AI)-Based Business Information Systems	Gnewuch	WiSe
V+Ü Business Intelligence & Analytics Systems			
	Business Intelligence & Analytics Systems	Gnewuch	SuSe
V+Ü Digital Markets and Online Platforms			
	Digital Markets and Online Platforms	Krämer	WiSe
V+Ü Digital Service Management			

V+Ü Information Management			
V+Ü IT-Architecture Management			
	IT Architecture Management	Widjaja	SuSe
V+Ü IT-Services und IT-Servicemanagement			
	IT-Services und IT-Servicemanagement	Widjaja	WiSe (not in 25/26)
V+Ü Management of Information Security and Privacy			
	Management of Information Security and Privacy	Gerlach	WiSe
V+Ü Strategic IT-Management (IT-Management für Fortgeschrittene)			
	Strategic IT Management	Widjaja	WiSe
V+Ü Strategies in the Software Industry			
	Strategies in the Software Industry	Gerlach	WiSe

Überdies kann eine Veranstaltung aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Advanced Information Systems and Digital Business			

Modulbereich B: Minor Marketing

Wahlpflichtmodule			
V B2B Marketing and Sales Management			
	B2B Marketing and Sales Management	Totzek	Three-semester cycle
V Branding and Marketing Communications			
	Produkt-, Marken und Kommunikationsmanagement	Totzek	Dreisemesterturnus
V Consumer Behavior			
	Konsumentenverhalten	Schumann	SoSe
V Customer Relationship Management			
	Customer Relationship Management (ehemals: Kundenmanagement)	Schumann	WiSe
V+Ü Marketing Research			
	Marketing Research	Totzek	SuSe
V oder SE Practical Course in Marketing			
	Praxisprojekt Marketing und Services	Totzek	WiSe or SuSe
V+Ü Price Management			
	Price Management	Totzek	Three-semester cycle

V Services Marketing			
	Services Marketing	Schumann	WiSe

Überdies kann eine Veranstaltung aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Advanced Marketing			

Modulbereich B: Minor Optimization

Wahlpflichtmodule			
V+Ü Approximate Dynamic Programming (Reinforcement Learning)			
	Tba		
V+Ü Artificial Intelligence and Optimization			
	Artificial Intelligence and Optimization	Goerigk	WiSe
V+Ü Combinatorial Optimization			
	Combinatorial Optimization	Goerigk	SuSe
V+Ü Data Science in Operations Management			
	Paneldatenanalyse	Haupt	SoSe
V+Ü Decision Making under Uncertainty			
	Decision Making under Uncertainty	Goerigk	SuSe
V+Ü Heuristics and Approximation Methods			
	Heuristics and Approximation Methods	Goerigk	Irregular
V+Ü Network Optimization			
	Network Optimization	Goerigk	Irregular
V Practical Course: Advanced Topics in Management Science			
	Tba		

Überdies kann eine Veranstaltung aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Advanced Optimization			

Modulbereich B: Minor Reporting and Controlling

Wahlpflichtmodule			
V+Ü Advanced International Accounting			
	Advanced International Accounting	Pelger	SuSe
V+Ü Corporate Valuation			
	Corporate Valuation (Unternehmensbewertung)	Obermaier	WiSe

V+Ü Financial Statement Analysis			
	Tba		
V+Ü International Accounting			
	International Accounting	Pelger	WiSe
V Reporting of Digital Business Models			
	Reporting of Digital Business Models	Pelger	SuSe (not in SuSe 25)
V Sustainability Reporting			
	Sustainability Reporting	Pelger	WiSe
V+Ü Value-based Management			
	Value-based Management (ehemals: Wertorientiertes Controlling)	Obermaier	SoSe
V Workshop Unternehmensbewertung			
	Workshop Unternehmensbewertung	Obermaier	SoSe

Überdies kann eine Veranstaltung aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Advanced Reporting and Controlling			
	Accounting for financial instruments according to IFRS	Pelger	Irregular

Modulbereich B: Minor Sustainability

Wahlpflichtmodule			
V Compliance			
	Tba		
V+Ü Environmental, Social and Corporate Governance Analytics			
	Environmental, Social and Corporate Governance Analytics	Kellner	WiSe
V Green and Sustainable Finance			
	Sustainable and Green Finance	Entrop	WiSe
V Organization Theory and Sustainable Leadership			
	Organization Theory and Sustainable Leadership	Bort	SuSe
V Sustainability and Business Ethics: Ethische Konzepte für nachhaltiges Wirtschaften			
	Sustainability and Business Ethics: Ethische Konzepte für nachhaltiges Wirtschaften	Meißner	WiSe
SE Sustainability and Business Ethics: Shaping Transformation			
	Sustainability and Business Ethics: Shaping Transformation	Bort (Meißner)	SuSe
V Sustainability by Digitalization			
	Sustainability by Digitalization	Fiedler	WiSe + SuSe
V Sustainability Reporting			
	Sustainability Reporting	Pelger	WiSe
V+Ü Value-based Management			

Modulkatalog M.Sc. Business Administration

	Value-based Management (ehemals: Wertorientiertes Controlling)	Obermaier	SoSe
--	---	-----------	------

Überdies kann eine Veranstaltung aus dem folgenden Bereich eingebracht werden:

V+Ü oder V Advanced Sustainability			

Definitions

The following abbreviations are used in this document:

FFA	=	Subject-specific language programme
FFP	=	Subject-specific language exam
H	=	Hours
LP	=	ECTS credits (European Credit Transfer and Accumulation System)
SE	=	Seminar
SWS	=	Contact teaching hours per week during the semester
Ü	=	Exercise course
V	=	Lecture
WÜ	=	Wissenschaftliche Übung (a type of seminar)

Preamble

Workload calculation:

A module's ECTS credit load is allocated based on the amount of work students can, on average, expect to put in to successfully complete the module: one credit point corresponds to approx. 30 hours of work. This average is applied uniformly across all subjects and course types in this degree programme.

Since the general political debate concerning the Bologna Process (i.e. the adoption of the bachelor/master system), including among those setting higher-education policy, has shown that modularised degree programmes are generally perceived as overly school-like and un-academic, we have opted for a relatively high number of credits in this model, trusting in the ability of our students to make good use of the freedom to learn independently.

The conceptual philosophy of the School of Business, Economics and Information Systems seeks to address to key concerns: to create degree programmes with as clear and straightforward a structure as possible, and to bring about the greatest possible freedom for students' own, independent study. This requires an intuitive credit-point system for all course types that takes into account the number of contact teaching hours per week as well as the total workload (5 ECTS credits for modules consisting of a lecture and an exercise course ("V+Ü"), and 7 ECTS credits for master's seminars). The courses taught at the School of Business, Economics and Information Systems have been designed such that the majority of the workload is allocated (in the form of ECTS credits) for students' self-study – i.e. the preparation and follow-up study of the courses they attend.

Examiners:

The module convenors named in this module catalogue are, at the same time, the examiners for their modules.

Compulsory attendance:

In principle, attendance is not compulsory. However, regular attendance is generally compulsory for seminars and workshops. Please always check the information in Stud.IP to find out whether compulsory attendance is in effect for each module.

Exam resit opportunities:

Resits are possible for examination modules in accordance with the examination and study regulation for the M.Sc. Business Administration programme.

Seminars:

In principle, chairs offer seminars on a regular basis, but there are exceptions. Please check the seminar announcements on the chairs' websites.

Module

Modulbereich A: Wirtschaftswissenschaftliche Methoden

Fundamentals of Business Analytics

Module number
39720
Course name
Fundamentals of Business Analytics
Module coordinator
Prof. Dr. Harry Haupt, Prof. Dr. Dirk Totzek, Prof. Dr. Joachim Schnurbus, Prof. Dr. Marc Goerigk

Examination number	Credit points (ECTS)	Hours per week (SWS)
261003	5	5
Availability	Duration	Recommended semester
Every semester	Block	1

Workload
5 SWS (150h of own work)
Module applicability
BA Version 2025: Modulbereich A: Wirtschaftswissenschaftliche Methoden
BA Version 1: Methoden
Reference to the LPO I
Recommended prerequisites
Basic knowledge in quantitative methods at the level of a management-oriented or economics-oriented bachelor's degree
Requirements
None
Language of instruction
English

Content
Data Literacy (i.e., competencies in Data Analytics and Data-Driven Decision Making) and Mathematical Literacy (i.e., the fundamentals in Mathematics and Statistics) form a fundamental framework of modern management. These core competencies are refreshed and strengthened in this course. The course covers four subject areas.: 1) Fundamentals of Mathematics: Sums, products, sets, linear equations, inequalities Calculus (functions, limits, derivatives and integration) Linear algebra (matrix algebra and systems of linear equations)

<p>2) Fundamentals of Statistics Random variables and stochastic modeling Estimation and test theory Regression modeling</p> <p>3) Fundamentals of Management Science Modeling of optimization problems Introduction to algorithms, heuristics and metaheuristics Linear programming</p> <p>4) Fundamentals of Empirical Research Methods Business research process Primary and secondary data collection methods Hypothesis testing</p>
<p>Intended learning outcomes (ILOs)</p> <p>Students who have successfully participated in the module "Fundamentals of Business Analytics" are able to identify appropriate quantitative methods to address questions and challenges in modern data-driven management, are able to reflect on the underlying elementary mathematical, statistical, optimization foundations and on the corresponding empirical research process, apply the methods and interpret the result from a management or economic perspective.</p>
<p>Teaching methods</p> <p>E-learning/online course with supporting live sessions Intensive block course at the beginning of the semester (~ 4 weeks) individual learning organization, based on knowledge and competencies identified in the placement test</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>Portfolio examination. The final grade depends on the successful completion of e-assessments qualifying in all four subject areas of the course.</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Additional notes</p> <p>Online course</p>

Business Research Methods

Module number
Course name
Business Research Methods
Module coordinator/ examiner(s)
Prof. Dr. Oliver Entrop, Prof. Dr. Jin Gerlach, Prof. Dr. Ralf Kellner, Prof. Dr. Robert Obermaier, Prof. Dr. Christoph Pelger

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2
Availability	Duration	Recommended semester
Every semester	1 semester	1

Workload
2 SWS (30 h attendance and 120 h own work) Calculation basis: 15 weeks in a semester, including an examination week; each SWS corresponds to 60 minutes.
Module applicability
BA Version 2025: Modulbereich A: Wirtschaftswissenschaftliche Methoden
BA Version 1: Methoden
LPO I applicability
Recommended prerequisites
Requirements
None
Language of instruction
English

Content
Business Research Methods provides an exploration of essential methodologies and techniques widely used in business research. Focusing on both quantitative and qualitative approaches, the course addresses key research approaches in business administration.
Key topics include:
1) Introduction to the philosophy of science
2) Experimental research
3) Event study analysis
4) Automated textual analysis techniques
5) Qualitative research methods

6) Grounded theory development
Intended learning outcomes (ILOs)
<p>After successful participation in this course, students</p> <ul style="list-style-type: none"> • explain various research methods, both quantitative and qualitative, in the context of the philosophy of science and discuss their strengths and limitations when applied to business research. • evaluate and design experimental research and event studies that analyze business and market phenomena. • interpret automated textual analysis tools that are used to analyze large-scale textual data. • assess qualitative research methods, including interviews and case studies, and understand grounded theory approaches that identify patterns and generate theories from qualitative data.
Teaching methods
Online course (asynchronous) with complementary live classroom sessions
Required attendance
Examination (type of examination, scope)
Final exam (100%)
Overall grade relevance
Exam resit opportunities
Recommended reading
Additional notes

Multivariate Verfahren

Modulnummer
Veranstaltungstitel
Multivariate Verfahren
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Joachim Schnurbus

Prüfungsnummer	ECTS	SWS
201504	5	4
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Wintersemester	1 Semester	1

Workload
4 SWS, davon ca. 3 SWS Vorlesung, ca. 1 SWS Übung. Dies entspricht 57 St. Präsenzzeit und 93 St. Eigenarbeitszeit. Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich A: Wirtschaftswissenschaftliche Methoden
BA Version 1: Accounting, Finance and Taxation – Grundlagen International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung Methoden
Bezug zur LPO I
Empfohlene Voraussetzungen
Grundlegende Mathematik- und Statistik-Kenntnisse.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
Multivariate Verfahren sind ein wichtiger Bestandteil in der empirischen Forschungspraxis, unter anderem im Bereich der Marktforschung. In diesem Modul werden grundlegende Analysetechniken für multivariate Datenstrukturen sowie deren theoretische Fundierung behandelt. Neben einer Einführung in die Grundlagen multivariater Analysemethoden umfasst das Modul folgende Themengebiete:
<ul style="list-style-type: none"> • Hauptkomponentenanalyse • Regressionsanalyse • Faktorenanalyse

<ul style="list-style-type: none"> • Varianzanalyse • Diskriminanzanalyse • Clusteranalyse
Lernergebnisse Lernziele
<p>Studierende, die erfolgreich an dem Modul teilgenommen haben:</p> <ul style="list-style-type: none"> • sind in der Lage, Fragestellungen, Anwendungsfelder und Potenziale von multivariaten statistischen Verfahren zu erkennen. Sie verstehen die grundlegenden strukturentdeckenden Verfahren (wie Clusteranalyse) und grundlegenden strukturprüfenden Verfahren (wie Regressionsanalyse) und deren Annahmen. • können die Verfahren anwenden und kombinieren, sowie Modellschätzungen und Hypothesentests durchführen und analysieren. • können Berechnungen, die mit der Statistiksoftware R erzeugt wurden, reproduzieren und den zugehörigen R-Code interpretieren. • sind in der Lage, empirische Ergebnisse kritisch zu bewerten und weiterführende Literatur zu den Verfahren zu verstehen und zu diskutieren.
Lehr- und Lernformen
<p>Interaktiver Frontalunterricht und Diskussion von Lehrinhalten. Vermittlung der theoretischen Grundlagen und Illustration anhand von Beispielen in der Vorlesung und Übung. Berechnen und besprechen von Übungsaufgaben. Anwenden der Statistiksoftware R (R-Vorkenntnisse werden nicht vorausgesetzt). Barrierefreie Vorlesungs- und Übungsmaterialien, Pflichtliteratur sowie Software sind ab Kursstart verfügbar.</p>
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang)
<p>Klausur oder häusliche Leistungsfeststellung (60 Min.), oder mündliche (Online-)Prüfung.</p>
Gesamtnotenrelevanz
<p>100 %</p>
Wiederholungsmöglichkeit
Literatur
<ul style="list-style-type: none"> • Handl, A. & T. Kuhlenkasper (2017), Multivariate Analysemethoden, Springer. • Johnson, R.A. & D.W. Wichern (2007), Applied Multivariate Statistical Analysis, Pearson Prentice Hall. • Ligges, U. (2008), Programmieren mit R, Springer. • Kleiber, C. & A. Zeileis (2008), Applied Econometrics with R, Springer.
Weitere Hinweise

Advanced Business Research Analytics and Research Methods

Module number
Course name
Advanced Business Research Analytics and Research Methods
Module coordinator/ examiner(s)
Alternating, depending on the courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-5	2-4
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	1-2

Workload
90 h to 150 h (presence and individual working hours depending on the course)
Module applicability
Methodological Foundations
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English or German

Content
<ul style="list-style-type: none"> This module provides specialist knowledge in the field of business research analytics and research methods.
Intended learning outcomes (ILOs)
<ul style="list-style-type: none"> Alternating, depending on the courses assigned to the module
Teaching methods
Alternating, depending on the courses assigned to the module
Required attendance
Examination (type of examination, scope)
Exam (written or oral) or Portfolio, depending on the courses assigned to the module (100%)
Overall grade relevance
Exam resit opportunities

According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Modulbereich B: Major Accounting and Tax

Advanced International Accounting

Module number
Course name
Advanced International Accounting
Module coordinator/ examiner(s)
Prof. Dr. Christoph Pelger

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2
Availability	Duration	Recommended semester
Every summer semester	1 semester	Master students

Workload
Lecture 2 SWS (30 hours class instruction; 45 hours self-study) Tutorials 2 SWS (30 hours class instruction; 45 hours self-study)
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Reporting and Controlling
BA Version 1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Requirements
Basic knowledge in IFRS is required.
Language of instruction
English

Content
This course aims to provide insights into advanced topics in international accounting.
The course presents research on the effects of IFRS adoption and introduces a number of specific standards in IFRS, dealing with topics such as lease accounting, deferred taxes, post-employment benefits, consolidation, business combinations, joint operations, associates.
Intended learning outcomes (ILOs)
The learning objectives of this course are to: •Understand and apply specific accounting topics in IFRS.

<ul style="list-style-type: none"> •Discuss recent developments in IFRS. •Reflect on the content and application of IFRS. <p>Overall, together with the basic course on International Accounting (offered in the winter term), this course aims to provide master students with a comprehensive overview of IFRS. Major Accounting and Tax, Minor Reporting and Controlling</p>
Teaching methods
Lecture, cases, discussions
Required attendance
Examination (type of examination, scope)
100 % final exam (60 minutes)
Overall grade relevance
Exam resit opportunities
Recommended reading
Additional notes
This course is taught in English.

Corporate Valuation (Unternehmensbewertung)

Module number
Course name
Corporate Valuation
Module coordinator/ examiner(s)
Prof. Dr. Robert Obermaier

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture: 2 SWS (30h present time, 45h own working time) Exercise: 2 SWS (30h present time, 45h own working time)
The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is counted as 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Reporting and Controlling
BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Basic knowledge of accounting and capital budgeting is recommended.
Requirements
Language of instruction
English or German

Content
The lecture “Corporate Valuation” deals with one of the most interesting and complex areas of business administration. After a systematization of the reasons and purposes for the valuation of entire companies or parts of companies, an overview of the theoretical foundations and relevant components of corporate valuation is provided. The lecture focuses on the theoretically and methodically sound application of Discounted Cash-Flow (DCF) approaches and the corresponding

determination of adequate cost of capital rates. Finally, advanced research topics in the field of corporate valuation and practitioner standards (IDW S1) are discussed.
Intended learning outcomes (ILOs)
After successful participation in the course "Corporate Valuation", students <ul style="list-style-type: none"> • know the different occasions and purposes for which companies or parts of companies are valued. • understand the theoretical underpinnings and the formal relationships between the Discounted Cash-Flow (DCF) approaches. • apply their conceptual and methodological knowledge to determine appropriate valuation-relevant cash-flows and cost of capital rates. • combine their theoretical, conceptual, and methodical knowledge by applying different DCF approaches in a reflective and suitable manner. • analyze, critically evaluate, and prepare company valuations, whether as controllers, auditors or investment bankers. • transfer their knowledge of valuation theory to the areas of investment controlling, mergers & acquisitions, and value-based management of companies and business units.
Teaching methods
Interactive lecture Completion of exercises and case studies
Required attendance
Examination (type of examination, scope)
a) Written exam 100% or b) Written exam 90% + 10% through optional semester-accompanying performance (subject to reservation; if the number of participants is suitable, the chair can offer a voluntary semester-accompanying assignment, through which up to 6 bonus points (10% of the final exam) can be acquired. These are added to the points achieved in the final exam).
Overall grade relevance
Exam resit opportunities
In the event of failure (grade worse than 4.0), all courses can be repeated in accordance with § 9 of AStuPO.
Recommended reading
Additional notes
International students are welcome! The exam can be written in English or German. The language of lectures and tutorials will be determined in the first lecture. Guest lectures by practitioners are planned. The chair reserves the right to offer a voluntary graded assignment during the semester.

Immobilien & Steuern

Modulnummer
Modultitel
Immobilien und Steuern
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Markus Diller

Prüfungsnummer	ECTS	SWS
262101	3	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Sommersemester, in Abhängigkeit von der Verfügbarkeit eines Praxispartners	1 Semester	

Workload
Vorlesung und integrierte Übung 2 SWS (30 St. Präsenzzeit und 45 St. Eigenarbeitszeit) Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Business Taxation BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration. Bachelor-Abschluss in einem wirtschaftswissenschaftlichen oder einem den Wirtschaftswissenschaften nahen Studiengang. Steuerliche Grundkenntnisse werden dringend empfohlen.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
Steuerrechtliche und steuerwirkungstheoretische Aspekte bei Erwerb, Nutzung und Veräußerung von Immobilien Grundlagen der Immobilienbewertung/ der Erbschaftsteuer
Lernergebnisse Lernziele

<p>Nach erfolgreicher Teilnahme am Modul</p> <ul style="list-style-type: none"> • benennen die Studierenden die steuerlichen Regelungen mit Bezug zu Immobilien sowie deren Wirkung, • schätzen komplexe Sachverhalte steuerrechtlich ein, • beschreiben die steuerlichen Implikationen auf Immobilien-(ver-)kauf sowie Immobilienbewertung sowie hinterfragen kritisch.
<p>Lehr- und Lernformen</p>
<ul style="list-style-type: none"> • Vorlesung mit Seminarcharakter und interaktiven Elementen wie Diskussionen und Gruppenarbeiten • Case studies
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang)</p>
<p>Klausur, 60 Min., 100 %</p>
<p>Gesamtnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p>
<p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
<p>Literatur</p>
<p>Die empfohlene Literatur wird vom jeweiligen Dozenten in der Veranstaltung bekannt gegeben.</p>
<p>Weitere Hinweise</p>
<p>Das Modul wird in Zusammenarbeit mit externen Dozenten gehalten und als Blockveranstaltung angeboten.</p> <p>Das Modul Immobilien und Steuern wird als eigenständiges Modul angeboten, da es als abgegrenztes und in sich geschlossenes Teilgebiet vermittelt wird. Aus organisatorischen Gründen gibt es mehrere geblockte Präsenzphasen; auch der Workload pro Teilnehmer liegt unter dem einer regulären Vorlesung, weshalb 3 ECTS-Punkte vergeben werden.</p>

International Accounting

Module number
Course name
International Accounting
Module coordinator/ examiner(s)
Prof. Dr. Christoph Pelger

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (30 hours class instruction; 45 hours self-study) Tutorials 2 SWS (30 hours class instruction; 45 hours self-study). The calculation is based on 15 semester weeks (14 lecture weeks + 1 exam week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Reporting and Controlling BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Basic knowledge in accounting (not necessarily IFRS)
Requirements
Language of instruction
English

Content
International Financial Reporting Standards (IFRS) are the global language of business because listed companies in more than 140 countries around the world (and many large non-listed companies) are required or at least have an option to use them for preparing their financial statements. This course aims to provide an in-depth understanding of IFRS in terms of the institutional structure of the standard-setter, the conceptual mindset of IFRS, and selected key standards. For instance,

<p>this course covers topics such as revenue recognition, intangible assets, provisions and fair value measurement. Together with the course on Advanced International Accounting (offered in the summer term), this course aims to provide master students with a comprehensive overview of IFRS.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>After successful participation in this course, students</p> <ul style="list-style-type: none"> • Explain the historical development of international accounting and the institutional setting of the International Accounting Standards Board (IASB). • Understand the conceptual mind-set of IFRS as outlined in the IASB's Conceptual Framework and characterize the interplay between framework and standards. • Summarize key accounting topics on recognition and measurement arising in specific standards in IFRS and apply them to examples and practical cases. • Assess the pros and cons associated with internationalization in accounting, IASB policies and specific concepts and standards in IFRS. • Develop suggestions on possible ways forward regarding IFRS standard-setting and implementation in light of practical concerns and research insights.
<p>Teaching methods</p>
<p>Interactive lecture with cases and discussions; exercises in the tutorial</p>
<p>Required attendance</p>
<p></p>
<p>Examination (type of examination, scope)</p>
<p>100 % final exam (60 minutes)</p>
<p>Overall grade relevance</p>
<p></p>
<p>Exam resit opportunities</p>
<p></p>
<p>Recommended reading</p>
<p></p>
<p>Additional notes</p>
<p>This course is taught in English.</p>

International Taxation

Module number
Course name
International Taxation (ehemals: internationale Unternehmensbesteuerung)
Module coordinator/ examiner(s)
Prof. Dr. Markus Diller

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (30 hours of attendance and 45 hours of individual work) Exercise 2 SWS (30 hours of attendance and 45 hours of individual work). 15 semester weeks are counted (14 lecture weeks + 1 examination week) and each SWS is counted at 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Business Taxation BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree programme in Business Administration. Bachelor's degree in an economics or business-related degree programme. Basic tax knowledge in the area of income taxes (EStG, KStG) is recommended.
Requirements
Language of instruction
English

Content
This module deals with cross-border tax issues. Students are given a systematic overview of the tax problems of tax residents investing abroad (outbound) and tax non-residents investing in Germany (inbound). Emphasis is placed on regulations that are of great importance to international groups, such as double taxation treaties, the license barrier, the treatment of losses, the choice of international legal

form, transfer pricing, and global minimum taxation. All chapters are accompanied by tax impact analyses.
Intended learning outcomes (ILOs)
After successfully completing the module: <ul style="list-style-type: none"> • students explain the legal foundations of international tax law, • recognise the most important tax implications for internationally active companies, • assess their influence on entrepreneurial decision-making situations, • can transfer the theoretical knowledge they have acquired to complex situations.
Teaching methods
<ul style="list-style-type: none"> • Lecture with seminar character and interactive elements such as discussions and group work • Working on exercises and suitable case studies.
Required attendance
Examination (type of examination, scope)
Exam 60 min, 100%
Overall grade relevance
Exam resit opportunities
In the event of failure, all courses may be repeated in accordance with § 6 of the Study and Examination Regulations.
Recommended reading
The recommended literature will be announced by the respective lecturer in the course.
Additional notes
Guest lectures from practice on selected topics

Rechtsformwahl und M&A

Modulnummer
Veranstaltungstitel
Rechtsformwahl und M & A – Steuerliche Aspekte
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Markus Diller

Prüfungsnummer	ECTS	SWS
	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Sommersemester	1 Semester	

Workload
Vorlesung 2 SWS (30 St. Präsenzzeit und 45 St. Eigenarbeitszeit) Übung 2 SWS (30 St. Präsenzzeit und 45 St. Eigenarbeitszeit) Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Business Taxation BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration. Steuerliche Kenntnisse im Bereich der Ertragsteuern (EStG, KStG) werden dringend empfohlen.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
Das Modul befasst sich mit den komplexen steuerlichen Aspekten im Bereich von Merger & Acquisition sowie die Rechtsformwahl. Die Studierenden erhalten einen systematischen Überblick über steueroptimale Rechtsformen sowie Gestaltungen von Unternehmenstransaktionen und über die Grundlagen des Umwandlungssteuerrechts.
Lernergebnisse Lernziele
Nach erfolgreicher Teilnahme an dem Modul:

<ul style="list-style-type: none">• erklären die Studierenden die wichtigsten steuerlichen Implikationen bei Unternehmenstransaktionen und Rechtsformwahl,• nehmen steueroptimale Entscheidungen vor,• nutzen dieses Vorgehen für praxisorientierte Beispiele,• quantifizieren Steuerwirkungen.
Lehr- und Lernformen
<ul style="list-style-type: none">• Vorlesung mit Seminarcharakter und interaktiven Elementen wie Diskussionen und Gruppenarbeiten• Bearbeitung von Übungsaufgaben und geeigneten Fallbeispielen.
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang)
Klausur, 60 Min., 100 %
Gesamtnotenrelevanz
Wiederholungsmöglichkeit
Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.
Literatur
Die empfohlene Literatur wird vom jeweiligen Dozenten in der Veranstaltung bekannt gegeben.
Weitere Hinweise
Gastvorträge aus der Praxis zu ausgewählten Themenkomplexen

Reporting of Digital Business Models

Module number
Course name
Reporting of Digital Business Models
Module coordinator/ examiner(s)
Prof. Dr. Christoph Pelger

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	3
Availability	Duration	Recommended semester
Every summer semester, but not in the summer term 2025	1 semester	

Workload
Lecture 3 SWS (45 hours class interaction; 105 hours self-study). The calculation is based on 15 semester weeks (14 lecture weeks + 1 exam week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Reporting and Controlling
BA Version 1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Basic knowledge of financial accounting (not necessarily IFRS)
Requirements
Language of instruction
English

Content
Digital business models are ever more pervasive in business practice. The traditional financial reporting approaches, however, are limited in depicting the key value drivers of digital business models in a transparent and useful manner. This raises the following questions: <ul style="list-style-type: none"> • How informative are financial reports of (listed) companies with digital business models about their key value drivers? • How could financial reporting be transformed to reflect the increasing importance of digital business models?

<p>This course first introduces relevant International Financial Reporting Standards (IFRS) that focus on the recognition and measurement of intangible assets. Cases of listed companies with digital business models are used to reflect on the abilities and limitations of current accounting standards to provide decision-useful information. Current research is then mobilized to shed light on more general Major Accounting and Tax, Minor Reporting and Controlling, Minor Digital Management and Strategy issues with the accounting for intangible assets under IFRS. Finally, current standard-setting and other regulatory developments in the area of intangible assets accounting are discussed.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>After successful participation in this course, students</p> <ul style="list-style-type: none"> • Summarize relevant financial reporting standards on intangible assets and apply them to examples and practical cases. • Assess academic research on the reporting of intangible assets. • Outline key aspects of digital business models and assess the limits of depicting them in financial statements. • Analyze the financial statements of listed companies with digital business models. • Develop suggestions of how the financial reporting standards could be improved to provide more decision-useful information about companies with digital business models. • Present their insights into practical cases and research studies effectively in oral presentations and short essays.
<p>Teaching methods</p>
<p>Lecture with seminar character (Interactive lecture with cases, student presentations and discussions; exercises in the tutorial).</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Individual essay(s), individual and group presentations, active participation in the sessions.</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Recommended reading</p>
<p>Additional notes</p> <p>The course is taught in English.</p> <p>The number of participants is limited. Prior application for this course is necessary. Information on the application process are provided on the website of the Chair of Accounting and Auditing and in Stud.IP.</p>

Sustainability Reporting

Module number
Course name
Sustainability Reporting
Module coordinator/ examiner(s)
Prof. Dr. Christoph Pelger

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	3
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 3 SWS (45 hours class interaction; 105 hours self-study)
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Reporting and Controlling Modulbereich B: Minor Sustainability
BA Version 1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Basic knowledge in accounting
Requirements
Language of instruction
English

Content
In recent years, corporate sustainability reporting has moved from a voluntary activity, prone to “greenwashing”, to a regulated field. The European Union has been particularly instrumental in promoting regulations on sustainability reporting, as becomes manifest in the recent Corporate Sustainability Reporting Directive (CSRD).
This course aims to provide an overview and to analyse current dynamic developments in the area of sustainability reporting. This involves some background on the development and theories of (voluntary) sustainability reporting, insights into current and planned regulations, standards, guidances and frameworks as well as actual practices of sustainability reporting. In this course, cases of companies’ sustainability reports are presented and discussed and academic research is mobilized to reflect on current (and future) developments in regulation/standards and practice.

Intended learning outcomes (ILOs)
<p>After successful participation in this course, students</p> <ul style="list-style-type: none"> • Explain the development of sustainability reporting and understand the limits of voluntary reporting in this area. • Compare different frameworks, guidelines and standards of sustainability reporting and evaluate them based on theories of sustainability reporting. • Analyze sustainability reports of listed companies and assess their content in light of relevant standards. • Develop suggestions on how current practices of sustainability reporting and reporting standards in this area could be improved. • Present their insights into practical cases, reporting standards and research studies effectively in oral presentations and short essays.
Teaching methods
Lecture with seminar character (input lectures, cases, student presentations, discussions)
Required attendance
Examination (type of examination, scope)
Individual essays, individual and group presentations, active participation in the sessions.
Overall grade relevance
Exam resit opportunities
Recommended reading
Additional notes
<p>The course is taught in English.</p> <p>The maximum number of participants is limited. Prior application for this course is necessary. Information on the application process are provided on the website of the Chair of Accounting and Auditing and in Stud.IP.</p>

Tax Effects

Module number
30000
Course name
Tax effect (ehemals: Steuerplanung und Steuerwirkung)
Module coordinator/ examiner(s)
Prof. Dr. Markus Diller

Examination number	Credit points (ECTS)	Hours per week (SWS)
262600	5	2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture 2 SWS (30 hours of attendance and 45 hours of individual work) Exercise 2 SWS (30 hours of attendance and 45 hours of individual work). 15 semester weeks are counted (14 lecture weeks + 1 examination week) and each SWS is counted at 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Business Taxation BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Bachelor's degree in economics or business-related studies. Basic tax knowledge in the area of income taxes (EStG, KStG) is recommended.
Requirements
Language of instruction
English

Content
The module deals with the impact of taxes on business decisions. In particular, the module discusses the impact of taxation on after-tax net present value in different scenarios and, based on this, investment-neutral tax systems (cash flow tax, economic profit) and their interrelationship with forward-looking effective tax rates.

Intended learning outcomes (ILOs)
<p>After successfully completing the module:</p> <ul style="list-style-type: none"> • Students explain multi-period tax effects using the after-tax NPV and quantify complex, investment-theoretic tax effects. • understand the concept of tax neutrality and its relationship to forward-looking effective tax rates. •
Teaching methods
<ul style="list-style-type: none"> • Lecture with seminar character and interactive elements such as discussions and group work • Working on exercises and suitable case studies.
Required attendance
Examination (type of examination, scope)
Exam 60 min, 100%
Overall grade relevance
Exam resit opportunities
In the event of failure, all courses may be repeated in accordance with § 6 of the Study and Examination Regulations.
Recommended reading
The recommended literature will be announced by the respective lecturer in the course.
Additional notes

Transfer Pricing

Module number
Course name
Transfer Pricing
Module coordinator/ examiner(s)
Prof. Dr. Markus Diller, Prof. Dr. Robert Obermaier, external lecturers

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
2 SWS (30 hours of present time, 120 self-responsible working hours): Lecture/Exercise: 20 hours present time, 80 hours own working time Case Study: 10 hours present time, 40 hours own working time The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is counted as 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Business Taxation BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Basic knowledge of accounting, capital budgeting and corporate taxation is recommended.
Requirements
Language of instruction
English

Content
The lecture “Transfer Pricing” deals with the highly relevant and complex problem of determining the prices at which services are exchanged between the divisions of a company. Considering transfer pricing in the area of tension between management control and corporate taxation, the formation of transfer prices is particularly related to the following problems:

<ul style="list-style-type: none"> • The determination of profit in decentralized companies requires an allocation of the costs incurred in the provision of services. Transfer prices are used to establish a market mechanism in the company as part of the alignment of decentralized decisions or activities with the overriding objectives of the company's management. • Transfer prices of cross-border transactions influence the tax burden of internationally active companies, whereby the optimal transfer prices for internal purposes are regularly changed (one set of books). Furthermore, due to the profit shifting possibilities that arise through transfer pricing, there are detailed tax regulations for their determination, which are also the subject of the course. Finally, the limits of tax profit allocation by means of transfer pricing, in particular with regard to digital companies, will be explained and current reform options will be presented. • The combination of management control and taxation aspects is achieved through the preparation and presentation of a practical case study in cooperation with external experts in the field of transfer pricing.
<p>Intended learning outcomes (ILOs)</p>
<p>After successful participation in the course "Transfer Pricing", students</p> <ul style="list-style-type: none"> • understand both the management control implications and the complex tax considerations associated with transfer pricing, recognizing and navigating potential conflicts between these dimensions. • analyze and assess transfer prices in terms of their impact on cost allocation, managerial incentives and tax outcomes. • apply and critically evaluate different methods for the determination of transfer prices. • synthesize and apply their knowledge by working on and presenting a practical case study.
<p>Teaching methods</p>
<p>Interactive lecture Completion of exercises and case studies</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Both the written exam and participation in the case study are compulsory components of the examination.</p> <p>Weighting of the components: 2/3 written exam (chairs) 60 minutes 1/3 group work / presentation (case study)</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>In the event of failure (grade worse than 4.0), all courses can be repeated in accordance with § 9 of AStuPO.</p>
<p>Recommended reading</p>
<p>Additional notes</p>

Value-based Management

Module number
Course name
Value-based Management (ehemals: Wertorientiertes Controlling)
Module coordinator/ examiner(s)
Prof. Dr. Robert Obermaier

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture: 2 SWS (30 hours attendance time; 45 hours individual work time) Tutorial: 2 SWS (30 hours attendance time; 45 hours individual work time)
We calculate with 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is included in the calculation with 60 minutes.
Module applicability
PO Version 2025: Modulgruppe B: Major Accounting and Tax Modulgruppe B: Minor Reporting and Controlling Modulgruppe B: Minor Sustainability
BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Basic knowledge of controlling, reporting, financing and investment accounting.
Requirements
Language of instruction
English or German

Content
Value-based management is a fundamental and widely adopted management accounting practice, guiding organizations toward long-term maximization of shareholder value. The course covers key concepts and frameworks of shareholder value and value-based management to support value-based decision-making in organizations. Topics include economic profit and residual income as foundations for value-based performance measurement, regulatory requirements in the context of corporate governance, and value-based compensation systems for aligning management incentives. Beyond

economic considerations, social and environmental aspects of management decision-making are discussed.
Intended learning outcomes (ILOs)
<p>Students who have taken part in the module Value-based Management,</p> <ul style="list-style-type: none"> • analyze and critically evaluate corporate objectives from an economic perspective, considering both theoretical frameworks and practical implications within the context of corporate governance; • demonstrate a profound understanding of the design, implementation and inherent complexities of value-based controlling systems aligned with shareholder value principles, while critically assessing their limitations and potential trade-offs; • evaluate the complexities of performance measurement systems that align with shareholder value principles, addressing methodological challenges and their impact on managerial decision-making; • critically assess and develop recommendations for incentive-compatible management compensation schemes, considering their strategic alignment, incentive structure and implications for management retention and shareholder cost.
Teaching methods
<ul style="list-style-type: none"> • Interactive lecture • Exercises and case studies
Required attendance
Examination (type of examination, scope)
<p>a) Written exam, 60 minutes, or b) Written exam, 60 minutes + optional semester-long performance (subject to change)</p>
Overall grade relevance
Exam resit opportunities
In the event of failure (grade worse than 4.0), all courses can be repeated in accordance with § 9 of AStuPO.
Recommended reading
Additional notes
<p>International students are welcome! The exam can be written in English or German. The language of lectures and tutorials will be determined in the first lecture.</p>

Workshop Unternehmensbewertung

Modulnummer
Veranstaltungstitel
Workshop Unternehmensbewertung
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Robert Obermaier, externe Dozierende

Prüfungsnummer	ECTS	SWS
	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Sommersemester	1 Semester	

Workload
Blockveranstaltung 2 SWS (16 Std. Präsenzzeit und 134 Std. Eigenarbeitszeit) 2 Blocktermine + Eigenarbeit
Verwendbarkeit
BA Version 2025: Modulgruppe B: Major Accounting and Tax Modulgruppe B: Minor Reporting and Controlling
BA Version 1: Accounting, Finance and Taxation – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Erfolgreiche Teilnahme an der Veranstaltung „Unternehmensbewertung“ oder einer äquivalenten Veranstaltung (z.B. im Rahmen des Auslandssemesters).
Verpflichtende Voraussetzungen
Fachliche Kenntnisse aus der Unternehmensbewertung sind erforderlich. Für den ersten Präsenztermin ist ein PC mit einem Kalkulationsprogramm (z.B. Excel) erforderlich.
Unterrichtssprache
Deutsch

Inhalte
Anhand eines Fallbeispiels werden ausgewählte Themengebiete der Unternehmensbewertung vertieft. Schwerpunkt ist die praktische Anwendung der Bewertungstheorie im Rahmen einer simulierten Praxissituation.
Lernergebnisse Lernziele
Studierende, die an dem Modul „Workshop Unternehmensbewertung“ teilgenommen haben, <ul style="list-style-type: none"> • verstehen ökonomische Grundlagen der Bewertungstheorie und deren Zusammenhänge. • analysieren und diskutieren Bewertungsthemen fachlich fundiert.

<ul style="list-style-type: none"> wenden Ihre Kenntnisse in der Bewertungstheorie durch die Erstellung einer integrierten Planungsrechnung und der Durchführung einer Unternehmensbewertung anhand eines komplexen Fallbeispiels praktisch an. verteidigen ein eigenes Kaufpreisangebot und beurteilen konkurrierende Kaufpreisangebote kritisch.
Lehr- und Lernformen
Die Studierenden sollen – weitgehend in Teamarbeit – eine Bewertung durchführen, ihre Ergebnisse knapp und verständlich präsentieren, eigene Positionen / Ergebnisse erläutern und verhandeln, (Rück-) Fragen beantworten und kritische Einwände behandeln.
Anwesenheitspflicht
Ja
Prüfungsleistung (Prüfungsform, Umfang)
Erstellung einer Fallstudie Präsentation der Ergebnisse Aktive Teilnahme an allen Terminen des Workshops (insbes. Mitarbeit bei Fallstudie, Diskussion der Präsentationen)
Gesamtnotenrelevanz
Wiederholungsmöglichkeit
Bei Nichtbestehen (Note schlechter als 4,0) können alle Veranstaltungen gemäß § 9 der AStuPO wiederholt werden.
Literatur
Weitere Hinweise
Es werden max. 12 Studierende als Teilnehmer zugelassen. Sofern die Anmeldungen die Maximalteilnehmerzahl übersteigen, erfolgt eine Auswahl der Teilnehmer/innen durch die Referenten.

Master Thesis Colloquium

Module number
Course name
Master Thesis Colloquium
Module coordinator/ examiner(s)
Alternating, depending on the courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	1-3	0,5-1
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	4

Workload
30 h to 90 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulgruppe B: Major Accounting and Tax Modulgruppe B: Major Data Science Modulgruppe B: Major Entrepreneurship Modulgruppe B: Major Finance Modulgruppe B: Major Information Systems and Digital Business Modulgruppe B: Major Management and Strategy
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
The colloquium supports students in writing their scientific thesis with regard to the conception, presentation, further development and discussion of the goals, approach and results of the thesis.
Intended learning outcomes (ILOs)
After completing the module, students are able to independently present scientific issues at master level on the basis of scientific methods and analytical thinking. They can present and discuss their results conclusively and draw conclusions from them.
Teaching methods
Alternating, depending on the courses assigned to the module
Required attendance

Examination (type of examination, scope)
Alternating, depending on the courses assigned to the module
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Master Thesis Colloquium

Module number
Course name
Master Colloquium
Module coordinator/ examiner(s)
Prof. Dr. Markus Diller

Examination number	Credit points (ECTS)	Hours per week (SWS)
	1	1
Availability	Duration	Recommended semester
Every semester	1 semester	

Workload
1 SWS (10 hours of attendance and 35 hours of individual work)
Module applicability
BA Version 2025: Modulgruppe B: Major Accounting and Tax
BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
In accordance with § 3 of the study and examination regulations for the Master's degree programme in Business Administration.
Requirements
The requirements for registering theses with the chair must be observed. A prerequisite for participation in the colloquium is confirmation of supervision by the chair.
Language of instruction
English / German (both on request)

Content
In the colloquium, students will present and discuss their research progress on selected tax issues in a plenary session.
Intended learning outcomes (ILOs)
After successfully completing the module: <ul style="list-style-type: none"> • students produce a formally correct academic paper in accordance with the rules of good academic writing, • structure the content of their work,

<ul style="list-style-type: none">• present the results of their work effectively.
Teaching methods
Processing, presentation and discussion of tax research topics Support from the chair.
Required attendance
Examination (type of examination, scope)
Overall grade relevance
Exam resit opportunities
In the event of failure, all courses may be repeated in accordance with § 6 of the Study and Examination Regulations.
Recommended reading
Additional notes

Seminar in Accounting and Tax

Module number
Course name
Module coordinator/ examiner(s)
Alternating, depending on the seminar courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	7	2
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	2-3

Workload
30 h presence and 180 h individual working hours
Module applicability
BA Version 2025: Modulgruppe B: Major Accounting and Tax (Seminar in Accounting and Tax)
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
<ul style="list-style-type: none"> • The Master's seminar is designed to promote independent scientific work in the field of accounting and tax and to prepare students for their master's thesis. • As part of the Master's seminar, students should further develop their skills in dealing with scientific work in accounting and tax. • Students are required to complete a scientific assignment such as a seminar paper or similar in a research field in accounting and tax. • Students present their results and discuss them.
Intended learning outcomes (ILOs)
<p>Students who have successfully completed the module</p> <ul style="list-style-type: none"> • are prepared for their master's thesis in the Major Accounting and Tax. • can create a scientifically sound assignment that is formally correct according to the rules of scientific work, but also creatively in terms of content. • can present their research results and communicate their research findings to scientific and non-scientific audiences at the appropriate level.

<ul style="list-style-type: none">• are able to both provide qualified criticism and implement critical comments in their work.
Teaching methods
Alternating, depending on the seminar courses assigned to the module
Required attendance
Alternating, depending on the seminar courses assigned to the module
Examination (type of examination, scope)
Portfolio, depending on the seminar courses assigned to the module (100%)
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Seminar in Accounting and Tax (Prof. Dr. Obermaier)

Module number
Course name
Master Seminar at the Chair of Business Economics, Accounting and Control
Module coordinator/ examiner(s)
Prof. Dr. Robert Obermaier

Examination number	Credit points (ECTS)	Hours per week (SWS)
	7	2
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	2-3

Workload
30 hours attendance time 180 hours individual study time
We calculate with 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulgruppe B: Major Accounting and Tax (Seminar in Accounting and Tax)
BA Version1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Requirements
Bachelor's degree in an economics or business-related degree programme.
Language of instruction
English

Content
In the Master's seminar, students refine their expertise in advanced academic methodologies and demonstrate their mastery by writing a seminar paper that addresses current topics in business economics, accounting, and control. Thus, students are enabled to engage with complex, practical challenges and contribute to advancing the field of management accounting
Intended learning outcomes (ILOs)
Students who have participated in the seminar, <ul style="list-style-type: none"> • prepare an academic paper with structured content, taking formal criteria into account; • research, structure and utilise relevant academic literature;

<ul style="list-style-type: none"> • implement critical advice in the process of writing the seminar paper; • present the knowledge gained from their academic work.
Teaching methods
<ul style="list-style-type: none"> • Individual elaboration and processing of scientific problems • Presentation of the results by students with subsequent discussion • Preparation of a seminar paper
Required attendance
Examination (type of examination, scope)
Overall grade relevance
Exam resit opportunities
In the event of failure (grade worse than 4.0), all courses can be repeated in accordance with § 9 of AStuPO.
Recommended reading
Will be announced at the beginning of the seminar
Additional notes
Registration must be made via the chair. For admission, an application with informative documents must be submitted to the Chair of Accounting and Control (see the chair's homepage).

Seminar in Accounting and Tax (Prof. Dr. Diller)

Module number
Course name
Tax Seminar Master
Module coordinator/ examiner(s)
Prof. Dr. Markus Diller

Examination number	Credit points (ECTS)	Hours per week (SWS)
	7	2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
2 SWS (30 hours of attendance and 180 hours of individual work)
Module applicability
BA Version 2025: Modulgruppe B: Major Accounting and Tax (Seminar in Accounting and Tax)
BA Version1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
According to § 3 of the study and examination regulations for the Business Administration degree programme. Bachelor's degree in an economics or business-related degree programme. Tax knowledge is recommended.
Requirements
The requirements for the application at the chair must be observed.
Language of instruction
English / German (both on request)

Content
As part of the module, students deal with current research questions in business taxation. They independently write a seminar paper in accordance with academic standards.
Intended learning outcomes (ILOs)
After successfully completing the module: <ul style="list-style-type: none"> • Students will analyze academic texts • Participate in discussions on current tax research topics

<ul style="list-style-type: none"> • Interpret publications in the field of business taxation and evaluate them in terms of their research question and methodology. • Write an academic paper according to the rules of good academic writing, correct in form and structured in content, • effectively present the results of their academic work.
Teaching methods
Independent development of specialised literature. Interactive presentation and discussion.
Required attendance
Examination (type of examination, scope)
Seminar paper 60 % Presentation 40 %
Overall grade relevance
Exam resit opportunities
In the event of failure, all courses may be repeated in accordance with § 6 of the Study and Examination Regulations.
Recommended reading
Suggested reading will depend on the nature of the research and will be communicated to students individually or will need to be compiled independently.
Additional notes
If a certain number of registrations is exceeded, the seminar topics may be assigned as group work, probably max. 2 people per group. The timetable with exact room and time details can only be given after the room allocation has been finalised; the following is planned (without guarantee!): The six-week processing period begins approximately in the first week of lectures. The final presentation will take place approximately 1-2 weeks after submission. Interim results should be presented in the middle of the processing period.

Seminar in Accounting and Tax (Prof. Dr. Pelger)

Module number
Course name
Seminar Accounting and Auditing
Module coordinator/ examiner(s)
Prof. Dr. Christoph Pelger

Examination number	Credit points (ECTS)	Hours per week (SWS)
	7	2
Availability	Duration	Recommended semester
Every winter/ summer semester, but not in the summer terms 2025 and 2026	1 semester	

Workload
30 hours of attendance and 180 hours of self-study
Module applicability
BA Version 2025: Modulgruppe B: Major Accounting and Tax (Seminar in Accounting and Tax)
BA Version1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Requirements
Language of instruction
English

Content
The seminar aims to expand students' knowledge and skills in independent academic work in the field of accounting and auditing and to prepare them for a master thesis in this area. Students write their seminar thesis on a given topic and present the results of their work in the seminar.
The seminar deals with topics that are currently relevant in practice and research under an overarching topic from the field of accounting and auditing, including current standard-setting projects in international accounting, accounting scandals and their effects, conceptual and empirical issues in the application, audit and enforcement of international accounting, and developments in the area of sustainability reporting.

Intended learning outcomes (ILOs)
<p>After successfully completing the seminar, students are able to:</p> <ul style="list-style-type: none"> • explain, structure and assess topics currently being discussed in research in the field of accounting and auditing. • effectively conduct research of relevant academic literature, structure and assess the literature and reflectively integrate it into their own seminar thesis. • reflect on critical comments in the process of writing a seminar thesis and to critically appreciate other works themselves. • Create an independent academic thesis that is formally correct according to the rules of good scientific work and well-structured and creative in terms of content. • Present the results of their academic work effectively. • Put topics from research and practice in the context of their own work and participate in a well-founded professional exchange.
Teaching methods
<ul style="list-style-type: none"> • Individual preparation of the seminar thesis • Presentations by students on the content of their seminar theses • Plenary discussions of the presentations
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none"> • Seminar thesis of approx. 15 pages • Final presentation of the seminar thesis <p>Composition of the grade: Seminar thesis 60%, presentation (and participation in discussions) 40%</p>
Overall grade relevance
Exam resit opportunities
Recommended reading
Additional notes

Data Science in Accounting and Tax

Module number
Course name
Data Science in Accounting and Tax
Module coordinator/ examiner(s)
Alternating, depending on the courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-5	2-4
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	2-3

Workload
90 h to 150 h (presence and individual working hours depending on the course)
Module applicability
Major Accounting and Tax
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
<ul style="list-style-type: none"> This module provides in-depth specialist knowledge in the field of data science, including computer-aided, theoretical and applied methods of statistics, econometrics and operations research and closely related fields. All courses from the major in Data Science are eligible.
Intended learning outcomes (ILOs)
<ul style="list-style-type: none"> Alternating, depending on the courses assigned to the module
Teaching methods
Alternating, depending on the courses assigned to the module
Required attendance
Examination (type of examination, scope)
Exam (written or oral) or Portfolio, depending on the courses assigned to the module (100%)
Overall grade relevance

Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Modulbereich B: Major Data Science

Advanced Data Analytics

Module number
Course name
Advanced Data Analytics (Lecture, Tutorial)
Module coordinator
Prof. Dr. Harry Haupt, Dr. Markus Fritsch

Examination number	Credit points (ECTS)	Hours per week (SWS)
261004	5	2+2
Availability	Duration	Recommended semester
Usually every winter semester	1 semester	3.

Workload
Lecture 2 SWS (28 h Contact hours and 28 h Self-study) and Tutorial 2 SWS (28 h Contact hours, 28 h Self-study). We are calculating with 15 semester weeks (Lecture, Tutorial, and Exam). Each SWS is included in the calculation with 60 minutes.
Module applicability
<p>BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Artificial Intelligence Modulbereich B: Minor Data Science Modulbereich B: Major Accounting and Tax - Container: Data Science in Accounting and Tax Modulbereich B: Major Entrepreneurship - Container: Data Science in Entrepreneurship Modulbereich B: Major Finance - Container: Data Science in Finance Modulbereich B: Major Information Systems and Digital Business - Container: Data Science in Information Systems and Digital Business Modulbereich B: Major Management and Strategy - Container: Data Science in Management and Strategy</p> <p>BA Version 1: Methoden</p>
Reference to the LPO I
Recommended prerequisites
Basic understanding of calculus and matrix algebra, introductory statistics including inferential methods, regression analysis, and testing methods. Basic knowledge of statistical software <i>R</i> is an advantage.
Requirements
Language of instruction
English

Content
This module covers key state of the art techniques in statistical learning/machine learning. The emphasis of the course is on techniques from supervised learning in the context of regression modeling. The following content is covered: Fundamental concepts (bias-variance trade-off, curse of dimensionality, flexibility vs. interpretability, resampling techniques), key building blocks (parametric polynomials, spline-regression, tree-based modeling), and frequently employed algorithms (lasso, backfitting, random forest, boosting). Prediction and inference are discussed. Selected applications are used to motivate the different algorithms.
Intended learning outcomes (ILOs)
Students who have successfully completed the module are able to: <ul style="list-style-type: none"> • explain and reflect the main principles and key assumptions of the covered techniques. • choose suitable and problem-adequate modeling approaches in the context of supervised learning. • implement the approaches in the statistical software R. • develop and evaluate predictive models for particular applications. • interpret and critically assess the modeling results. • discuss selected considerations regarding inference for predictive models and implement the approaches.
Teaching methods
Interactive frontal teaching and discussion of the course content. Teaching of theoretical principles and illustration by examples in lecture and tutorial. Weekly (accessible) lecture and exercise materials and required literature. Some of the tutorials are hands-on using the open-source statistical software R. Students are explicitly invited to play an active role in lectures and tutorials through questions and input for discussions. Readings are essential to prepare the class and the exam.
Required attendance
Examination (type of examination, scope)
Written exam or performance assessment at home (60 minutes) or oral (online) exam
Overall grade relevance
100%
Exam resit opportunities
Recommended reading
Hastie, T., R. Tibshirani, R., and J. Friedman (2017), The Elements of Statistical Learning, 2A, Springer. James, G., Witten, D., Hastie, T., and R. Tibshirani (2023), An Introduction to Statistical Learning, 2A, Springer. Kuhn, M. and K. Johnson (2013), Applied Predictive Modeling, Springer. Efron, B. and T. Hastie (2016), Computer Age Statistical Inference: Algorithms, Evidence, and Data Science, Cambridge University Press.
Additional notes

Artificial Intelligence and Optimization

Module number
Course name
Artificial Intelligence and Optimization
Module coordinator
Prof Dr Marc Goerigk

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture classes 2 SWS (30h presence, 45h unsupervised work) Tutorial classes 2 SWS (30h presence, 45h unsupervised work)
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Artificial Intelligence Modulbereich B: Minor Optimization Modulbereich B: Major Accounting and Tax - Container: Data Science in Accounting and Tax Modulbereich B: Major Entrepreneurship - Container: Data Science in Entrepreneurship Modulbereich B: Major Finance - Container: Data Science in Finance Modulbereich B: Major Information Systems and Digital Business - Container: Data Science in Information Systems and Digital Business Modulbereich B: Major Management and Strategy - Container: Data Science in Management and Strategy
BA Version 1: Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
Basic knowledge of optimization and/or AI helpful
Requirements
Language of instruction
English

Content
We study the relationship between problems and methods in artificial intelligence (in particular, machine learning) and optimization. Concepts that are discussed include: <ul style="list-style-type: none"> • classification and regression trees • neural networks

<ul style="list-style-type: none"> • nearest neighbors classification • support vector machines • clustering • robustness, interpretability, explainability <p>Each aspect is discussed from both the AI and optimization perspective, including issues of complexity. Methods are tested computationally.</p>
<p>Intended learning outcomes (ILOs)</p> <p>Upon completion of the module, students are able to</p> <ul style="list-style-type: none"> • identify typical tasks in machine learning, • formulate them as optimization models, • distinguish between problems of different complexity classes, • identify and apply the most suitable optimization strategy, and • evaluate the quality of these methods
<p>Teaching methods</p> <ul style="list-style-type: none"> • interactive lectures • group work in tutorial classes, including programming of AI and optimization methods
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>Oral exam (duration 45 minutes), OR written exam (90 minutes) The type of exam will be communicated within the first two weeks of teaching.</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p> <p>Related literature includes:</p> <ul style="list-style-type: none"> • D. Bertsimas, J. Dunn: "Machine Learning under a Modern Optimization Lens", Dynamic Ideas LLC, Belmont, Massachusetts, 2019 • M. Mohri, A. Rostamizadeh, A. Talwalkar: "Foundations of Machine Learning", second edition, MIT Press, Cambridge, Massachusetts, 2018 • W. Ertel: "Grundkurs Künstliche Intelligenz", fifth edition, Springer Vieweg, Wiesbaden, 2021
<p>Additional notes</p>

Combinatorial Optimization

Module number
Course name
Combinatorial Optimization
Module coordinator
Prof Dr Marc Goerigk

Examination number	Credit points (ECTS)	Hours per week (SWS)
271036	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	any

Workload
Lecture classes 2 SWS (30h presence, 45h unsupervised work) Tutorial classes 2 SWS (30h presence, 45h unsupervised work)
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Data Science Modulbereich B: Minor Optimization Modulbereich B: Major Accounting and Tax - Container: Data Science in Accounting and Tax Modulbereich B: Major Entrepreneurship - Container: Data Science in Entrepreneurship Modulbereich B: Major Finance - Container: Data Science in Finance Modulbereich B: Major Information Systems and Digital Business - Container: Data Science in Information Systems and Digital Business Modulbereich B: Major Management and Strategy - Container: Data Science in Management and Strategy
BA Version 1: Methoden
Reference to the LPO I
Recommended prerequisites
Mathematical maturity and previous work with optimization problems
Requirements
Language of instruction
English

Content
We study fundamentals of combinatorial decision making problems. These include <ul style="list-style-type: none"> - graph theory - complexity classes

<ul style="list-style-type: none"> - approximation methods - spanning tree problems - path problems - matching problems - knapsack problems - traveling salesperson problems
Intended learning outcomes (ILOs)
<p>Upon completion of the module, students are able to</p> <ul style="list-style-type: none"> - identify fundamental problems of combinatorial optimization, also in the context of more complex decision-making situations - choose appropriate heuristic and exact solution methods and apply them to solve such problems - classify problems by their complexity, and demonstrate hardness using different proof techniques, including polynomial reductions
Teaching methods
<ul style="list-style-type: none"> - lecture with seminar character - interactive lectures - group work in tutorial classes - online forums and discussions - take-home mock exam and its discussion - blended learning
Required attendance
Examination (type of examination, scope)
<p>Oral exam (duration 45 minutes), OR written exam (90 minutes) The type of exam will be communicated within the first two weeks of teaching.</p>
Overall grade relevance
Exam resit opportunities
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
Recommended reading
<p>Related literature: Korte, B. H., Vygen, J. (2011). <i>Combinatorial optimization</i>. Berlin: Springer.</p>
Additional notes

Computational Statistics – Regression in R

Module number
Course name
Computational Statistics – Regression in R
Module coordinator
Prof. Dr. Joachim Schnurbus

Examination number	Credit points (ECTS)	Hours per week (SWS)
261070	3	2
Availability	Duration	Recommended semester
Every winter semester; if possible every semester	1 semester (or block course)	

Workload
Computer lectures and exercises: 30 hrs. attendance and 60 hrs. self-study
The calculation is based on 15 semester weeks (14 lectures + 1 examination week) and each SWS is included in the calculation with 60 minutes.
Module applicability
<p>BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Data Science Modulbereich B: Major Accounting and Tax - Container: Data Science in Accounting and Tax Modulbereich B: Major Entrepreneurship - Container: Data Science in Entrepreneurship Modulbereich B: Major Finance - Container: Data Science in Finance Modulbereich B: Major Information Systems and Digital Business - Container: Data Science in Information Systems and Digital Business Modulbereich B: Major Management and Strategy - Container: Data Science in Management and Strategy</p> <p>BA Version 1: Methoden Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung Wirtschaftsinformatik / Information Systems – Grundlagen Wirtschaftsinformatik / Information Systems – Vertiefung</p>
Reference to the LPO I
Recommended prerequisites
The course aims at students with a basic knowledge in statistics and complements some of the topics treated in 'Methods in Econometrics'.
Requirements

Language of instruction
English
Content
The course focuses on estimating and evaluating regression models with the statistical software R. Model evaluation procedures discussed in class range from graphical methods, classic validation techniques and tests to simulation-based approaches. The course includes model selection (i.e., finding the best model from a large number of possible models), model validation (i.e., checking whether the presumed best specification satisfies the model assumptions), and model interpretation (for linearly and/or nonlinearly transformed variables). Additionally, different data structures such as cross-sections, time series, and panel data are shortly discussed.
Intended learning outcomes (ILOs)
Students who have successfully passed the module: <ul style="list-style-type: none"> • are able to perform and interpret a regression analysis in the statistical software R. • have the skill to select an appropriate statistical model, critically judge the validity of a model and in detail interpret the estimation results in order to provide decision support. • are able to create Monte Carlo-simulations in order to perform a simulation-based assessment of statistical methods or models. • understand statistical tests and can select, apply, and interpret the appropriate tests in regression context.
Teaching methods
Interactive frontal teaching and discussion of the R-Codes. Exercises that are worked on independently in R and then discussed together. Students are expected to deepen their knowledge by completing self-contained R-exercises. Accessible lecture and exercise materials and required literature.
Required attendance
Examination (type of examination, scope)
Exam or performance assessment at home (60 minutes) or portfolio. R-skills are certified via a certificate when the exam is passed.
Overall grade relevance
100%
Exam resit opportunities
Recommended reading
- Kleiber, C. & A. Zeileis (2008), Applied Econometrics with R, Springer. - Field, A. & Miles, J. & Field, Z. (2012), Discovering Statistics using R, SAGE. - Wooldridge, J. (2013), Introductory Econometrics, 5Ed., South Western. - Greene, W.H. (2012), Econometric Analysis, Pearson. - Ligges, U. (2008), Programmieren mit R, Springer.
Additional notes

Computational Statistics – Statistical Learning in R

Module number
Course name
Computational Statistics – Statistical Learning in R
Module coordinator
Prof. Dr. Joachim Schnurbus

Examination number	Credit points (ECTS)	Hours per week (SWS)
261001	3	2
Availability	Duration	Recommended semester
Every summer semester, if possible every term.	1 semester (or block course)	

Workload
Computer lectures and exercises: 30 hrs. attendance and 60 hrs. self-study
The calculation is based on 15 semester weeks (14 lectures + 1 examination week) and each SWS is included in the calculation with 60 minutes.
Module applicability
<p>BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Artificial Intelligence Modulbereich B: Minor Data Science Modulbereich B: Major Accounting and Tax - Container: Data Science in Accounting and Tax Modulbereich B: Major Entrepreneurship - Container: Data Science in Entrepreneurship Modulbereich B: Major Finance - Container: Data Science in Finance Modulbereich B: Major Information Systems and Digital Business - Container: Data Science in Information Systems and Digital Business Modulbereich B: Major Management and Strategy - Container: Data Science in Management and Strategy</p> <p>BA Version 1: Methoden Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung Wirtschaftsinformatik / Information Systems – Grundlagen Wirtschaftsinformatik / Information Systems – Vertiefung</p>
Reference to the LPO I
Recommended prerequisites
The course aims at students with a basic knowledge in statistics (especially regression methods) and basic knowledge of R (e.g. via 'Computational Statistics – Regression in R').
Requirements

Language of instruction
English
Content
Statistical Learning sums up methods from computational statistics that are designed to deal with high dimensional, complex large-scale data sets. Various topics that facilitate modeling of and gaining a deeper insight into these data sets are introduced. Supervised (classification and regression) and unsupervised statistical learning techniques (like neural nets, boosting, clustering) are presented, discussed, and applied. Further topics comprise preprocessing (transformation of variables), resampling (cross-validation, bootstrapping), meta-parameter selection, model evaluation.
Intended learning outcomes (ILOs)
Students who have successfully passed the module: <ul style="list-style-type: none"> • are able to apply and interpret unsupervised and supervised learning methods in the statistical software R. • have the skill to select a problem-adequate statistical learning method, to configure and employ the corresponding R-functions, to critically judge the validity of the outcomes, and to interpret the results in order to provide decision support. • will be able to relate to recent literature on statistical learning.
Teaching methods
Interactive frontal teaching and discussion of the R-Codes. Exercises that are worked on independently in R and then discussed together. Students are expected to deepen their knowledge by completing self-contained R-exercises. Accessible lecture and exercise materials and required literature.
Required attendance
Examination (type of examination, scope)
Exam or performance assessment at home (60 minutes) or portfolio. R-skills are certified via a certificate when the exam is passed.
Overall grade relevance
100%
Exam resit opportunities
Recommended reading
- Kuhn, M. & Johnson, K. (2013), Applied Predictive Modeling, Springer. - Hastie, T., Tibshirani, R. & Friedman, J. (2009), The Elements of Statistical Learning: Data Mining, Inference, and Prediction, 2Ed., Springer. - Efron, B., Hastie, T. (2016), Computer Age Statistical Inference, Cambridge University Press. - Torgo, L. (2017), Data Mining with R: Learning with Case Studies, 2Ed., CRC Press. - James, G., Witten, D., Hastie, T & Tibshirani, R. (2015), An Introduction to Statistical Learning: with Applications in R, Springer.
Additional notes

Decision Making Under Uncertainty

Module number
Course name
Decision Making Under Uncertainty
Module coordinator
Prof Dr Marc Goerigk

Examination number	Credit points (ECTS)	Hours per week (SWS)
271034	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	any

Workload
Lecture classes 2 SWS (30h presence, 45h unsupervised work) Tutorial classes 2 SWS (30h presence, 45h unsupervised work)
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Data Science Modulbereich B: Minor Optimization Modulbereich B: Major Accounting and Tax - Container: Data Science in Accounting and Tax Modulbereich B: Major Entrepreneurship - Container: Data Science in Entrepreneurship Modulbereich B: Major Finance - Container: Data Science in Finance Modulbereich B: Major Information Systems and Digital Business - Container: Data Science in Information Systems and Digital Business Modulbereich B: Major Management and Strategy - Container: Data Science in Management and Strategy
BA Version 1: Methoden
Reference to the LPO I
Recommended prerequisites
Mathematical maturity and previous work with optimization problems
Requirements
Module "Fundamentals of Management Science"
Language of instruction
English

Content
We study decision-making problems under uncertainty using optimization tools, including - robust optimization, in particular

<ul style="list-style-type: none"> - min-max, min-max regret, and ordered weighted averaging - one- and two-stage problems - different types of uncertainty sets (discrete, polyhedral, budgeted, ellipsoidal) - complexity, approximation and solution methods - the application to combinatorial problems - stochastic optimization - other approaches, such as fuzzy sets
Intended learning outcomes (ILOs)
<p>Upon completion of the module, students are able to</p> <ul style="list-style-type: none"> - recognize and model uncertain data, taking into account resulting complexity consequences - apply suitable techniques to model and solve uncertainty in decision-making - differentiate between hard and easy uncertain problems
Teaching methods
<ul style="list-style-type: none"> - lecture with seminar character - interactive lectures - group work in tutorial classes - online forums and discussions - take-home mock exam and its discussion - blended learning
Required attendance
Examination (type of examination, scope)
<p>Oral exam (duration 45 minutes), OR written exam (90 minutes) The type of exam will be communicated within the first two weeks of teaching.</p>
Overall grade relevance
Exam resit opportunities
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
Recommended reading
Additional notes

Deep Learning and Text Analysis in Finance

Module number
Course name
Deep Learning and Text Analysis in Finance
Module coordinator
Prof. Dr. Ralf Kellner

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	4

Workload
150 h (60 h contact studies / 90 h self-studies)
Module applicability
<p>BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Artificial Intelligence Modulbereich B: Major Accounting and Tax - Container: Data Science in Accounting and Tax Modulbereich B: Major Entrepreneurship - Container: Data Science in Entrepreneurship Modulbereich B: Major Finance - Container: Data Science in Finance Modulbereich B: Major Information Systems and Digital Business - Container: Data Science in Information Systems and Digital Business Modulbereich B: Major Management and Strategy - Container: Data Science in Management and Strategy</p> <p>BA Version 1: Accounting, Finance and Taxation – Vertiefung Wirtschaftsinformatik / Information Systems – Vertiefung</p>
Reference to the LPO I
Recommended prerequisites
Fundamentals of mathematics and statistics.
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Text Preprocessing • Simple frequency-based text models • Quantitative basics for understanding advanced text models

<ul style="list-style-type: none"> • Word2Vec, Doc2Vec • Text models with attention mechanisms: encoder and decoder models • Use of text models in the financial sector <ul style="list-style-type: none"> ○ Information processing of capital market participants ○ Quantification of capital market reactions ○ Identification of companies with risks in relation to climate change and the transformation to a CO2-neutral economy
Intended learning outcomes (ILOs)
Students who have successfully completed this course
<ul style="list-style-type: none"> • develop a deep understanding of how modern text models work • establish the connection between general machine learning methods and modern text modelling • assess which form of text analysis is suitable for different situations • use modern text models to analyse and evaluate important documents from the field of economics
Teaching methods
<ul style="list-style-type: none"> • Interactive lectures incl. digital documents • Interactive exercise units
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none"> • Written exam
Overall grade relevance
Exam resit opportunities
Recommended reading
<ul style="list-style-type: none"> • Machine Learning for Text (2018) – Aggarwal, C. C., Springer Verlag • When Is a Liability Not a Liability? Textual Analysis, Dictionaries, and 10-Ks (2011) – Loughran and McDonald, The Journal of Finance 66(1) • Disclosure Sentiment: Machine Learning vs. Dictionary Methods (2022) – Frankel et. al, Management Science 68(7)
Additional notes

Econometric Methods

Module number
Course name
Econometric Methods
Module coordinator
Prof. Dr. Harry Haupt

Examination number	Credit points (ECTS)	Hours per week (SWS)
261120	5	3+2
Availability	Duration	Recommended semester
Every winter semester	1 semester	1.

Workload
Lecture 3 SWS (42 h Contact hours and 28 h Self-study) and Tutorial 2 SWS (28 h Contact hours, 42 h Self-study). We are calculating with 15 semester weeks (Lecture, Tutorial and Exam). Each SWS is included in the calculation with 60 minutes.
Module applicability
<p>BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Data Science Modulbereich B: Major Accounting and Tax - Container: Data Science in Accounting and Tax Modulbereich B: Major Entrepreneurship - Container: Data Science in Entrepreneurship Modulbereich B: Major Finance - Container: Data Science in Finance Modulbereich B: Major Information Systems and Digital Business - Container: Data Science in Information Systems and Digital Business Modulbereich B: Major Management and Strategy - Container: Data Science in Management and Strategy</p> <p>BA Version 1: Methoden</p>
Reference to the LPO I
Recommended prerequisites
Bachelor's level understanding of calculus and matrix algebra, introductory statistics including inferential methods, regression analysis, and testing methods. Basic knowledge of R statistical software is an advantage.
Requirements
None
Language of instruction
English

Content
This module provides an introduction into the core methods of modern econometrics at international standard master's level. The following content is covered: Regression analysis and estimation

principles, econometric models, hypothesis testing in regression, exact and asymptotic inference, endogeneity, and heteroscedasticity.
Intended learning outcomes (ILOs)
Students who have successfully completed the module are able: <ul style="list-style-type: none"> • to give a systematic overview of the core principles of modern econometrics. • to understand regression estimation and inference methods and their basic interpretations • to apply the acquired methods and principles to data-based problems. • to perform econometric analyses and will know the underlying mathematical assumptions and the corresponding statistical properties of important regression-based testing and estimation procedures. • to critically assess empirical results, identify potential pitfalls, falsify statements while quantifying the underlying uncertainty, and develop and interpret sound simple models.
Teaching methods
Interactive frontal teaching and discussion of the course content. Teaching of theoretical principles and illustration by examples in lecture and tutorial. Weekly (accessible) lecture and exercise materials and required literature. Some of the tutorials are hands-on using the open-source statistical software R.
Required attendance
Examination (type of examination, scope)
Written exam or home performance assessment (60 minutes) or oral (online) exam
Overall grade relevance
100%
Exam resit opportunities
Recommended reading
- Hansen, B. (2021), Econometrics. http://www.ssc.wisc.edu/~bhansen/econometrics/ - Davidson, R. & J.G. MacKinnon (2009), Econometric Theory and Methods, Oxford Univ. Press. - Stock J.H. & M.M.Watson (2019) Introduction to Econometrics. 4e. Pearson. - Angrist J.D. & J.S. Pischke (2009) Mostly Harmless Econometrics. Princeton Univ. Press.
Additional notes

Heuristics and Approximation Methods

Module number
Course name
Heuristics and Approximation Methods
Module coordinator
Prof Dr Marc Goerigk

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
irregular	1 semester	

Workload
Lecture classes 2 SWS (30h presence, 45h unsupervised work) Tutorial classes 2 SWS (30h presence, 45h unsupervised work)
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Optimization Modulbereich B: Major Accounting and Tax - Container: Data Science in Accounting and Tax Modulbereich B: Major Entrepreneurship - Container: Data Science in Entrepreneurship Modulbereich B: Major Finance - Container: Data Science in Finance Modulbereich B: Major Information Systems and Digital Business - Container: Data Science in Information Systems and Digital Business Modulbereich B: Major Management and Strategy - Container: Data Science in Management and Strategy
BA Version 1: Methoden
Reference to the LPO I
Recommended prerequisites
Basic knowledge of combinatorial optimization is helpful
Requirements
Language of instruction
English

Content
We discuss optimization algorithms for problems that are too difficult to solve exactly. They either provide no guarantee (heuristics in general) or do provide a guarantee (approximation methods) on the quality of the resulting solution. Types of methods we study include <ul style="list-style-type: none"> • greedy algorithms • local search

<ul style="list-style-type: none"> • meta-heuristics and matheuristics • dynamic programming • deterministic and randomized rounding • primal-dual methods • approximation schemes
<p>Intended learning outcomes (ILOs)</p> <p>Upon completion of the module, students are able to</p> <ul style="list-style-type: none"> • differentiate between approximable and inapproximable problems, • apply techniques to analyze the approximation guarantee of solution methods, • develop effective heuristic strategies for complex economical problems, and • find solutions of good quality for difficult decision problems
<p>Teaching methods</p> <ul style="list-style-type: none"> • interactive lectures • group work in tutorial classes
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>Oral exam (duration 45 minutes), OR written exam (90 minutes) The type of exam will be communicated within the first two weeks of teaching.</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p> <p>Recommended literature includes:</p> <ul style="list-style-type: none"> • D. P. Williamson, D.B. Shmoys: "The Design of Approximation Algorithms", Cambridge University Press, New York, 2011
<p>Additional notes</p>

Network Optimization

Module number
Course name
Network Optimization
Module coordinator
Prof Dr Marc Goerigk

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
irregular	1 semester	

Workload
Lecture classes 2 SWS (30h presence, 45h unsupervised work) Tutorial classes 2 SWS (30h presence, 45h unsupervised work)
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Optimization Modulbereich B: Major Accounting and Tax - Container: Data Science in Accounting and Tax Modulbereich B: Major Entrepreneurship - Container: Data Science in Entrepreneurship Modulbereich B: Major Finance - Container: Data Science in Finance Modulbereich B: Major Information Systems and Digital Business - Container: Data Science in Information Systems and Digital Business Modulbereich B: Major Management and Strategy - Container: Data Science in Management and Strategy
BA Version 1: Methoden
Reference to the LPO I
Recommended prerequisites
Basic knowledge of combinatorial optimization or linear programming is helpful
Requirements
Language of instruction
English

Content
We study optimization problems on graphs. We develop an understanding of different problem types and discuss corresponding solution methods. Problem applications include: <ul style="list-style-type: none"> • shortest path problems • minimum spanning tree problems • maximum flow problems

<ul style="list-style-type: none"> • minimum cost flow problems • assignments and matchings • multicommodity flow problems
Intended learning outcomes (ILOs)
<p>Upon completion of the module, students are able to</p> <ul style="list-style-type: none"> • identify network optimization problems, • differentiate between polynomially solvable and hard types of problems, • choose and apply an appropriate solution method, • assess the impact of using different data structures for the implementation of algorithms, and • model real-world problems using networks.
Teaching methods
<ul style="list-style-type: none"> • interactive lectures • group work in tutorial classes
Required attendance
Examination (type of examination, scope)
<p>Oral exam (duration 45 minutes), OR written exam (90 minutes) The type of exam will be communicated within the first two weeks of teaching.</p>
Overall grade relevance
Exam resit opportunities
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
Recommended reading
<p>Recommended literature includes:</p> <ul style="list-style-type: none"> • R. K. Ahuja, T. L. Magnanti, J. B. Orlin: "Network Flows – Theory, Algorithms, and Applications", Pearson, Harlow, 2014
Additional notes

Paneldatenanalyse

Modulnummer
Veranstaltungstitel
Paneldatenanalyse
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Harry Haupt, Dr. Markus Fritsch

Prüfungsnummer	ECTS	SWS
261080	5	2+2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Sommersemester	1 Semester	2

Workload
Vorlesung 2 SWS (30 St. Präsenzzeit und 45 St. Eigenarbeitszeit) und Übung 2 SWS (30 St. Präsenzzeit und 45 St. Eigenarbeitszeit). Es wird mit 15 Semesterwochen gerechnet (Vorlesung, Übung und Prüfung) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
<p>BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Data Science Modulbereich B: Minor Optimization Modulbereich B: Major Accounting and Tax - Container: Data Science in Accounting and Tax Modulbereich B: Major Entrepreneurship - Container: Data Science in Entrepreneurship Modulbereich B: Major Finance - Container: Data Science in Finance Modulbereich B: Major Information Systems and Digital Business - Container: Data Science in Information Systems and Digital Business Modulbereich B: Major Management and Strategy - Container: Data Science in Management and Strategy</p> <p>BA Version 1: Accounting, Finance and Taxation – Grundlagen International Management and Marketing – Grundlagen Methoden</p>
Bezug zur LPO I
Empfohlene Voraussetzungen
Kenntnis der Inhalte von „Econometric Methods“. Dies umfasst eine detaillierte Kenntnis des multiplen linearen Regressionsmodells für Querschnittsdaten (OLS-Schätzung, Tests sowie entsprechende zugrundeliegende Annahmen, Projektionsmatrizen) sowie solide Kenntnisse im Umgang mit der Statistiksoftware R. Kenntnisse von Modellen für Zeitreihendaten sind hilfreich, werden jedoch nicht vorausgesetzt.
Verpflichtende Voraussetzungen
Keine
Unterrichtssprache
Deutsch

Inhalte
Zentraler Gegenstand des Moduls ist die Schätzung von Regressionsmodellen für Paneldaten. Hierbei werden neben grundlegenden Schätzverfahren und Fehlerkomponentenmodellen unter anderem die Fixed-Effects- und Random-Effects-Schätzung behandelt. Weitere Kursinhalte sind dynamische Paneldatenmodelle sowie Test- und Prognoseverfahren für Paneldaten (Stichwort: Best linear unbiased prediction). Die Vermittlung der Kursinhalte erfolgt in Form von Modelltheorie und Anwendung sowie mittels Besprechung und Diskussion ausgewählter Literatur. Die Inhalte werden auch anhand von Beispielen in der Statistiksoftware R veranschaulicht.
Lernergebnisse Lernziele
Nach erfolgreicher Teilnahme am Modul sind die Studierenden in der Lage: <ul style="list-style-type: none"> • Fragestellungen, Anwendungsfelder und Potenziale von Panelmodellschätzungen zu erkennen. • die zentralen Annahmen für statische und dynamische Panelmodellschätzer erläutern und kritisch reflektieren. • geeignete Schätzverfahren für Paneldaten auf Basis der zugrundeliegenden Modelltheorie auszuwählen. • statische und dynamische Panelmodellschätzungen in der Statistiksoftware R implementieren und die Schätzergebnisse interpretieren zu können. • Hypothesen- und Modellspezifikationstests für Panelmodellschätzer anzuwenden und deren Ergebnisse einzuordnen und kritisch zu reflektieren. • aktuelle Literatur zu lesen, zu verstehen und zu diskutieren.
Lehr- und Lernformen
Interaktiver Frontalunterricht und Diskussion von Lehrinhalten. Vermittlung der theoretischen Grundlagen und Illustration anhand von Beispielen in der Vorlesung und Übung. Die Theorie wird auch durch Beispiele in der Statistiksoftware R veranschaulicht. Wöchentliche Vorlesungs- und Übungsmaterialien sowie Pflichtliteratur.
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang)
Schriftliche Prüfung oder häusliche Leistungsfeststellung (60 Minuten) oder mündliche (Online-)Prüfung
Gesamtnotenrelevanz
100%
Wiederholungsmöglichkeit
Literatur
Basisliteratur (andere Auflagen dieser Bücher sind ebenfalls verwendbar): - Wooldridge, J.M. (2019), Introductory Econometrics, 7A, Thomson South-Western. - Stock, J.H. und M.W. Watson (2019), Introduction to Econometrics, 4A, Pearson. - Greene, W.H. (2019), Econometric Analysis, 8A., Pearson. Weiterführende Literatur: - Baltagi, B.H. (2021), Econometric Analysis of Panel Data, 6A., Wiley. - Wooldridge, J. (2010), Econometric Analysis of Cross Section and Panel Data, 2A, MIT Press. - Arellano, M. (2004), Panel Data Econometrics, Oxford University Press. - Angrist, J.D. und J.-S. Pischke (2009), Mostly Harmless Econometrics, Princeton University Press.
Weitere Hinweise
Die Theorie wird auch anhand von Beispielen in der Statistiksoftware R illustriert.

Scientific Computing and Digital Reporting with Python

Module number
Course name
Scientific Computing and Digital Reporting with Python
Module coordinator
Prof. Dr. Ralf Kellner

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
150 h (60 h contact studies / 90 h self-studies)
Module applicability
<p>BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Artificial Intelligence Modulbereich B: Major Accounting and Tax - Container: Data Science in Accounting and Tax Modulbereich B: Major Entrepreneurship - Container: Data Science in Entrepreneurship Modulbereich B: Major Finance - Container: Data Science in Finance Modulbereich B: Major Information Systems and Digital Business - Container: Data Science in Information Systems and Digital Business Modulbereich B: Major Management and Strategy - Container: Data Science in Management and Strategy</p> <p>BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung Wirtschaftsinformatik / Information Systems – Vertiefung</p>
Reference to the LPO I
Recommended prerequisites
Mathematics and statistics from the Bachelor's programme. At best, the course 'Fundamentals of Business Analytics' (39720) has already been taken beforehand.
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Introduction to programming with Python

<ul style="list-style-type: none"> • Statistical models (sklearn, statsmodels, etc. and own implementation) • Optimization using gradient-based algorithms (Scipy, Tensorflow, Pytorch) • Matrix decompositions with application examples such as principal component analysis • Access to data using APIs and web scraping • Digital reporting with the help of a specially programmed web application • Final project: data reference, analysis using a model, reporting of the results using a customized web app
<p>Intended learning outcomes (ILOs)</p> <p>After successfully completing the course, students will be able to carry out advanced data analyses using the Python programming language and inform external parties about the relevant results of the analyses in an appropriate manner. This includes all individual steps from collecting their own data, identifying and carrying out their own analyses to making the results accessible. In addition, course participants gain in-depth knowledge of the statistical modelling of financial market data. In addition to specific applications, the general competence of independent learning of new statistical models is trained.</p>
<p>Teaching methods</p> <ul style="list-style-type: none"> • Interactive lectures • Interactive exercises • Digital teaching materials on programming with Python and the methodological basics of the course
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <ul style="list-style-type: none"> • Written exam • Digital exam
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Recommended reading</p> <ul style="list-style-type: none"> • Deep Learning (2016) – Goodfellow, I., Bengio, Y., Courville, A.; MIT Press • The Elements of Statistical Learning (2017) - Hastie, T., Tibshirani, R., Friedman, J.; Springer • Hands-On Machine Learning with Scikit-Learn, Keras & Tensorflow (2017) – Geron, A.; Wiley • Learn Python Programming (2018) – Romano, F., Packt Publishing Ltd. • Web Scraping with Python (2018) - Ryan Mitchell, O'Reilly Media, Inc.
<p>Additional notes</p>

Topics in Applied Econometrics

Module number
Course name
Topics in Applied Econometrics
Module coordinator
Prof. Dr. Harry Haupt, Prof. Dr. Joachim Schnurbus

Examination number	Credit points (ECTS)	Hours per week (SWS)
271030	5	2+2
Availability	Duration	Recommended semester
Usually every summer term	1 semester	2/4

Workload
Lecture 2 SWS (28 h Contact hours and 28 h Self-study) and Tutorial 2 SWS (28 h Contact hours, 28 h Self-study). We are calculating with 15 semester weeks (Lecture, Tutorial and Exam). Each SWS is included in the calculation with 60 minutes.
Module applicability
<p>BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Artificial Intelligence Modulbereich B: Minor Data Science Modulbereich B: Major Accounting and Tax - Container: Data Science in Accounting and Tax Modulbereich B: Major Entrepreneurship - Container: Data Science in Entrepreneurship Modulbereich B: Major Finance - Container: Data Science in Finance Modulbereich B: Major Information Systems and Digital Business - Container: Data Science in Information Systems and Digital Business Modulbereich B: Major Management and Strategy - Container: Data Science in Management and Strategy</p> <p>BA Version 1: Methoden Accounting, Finance and Taxation – Vertiefung International Management and Marketing – Vertiefung</p>
Reference to the LPO I
Recommended prerequisites
An understanding of introductory statistics including inferential methods and regression analysis and test methods on bachelor level. Basic knowledge of R statistical software is an advantage.
Requirements
Language of instruction
English

Content

<p>This module covers a selection (usually divided in three to four blocks) of fundamental research methods and techniques in applied econometrics. Topics included are: Maximum-Likelihood estimation and inference (for specification tests and various fields of microeconomic applications), advanced applications of least squares and GMM (for modeling heterogeneity and endogeneity in empirical practice), smoothing methods such as kernel and spline regression, robust inferential methods such as quantile regression and their interpretation, machine learning methods (and their applications in econometrics), and simulation-based methods (such as Bootstrap-, Monte Carlo-, and Bayesian techniques).</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have successfully completed the module:</p> <ul style="list-style-type: none"> • develop a basic understanding of some of the core methods of applied econometrics. • are able to reflect the underlying elementary mathematical foundations and corresponding assumptions of estimation and inference for the covered techniques, while developing an awareness of potential pitfalls in empirical practice. • can implement the methods in the statistical software R, apply the methods to empirical datasets and are able to provide economic interpretations and critically reflect the modeling results.
<p>Teaching methods</p>
<p>Interactive frontal teaching and discussion of the course content. Teaching of theoretical principles and illustration by examples in lecture and tutorial. Weekly (accessible) lecture and exercise materials and required literature. Some of the tutorials are hands-on using the open-source statistical software R.</p> <p>Students are explicitly invited to play an active role in lectures and tutorials through questions and input for discussions. Additionally, students are invited to indicate those parts of the course for which they need additional training.</p> <p>Readings are essential to prepare the class and the exam.</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Portfolio, consisting of two parts:</p> <ul style="list-style-type: none"> • Part 1 (1/3): Short presentation of (a part of) a scientific paper or an application. • Part 2 (2/3): Oral (online) exam or performance assessment at home.
<p>Overall grade relevance</p>
<p>One overall grade, 100%</p>
<p>Exam resit opportunities</p>
<p>Recommended reading</p>
<p>Among others and depending on the selection of topics: Angrist, J.D. & Pischke J.-S. (2009); Mostly Harmless Econometrics, Princeton. Cameron, C.A. & Trivedi, P.K. (2005), Microeconometrics: Methods & Applications, Cambridge. Franses, P.H., van Dijk, D. & A. Opschoor (2014), Time Series Models for Business and Economic Forecasting, Cambridge. Kleiber, C. & Zeileis, A. (2008), Applied Econometrics with R, Springer. Verbeek, M. (2017), A Guide to Modern Econometrics, 5e, Wiley</p>
<p>Additional notes</p>

Master Thesis Colloquium

Module number
Course name
Master Thesis Colloquium
Module coordinator/ examiner(s)
Alternating, depending on the courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	1-3	0,5-1
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	4

Workload
30 h to 90 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulgruppe B: Major Accounting and Tax Modulgruppe B: Major Data Science Modulgruppe B: Major Entrepreneurship Modulgruppe B: Major Finance Modulgruppe B: Major Information Systems and Digital Business Modulgruppe B: Major Management and Strategy
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
The colloquium supports students in writing their scientific thesis with regard to the conception, presentation, further development and discussion of the goals, approach and results of the thesis.
Intended learning outcomes (ILOs)
After completing the module, students are able to independently present scientific issues at master level on the basis of scientific methods and analytical thinking. They can present and discuss their results conclusively and draw conclusions from them.
Teaching methods
Alternating, depending on the courses assigned to the module
Required attendance

Examination (type of examination, scope)
Alternating, depending on the courses assigned to the module
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Seminar in Data Science

Module number
Course name
Module coordinator/ examiner(s)
Alternating, depending on the seminar courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	7	2
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	2-3

Workload
30 h presence and 180 h individual working hours
Module applicability
BA Version 2025: Modulgruppe B: Major Data Science (Seminar in Data Science)
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
<ul style="list-style-type: none"> • The Master's seminar is designed to promote independent scientific work in the field of data science and to prepare students for their master's thesis. • As part of the Master's seminar, students should further develop their skills in dealing with scientific work in data science. • Students are required to complete a scientific assignment such as a seminar paper or similar in a research field in data science. • Students present their results and discuss them.
Intended learning outcomes (ILOs)
<p>Students who have successfully completed the module</p> <ul style="list-style-type: none"> • are prepared for their master's thesis in the Major Data Science. • can create a scientifically sound assignment that is formally correct according to the rules of scientific work, but also creatively in terms of content. • can present their research results and communicate their research findings to scientific and non-scientific audiences at the appropriate level.

<ul style="list-style-type: none"> • are able to both provide qualified criticism and implement critical comments in their work.
Teaching methods
Alternating, depending on the seminar courses assigned to the module
Required attendance
Alternating, depending on the seminar courses assigned to the module
Examination (type of examination, scope)
Portfolio, depending on the seminar courses assigned to the module (100%)
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Seminar in Data Science (Prof. Dr. Haupt, Prof. Dr.Schnurbus)

Module number
Module title
Applied Statistics (Master Seminar)
Module coordinator
Prof. Dr. Harry Haupt, Prof. Dr. Joachim Schnurbus

Examination number	Credit points (ECTS)	Hours per week (SWS)
261110	7	2
Availability	Duration	Recommended semester
Usually in summer semester	1 semester	4

Workload
Seminar 2 SWS (30 hrs. attendance and 180 hrs. self-study). The calculation is based on 15 semester weeks and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025 Modulgruppe B: Major Data Science (Seminar in Data Science)
BA Version 1 Methoden Accounting, Finance and Taxation - Grundlagen Accounting, Finance and Taxation - Vertiefung International Management and Marketing - Grundlagen International Management and Marketing - Vertiefung
Reference to the LPO I
Recommended prerequisites
According to the study & examination regulations for the respective degree. Completion of courses in the field of statistics/mathematics/data science prior to the seminar is recommended.
Requirements
The theoretical foundations and computer-based applications of statistical methods as well as the interpretation of the empirical results obtained is a core competence in various professional fields. In this module, these core competencies are trained and further developed by systematical deepening selected techniques of scientific work in the context of statistics and data analytics. The thematic focus of the seminar varies and covers a wide range of topics in theoretical and applied statistics and econometrics.
Language of instruction
English

Content
The theoretical foundations and computer-based applications of statistical methods as well as the interpretation of the empirical results obtained is a core competence in various professional fields. In

<p>this module, these core competencies are trained and further developed by systematical deepening selected techniques of scientific work in the context of statistics and data analytics. The thematic focus of the seminar varies and covers a wide range of topics in theoretical and applied statistics and econometrics.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have successfully completed the module "Applied Statistics (Master's Seminar)" are able</p> <ul style="list-style-type: none"> • to outline the state of the relevant scientific literature on their chosen topic. • to present the main results of their work taking into account general scientific aspects (e.g. scientific writing and presentation, literature research and handling of sources, time management, general organization of scientific work) as well as subject-specific aspects (e.g. design of data simulations, use of specific databases, journals and methods). • to conduct an analysis along their selected core literature and justify the focus and structure of the term paper and presentation. • to evaluate the advantages and disadvantages of the different approaches in the literature and how they contribute to a better understanding of the topic, using theoretical or empirical arguments. • to develop starting points for the introduction of novel issues and research questions into the literature at the frontier.
<p>Teaching methods</p>
<p>Seminar. Writing, presenting and discussing seminar paper.</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Seminar paper with approximately 15 pages of text. Presentation of about 30 minutes, including 10 minutes discussion. Both performances enter the grade (seminar paper: 70%, presentation: 30%).</p>
<p>Overall grade relevance</p>
<p>One overall grade, 100%</p>
<p>Exam resit opportunities</p>
<p>Recommended reading</p>
<p>Core literature depends on the thematic focus of the seminar and will be announced prior to the seminar. Students are expected to provide further literature.</p>
<p>Additional notes</p>
<p></p>

Seminar in Data Science (Prof. Dr. Goerigk)

Modulnummer
Veranstaltungstitel
Masterseminar in Business Analytics
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Marc Goerigk

Prüfungsnummer	ECTS	SWS
	7	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
unregelmäßig	1 Semester	2.-4.

Workload
Seminar 2 SWS (30h Präsenzzeit, 180h Eigenarbeitszeit)
Verwendbarkeit
BA Version 2025: Modulgruppe B: Major Data Science (Seminar in Data Science)
BA Version 1: Wirtschaftsinformatik / Information Systems – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Teilnahme an mindestens einer dieser Veranstaltungen hilfreich: Decision Making Under Uncertainty, Combinatorial Optimization, Artificial Intelligence and Optimization, Network Optimization, Heuristics and Approximation Methods
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch und Englisch

Inhalt
Es werden aktuelle Themen aus dem Forschungsbereich Business Analytics behandelt und von den Studierenden eigenständig bearbeitet, schriftlich dokumentiert und analysiert sowie vorgestellt.
Lernergebnisse Lernziele
Studierende erlernen die Fähigkeiten: <ul style="list-style-type: none"> - an einem ausgewählten, vertiefenden und aktuellen Thema in Business Analytics selbstständig und methodisch wissenschaftlich zu arbeiten - durch modulübergreifend gestellte Seminarthemen sich kritisch fachlich mit aktuellen Themenstellungen auseinander zu setzen - wissenschaftliche Methoden der empirischen Forschung bzw. Methoden der Lösung von praxisorientierten Problemstellungen anzuwenden Sie erwerben darüber hinaus kommunikative Kompetenz und fachbezogene Methodenkompetenz

Lehr- und Lernformen
Selbständige Textarbeit, Präsentationen, Gruppendiskussionen
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)
Vortrag (30 Minuten, 50%) und Hausarbeit (20 Seiten, 50%)
Gesamtnotenrelevanz
Wiederholungsmöglichkeit
Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.
Weitere Hinweise

Seminar in Data Science (Prof. Dr. Kellner)

Module number
39904
Course name
Master seminar: Machine Learning in Finance and Economics
Module coordinator/ examiner(s)
Prof. Dr. Ralf Kellner

Examination number	Credit points (ECTS)	Hours per week (SWS)
262504	7	2
Availability	Duration	Recommended semester
Every semester	1 semester	

Workload
Module applicability
BA Version 2025: Modulgruppe B: Major Data Science (Seminar in Data Science) Modulgruppe B: Major Finance (Seminar in Finance)
BA Version 1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
1. You have successfully completed at least one course at our department with a grade of 2.7 or better. 2. You have completed at least one thesis with a grade of 2.7 or better. 3. The seminar papers at our chair usually include empirical evaluations, therefore basic knowledge of the programming language PYTHON is desirable.
Requirements
Language of instruction
English

Content
- Introduction to scientific work - Statistical learning using data - Data collection - Carrying out your own empirical analyses - Preparation of an independent scientific paper
Intended learning outcomes (ILOs)
Students understand the principles of independent scientific work. After completing the seminar, students can familiarize themselves independently with statistical models and use them for

independent empirical analysis. With the knowledge acquired in the seminar, students are prepared for writing their master's thesis
Teaching methods
Self-study and regular individual support
Required attendance
Examination (type of examination, scope)
Seminar paper
Overall grade relevance
Exam resit opportunities
Recommended reading
Additional notes
<p>Application procedure</p> <p>You must apply for the Master's seminars at the Faculty of Business, Economics and Informatics in the respective previous semester. To provide every applicant with a seminar place, there are both basic requirements and a structured procedure for registering for Bachelor's seminars at our department.</p> <p>Application procedure Please submit the following documents to our chair:</p> <ul style="list-style-type: none"> - Application form for the Master's seminar at the Chair of Business Administration with a focus on Financial Data Analytics - Current HISQIS excerpt <p>Please send your documents during the respective application period to: heike.wahsner@uni-passau.de</p> <p>Please note that your acceptance is binding after the withdrawal period has expired. In case of non-attendance or no examination performance, the seminar will be graded with 5.0.</p>

Modulbereich B: Major Entrepreneurship

5-Euro-Business

Modulnummer
32865
Modultitel
5-Euro-Business Wettbewerb (für Masterstudierende)
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Carolin Häussler, Dr. Patrick Figge

Prüfungsnummer	ECTS	SWS
264960	5	4
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Unregelmäßig	1 Semester	

Workload
4 SWS (60h Präsenzzeit, 90h Eigenstudium)
Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Minor Entrepreneurship
BA Version 1: International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration.
Verpflichtende Voraussetzungen
Teilnahme an der Auftaktveranstaltung in den ersten Wochen des Semesters.
Die Auswahl der Teilnehmenden, falls nötig, findet im Anschluss an die Anmeldung bei der Auftaktveranstaltung statt. (Bei den letzten Wettbewerben konnte allen Angemeldeten die Teilnahme ermöglicht werden).
Unterrichtssprache
Deutsch

<p>Inhalte</p> <p>Spielen Sie mit dem Gedanken, ein Unternehmen zu gründen? Wollen Sie ausprobieren, ob Ihre Idee am Markt ankommt? Dann nehmen Sie am "5-Euro-Business"-Wettbewerb teil! Interessierte Studierende können sowohl mit als auch ohne Team und Idee teilnehmen.</p> <p>Sie entwickeln während des Wettbewerbs gemeinsam mit Ihrem Team eine Idee und setzen diese um. In Intensivkursen werden Sie von Coaches aus der Praxis begleitet (z.B. Ideenentwicklung, Teambildung, Marketing, Schutz, Projektmanagement). Ein(e) Pate/Patin aus der Wirtschaft steht Ihnen zur Seite und unterstützt Sie durchgehend bei der Umsetzung Ihrer Idee. Bei der Abschlussveranstaltung können Preise im Gesamtwert von über 1.500 Euro gewonnen werden.</p> <p>Wir freuen uns über Teilnehmende aller Fakultäten!</p> <p>Nach erfolgreichem Abschluss des Wettbewerbs erhalten Sie bei Abgabe einer zusätzlichen Seminararbeit nach dem Wettbewerb 5 ECTS (vom Lehrstuhl für Betriebswirtschaftslehre mit Schwerpunkt Organisation, Technologiemanagement und Entrepreneurship).</p> <p>Weitere Informationen: www.5-euro-business.de</p>
<p>Lernergebnisse Lernziele</p> <p>Studierende, die erfolgreich an dem Modul "5-Euro-Business Wettbewerb (für Masterstudierende)" teilgenommen haben,</p> <ul style="list-style-type: none"> • erläutern grundlegende Konzepte und Methoden im Bereich der Existenzgründung und identifizieren entscheidungsrelevante Meilensteine in verschiedenen Teilbereichen wie "Ideenentwicklung", "Projektmanagement", "Marketing" und "Finanzen", welche im Zuge der Existenzgründung essenziell sind. • stellen detaillierte, wirtschaftliche Zusammenhänge und Bedingungen, unter welchen unternehmerische Entscheidungen getroffen werden, dar. • arbeiten einen differenzierten Businessplan auf Basis des für Unternehmensgründungen notwendigen Grundwissen aus, welcher ihre entwickelte Geschäftsidee strukturiert und konzeptionell zielgruppenspezifisch illustriert. • schätzen ihre im spielerischen Umfeld des Wettbewerbs getätigten Entscheidungen, Handlungen und Erfahrungen kritisch reflektiert anhand von wissenschaftlichen Konzepten und Theorien ein. • analysieren das Potential der eigenen Geschäftsidee anhand verschiedener Dimensionen. Dabei nutzen die Studierenden Tools, um u.a. den Wettbewerb oder das mit der Geschäftsidee adressierte Problem zu analysieren. Auf Basis ihrer Ergebnisse entwickeln die Studierenden anschließend die Value Proposition der eigenen Geschäftsidee. • Entwickeln und reflektieren im Zuge der praktischen Erfahrung der Existenzgründung unternehmerisches Denken und Handeln, für welches Eigeninitiative, Entscheidungsfreude, Teamfähigkeit, Kreativität und Selbstständigkeit von zentraler Bedeutung sind.
<p>Lehr- und Lernformen</p> <ul style="list-style-type: none"> • Interaktiver Frontalunterricht • Problemorientiertes Lernen (POL), angeleitet durch die Dozierenden und Wirtschaftspaten und -patinnen aus der betrieblichen Praxis
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang)</p> <p>Zusätzlich zur Teilnahme am Wettbewerb: Abgabe einer Seminararbeit (100%).</p>
<p>Gesamtnotenrelevanz</p> <p>Seminararbeit (100%)</p>
<p>Wiederholungsmöglichkeit</p> <p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>

Literatur
Weitere Hinweise
Ablauf: Beim 5-Euro-Business-Wettbewerb können Studierende sich während eines Semesters als Unternehmer bzw. Unternehmerin versuchen. Sie erhalten ein Startkapital von fünf Euro und entwickeln gemeinsam im Team eine Geschäftsidee, die sie innerhalb der Unternehmensphase auf dem Markt umsetzen. In Crashkursen zu den Phasen der Gründung werden die Teilnehmenden mit dem notwendigen Grundwissen ausgestattet. Am Ende der Unternehmensphase treten die Teams im Rahmen der offiziellen Abschlussveranstaltung an. Dort präsentieren sie ihr Unternehmen, ihre Strategien und Ergebnisse vor einer fachkundigen Jury.

Advanced Strategic Sensitivity and Digitalization

Module number
Course name
Advanced Strategic Sensitivity and Digitalization
Module coordinator
Prof. Dr. Andreas König

Examination number	Credit points (ECTS)	Hours per week (SWS)
264507	5	4
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Workshop 4 SWS (60h presence time and 90h own working time)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Business Administration Master's programme.
Requirements
Language of instruction
English

Content
This workshop is concerned with two focal questions: (1) How can we identify digital trends? (2) How can we develop innovative digital business models and communicate them in a way that important stakeholders appreciate, remember, use, and/or fund them? In this quest, we teach approaches and methods from management, innovation and entrepreneurship research, communication research, and leadership studies. The central, unifying concept participants learn to apply and leverage is that of strategic sensitivity, i.e., deliberate and research-driven search for anomalies to taken-for-granted business assumptions and the purposefully entrepreneurial implementation of innovative ideas.

Once acquainted with these theories and methods, the participants will work in teams to develop recommendations and communicate concepts for a current real world managerial problem. This semester, an international manufacturer of passive electronic components will present a digital challenge to the students.
Intended learning outcomes (ILOs)
After successful participation in this course, students can: <ul style="list-style-type: none"> • Explain the concept of strategic sensitivity and are familiar with recent developments in digitalization. • Apply a set of empirical methodologies to induce and test hypotheses that underlie and feed their strategic thinking. • Solve digital challenges strategically and develop own digital business models. • Develop their presentation skills by pitching their own innovations to an expert panel and communicate them successfully.
Teaching methods
<ul style="list-style-type: none"> • Interactive teaching • Classroom discussions and case study in group work • Digital presentation methods
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none"> • Portfolio
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Chevallier, A. and Enders, A., 2022. <i>Solveable</i> . Pearson UK.
Additional notes
<ul style="list-style-type: none"> • The course is offered as a block course. • The course can be credited in the DTE Pathfinder • The course will be held in English. • Typically, the course will be blocked within the first two weeks of the semester. • There will be a mid-term presentation and a final presentation. • Please note that you have to apply for this workshop. <p>For further information, please visit Stud.IP or our homepage via https://www.wiwi.uni-passau.de/strategie-innovation/studium/seminare-und-workshops/</p>

V Branding and Marketing Communications

Modulnummer
33820
Modultitel
Produkt-, Marken und Kommunikationsmanagement
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Dirk Totzek

Prüfungsnummer	ECTS	SWS
264950	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Dreisemesterturnus	1 Semester	

Workload
Vorlesung 2 SWS (30 Std. Präsenz- und 120 Std. Eigenarbeitszeit)
Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- und 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Minor Marketing
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Grundlegende Kenntnisse in Marketing und Modulen des Gebiets Methoden (z.B. „Multivariate Verfahren“) werden empfohlen.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch (will be in English from 2026 onwards)

Inhalte
<ul style="list-style-type: none"> • Präferenztheoretische Grundlagen des Konsumentenverhaltens • Zentrale Entscheidungsfelder der Ausgestaltung und Führung von Produktprogrammen • Zentrale Entscheidungsfelder der Gestaltung und Führung von Marken • Zentrale Entscheidungsfelder und Instrumente des Kommunikationsmanagements • Instrumente zur Budgetierung von Kommunikationsausgaben • Modellierung und Messung der Kommunikationswirkung
Lernergebnisse Lernziele
Studierende, die am Modul „Produkt-, Marken und Kommunikationsmanagement“ teilgenommen haben,
<ul style="list-style-type: none"> • erläutern zentrale Konzepte und Methoden zur Führung von Produktprogrammen und Marken. • wenden Methoden zur Bewertung und Steuerung von Marken an.

<ul style="list-style-type: none">• führen Messungen zur Wirkung von Kommunikationsmaßnahmen durch.• entwickeln optimale Verteilungen von Kommunikationsbudgets.• beurteilen zentrale Vor- und Nachteile unterschiedlicher Kommunikationsinstrumente.• entwickeln ein integriertes und kritisches Verständnis von Markenführung und effektiver Marketingkommunikation vor dem Hintergrund des aktuellen Forschungsstands.
Lehr- und Lernformen
Interaktiver Frontalunterricht ergänzt durch Praxisvorträge
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang)
Schriftliche Klausur (Dauer 60 Minuten) Gewichtung: 100%
Gesamnotenrelevanz
Wiederholungsmöglichkeit
jeweils im folgenden Semester; Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.
Literatur
Basisliteratur: Homburg, Ch. (2020), Marketingmanagement, 7. Aufl., Wiesbaden Spezielle Literatur zu den einzelnen Kapiteln wird in der Vorlesung bekannt gegeben. Ausgewählte Artikel als Pflichtlektüre.
Weitere Hinweise

Consumer Behavior

Modulnummer
Klicken oder tippen Sie hier, um Text einzugeben.
Modultitel
Konsumentenverhalten
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Jan Schumann

Prüfungsnummer	ECTS	SWS
Klicken oder tippen Sie hier, um Text einzugeben.	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Sommersemester	1 Semester	

Workload
Vorlesung = 2 SWS (30 Std. Präsenzzeit + 120 Std. Eigenarbeitszeit)
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Minor Marketing
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration. Grundkenntnisse in "Marketing" werden empfohlen.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
Das Modul gibt einen Überblick über konsumrelevante Wahrnehmungs-, Bewertungs- und Entscheidungsprozesse im Rahmen der individuellen Informationsverarbeitung. Hierbei werden aktuelle Erkenntnisse aus der Motivations-, Emotions-, Wahrnehmungs- und Sozialpsychologie berücksichtigt und aus einer problem- und managementorientierten Perspektive dargestellt. Zahlreiche Beispiele illustrieren, wie diese grundlegenden theoretischen Prinzipien in der Unternehmenspraxis zur Anwendung kommen können.
Lernergebnisse Lernziele
Studierende, die an dem Modul „Konsumentenverhalten“ teilgenommen haben, ... - ... verinnerlichen wesentliche Aussagen der zentralen verhaltenswissenschaftlichen Theorien.

<p>- ... wenden verhaltenswissenschaftliche Theorien auf Erkenntnisse und praktische Problemstellungen des Marketings an.</p> <p>- ... sind vertraut mit der optimalen Gestaltung der Instrumente des Marketing-Mix im Hinblick auf den Konsumenten.</p> <p>- ... beurteilen Anwendungsfälle im Kaufverhalten und in der Unternehmenspraxis im Rahmen des Konsumentenverhalten.</p> <p>- ... bewerten Erkenntnisse aus der Motivations-, Emotions-, Wahrnehmungs- und Sozialpsychologie im Marketingkontext.</p>
<p>Lehr- und Lernformen</p>
<p>Interaktiver Frontalunterricht</p>
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang)</p>
<p>Schriftliche Klausur am Ende des Semesters, 60 min., 100 %</p>
<p>Gesamtnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p>
<p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
<p>Literatur</p>
<ul style="list-style-type: none"> • Koeber-Riel, W. Weinberg, P. / Gröppel-Klein, A. (2008): Konsumentenverhalten (9. Aufl.), München: Vahlen. • Homburg, Christian (2017). Marketingmanagement. Strategie, Instrumente, Umsetzung, Unternehmensführung. Wiesbaden, Springer-Gabler. • Hoyer, W.D./MacInnis, D.J. (2009): Consumer Behavior, International Edition (5 th ed.), Cengage Learning Services. • Trommsdorff, H. (2004): Konsumentenverhalten (6. Aufl.), Stuttgart.
<p>Weitere Hinweise</p>
<p>Die Lehrveranstaltung soll durch Gastvorträge ergänzt werden.</p>

Entrepreneurship Development Programme

Module number
Course name
Entrepreneurship Development Programme (for Master students) - ‚Honours Degree in Entrepreneurship‘
Module coordinator/ examiner(s)
Prof. Dr. Barmeyer; Prof. Dr. Bleyer; Prof. Dr. Bort; Prof. Dr. Granitzer; Prof. Dr. Häussler; Prof. Dr. Mayr; Prof. Dr. Schumann; Prof. Dr. Totzek; Prof. Dr. von Lewinski, Dr. Diekmann
Examiners: Dr. Diekmann, Prof. Dr. Häussler

Examination number	Credit points (ECTS)	Hours per week (SWS)
651430	10	8
Availability	Duration	Recommended semester
Start: every summer semester	2 semesters	1-6

Workload
Seminars and team coaching 8 SWS (90 hrs. class instruction, 210 hrs. self-study & teamwork)
The calculation is based on 15 semester weeks (14 lecture weeks + 1 exam week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship
BA Version 1: International Management and Marketing – Vertiefung Wirtschaftsinformatik / Information Systems – Vertiefung
LPO I applicability
Recommended prerequisites
Initial (business) idea, and at least a team of two members.
Requirements
Successful application and participation at ‘Focus Days’ (Note: The selection of participants, if necessary, will take place after application at the so-called ‘Focus Days’.)
Language of instruction
English

Content
The Entrepreneurship Development Programme is an intense, interdisciplinary programme to develop and validate a business idea and prototype with a focus on digitalisation, interculturality or sustainability. Following the Lean Start-up method, the programme is structured in two intense phases focusing on value creation and value capture to meet the individual needs of student start-

<p>up teams (or student entrepreneurs). Within each intense phase, the (business) idea and prototype(s) will be refined in various workshops and individual coaching sessions. Faculty specialised in (digital) technology, business, sustainability, interculturality, and law support the teams in developing and validating their business model and prototype(s). At the end of the programme, all developed content results in a business plan and pitch deck presented at the final pitch event which can be the starting point for the next steps as an entrepreneur.</p> <p>The following contents will be covered:</p> <ul style="list-style-type: none"> • Customer and market research • Value proposition design along with competition and stakeholder analyses • Business modelling, incl. financial planning as well as sustainable (ecological and social) impact • Marketing strategy (incl. marketing mix) formulation and intercultural aspects • (Digital) prototyping and testing based on psychological theories and concepts • Legal idea and stakeholder assessment
<p>Intended learning outcomes (ILOs)</p> <p>Students who have successfully participated in the module Entrepreneurship Development Programme,</p> <ul style="list-style-type: none"> • explain concepts and methods in the start-up field and identify decision-relevant milestones in various sub-areas such as “customer-centric idea development”, “business modelling”, “prototyping”, “testing”, and “stakeholder management”. • analyse in detail the potential of target markets, prototypes or business ideas with qualitative (and, if necessary, quantitative) customer and market research tools. • apply established entrepreneurial tools and concepts to formulate and quantify a compelling value proposition while taking sustainable (ecological and social), and intercultural effects into consideration. • critically reflect and discuss their entrepreneurial decisions, actions and experiences based on scientific concepts and theories. • set up and present a sophisticated pitch deck and business plan, which compellingly structures the business idea and prototype for potential stakeholders (e.g., partners, employees, or investors). • develop and reflect entrepreneurial thinking and action during the practical experience of setting up a business, for which self-initiative, decisiveness, teamwork, communication skills, and creativity are of central importance.
<p>Teaching methods</p> <ul style="list-style-type: none"> • Project-based learning in combination with an iterative idea development process inspired by the Lean Start-up method. • Seminar and workshop sessions with interactive frontal teaching supplemented by practitioner impulse talks, and individual coaching with team- and idea-specific guidance. • Self-study work in teams on their respective idea accompanied by individual coaching and mentoring sessions providing idea- and team-specific guidance and topic-specific assignments. • In-class presentation, discussion of solutions (peer-to-peer feedback), and written reflection on state-of-the-art studies in entrepreneurship.
<p>Required attendance</p> <p>In-class participation in all parts of the module is required.</p>
<p>Examination (type of examination, scope)</p> <p>In-class participation in all parts of the module is required. Portfolio examination: 25% Term Paper, 75% Project Submissions (incl. 30% Businessreport, 15% Participation, 30% Checkpoint & final pitch)</p>
<p>Overall grade relevance</p> <p>The module is graded.</p>

Exam resit opportunities
in consultation with Examiner
Recommended reading
Literature & supporting material will be announced individually in the workshops & coaching sessions
Additional notes
<ul style="list-style-type: none">• The module is (mainly) taught in English.• Complementary to the core courses, entrepreneurial soft skills can be developed via further workshops, such as "Entrepreneurial Negotiation" or professional "Pitch Training".• In addition to the recognition in the respective degree programme, the certificate 'Honours Degree in Entrepreneurship' will be issued after successful completion.• The programme starts in early spring; workshops and coaching are mainly offered in summer term. The programme ends in fall/early winter.• The modules on Value Creation (#32867), Value Capture (32868), and the study group "Entrepreneurship Development Programme" of the specific cohort will supplement this module.

Entwicklung von Managementfähigkeiten

Module number
Course name
Developing Management Skills
Module coordinator/ examiner(s)
Prof. Dr. Marina Fiedler

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2+2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Workload (to be calculated in hours of 60 minutes over 15 semester weeks, i.e. 14 lecture weeks + 1 exam week)
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
LPO I applicability (only for Teacher Education Programmes)
Recommended prerequisites
Requirements
Language of instruction
English

Content
The aim of the module is to emphasize the importance and significance of management skills, to lean basic management skills, to explain a learning model for developing management skills and to critically reflect on the lecture content. The following aspects will be covered: <ul style="list-style-type: none"> • Personal skills • Happiness, well-being and work • Developing self-awareness • Stress management • Analytical and creative problem solving

<ul style="list-style-type: none"> • Power and influence • Motivation and engagement • Management of positive change <p>Further information about the course will be available in Stud.IP at the start of the course.</p>
<p>Intended learning outcomes (ILOs)</p> <p>After successfully completing the module, students are able to:</p> <ul style="list-style-type: none"> • explain the importance and development of various management skills. • assess their own management skills in terms of strengths and weaknesses. • analyze the management skills necessary for companies. • develop a management skills development program that is aligned with organizational goals, values and strategies. • use social skills to work effectively in a team. • argue and present their own ideas and concepts in a targeted and concise manner.
<p>Teaching methods</p> <ul style="list-style-type: none"> • The lecture will be conducted in German and audio-recorded. An AI-generated English audio translation will be available after each session. International participants are welcome to attend and contribute in either German or English. • Guest lectures by experts in the field • Group project • The exam can be taken in either German or English
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>This course is a portfolio course. The overall grade is composed of two parts:</p> <ul style="list-style-type: none"> • Part 1: group work, 25 points • Part 2: 60-minute written exam, 60 points • Overall grade: A maximum of 85 points can be achieved in total (part 1 and written exam), which is used to calculate the overall grade.
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>If you fail, you can repeat all courses in accordance with § 6 of the subject-specific study and examination regulations.</p>
<p>Recommended reading</p>
<p>Additional notes</p> <p>Strong management skills are essential for professional success—both in leadership positions and teamwork. This course provides a research-oriented yet practical approach to developing these competencies and preparing for real-world challenges. The focus is on theory development and knowledge generation, enabling not only the application of existing concepts but also their critical evaluation and further development.</p> <p>The course covers key management skills, including self-awareness (e.g., emotional intelligence, attribution style, strengths and virtues, resilience), stress and time management, analytical and creative problem-solving, and the impact of artificial intelligence on learning and management. In addition to theoretical foundations, the course emphasizes methodological competencies such as critical thinking, academic research, and data-driven decision-making.</p>

Through interactive lectures and a semester-long group project, students will develop a comprehensive understanding of what management skills are and how to enhance them effectively. The course is not just about theoretical concepts but also their practical application. Teamwork, communication skills, and intercultural competence are as much in focus as the independent development of innovative approaches to improving management skills.

As part of the group project, generative AI will be used in a targeted manner—whether to support creative processes or optimize problem-solving strategies. At the same time, the course encourages critical reflection on the limitations of AI and how it can be effectively and value-adding in practice. In addition to developing management skills, students will also engage with digital literacy and the reflective use of AI-driven methods.

The final grade consists of a group project (30%) and a written exam (70%). The exam can be taken in German or English.

International students are welcome! The lecture is conducted in German, but AI-generated English audio translations will be available. Contributions in both German and English are explicitly encouraged. Please note the current information provided in the course and in Stud.IP.

Ethical Entrepreneurship and Stakeholder Analysis

Module number
Course name
Ethical Entrepreneurship and Stakeholder Analysis
Module coordinator/ examiner(s)
Prof. Dr. Carola Jungwirth

Examination number	Credit points (ECTS)	Hours per week (SWS)
266204	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
4 SWS (hours per week) (= 60 hours attendance time and 90 hours own work time) The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is counted as 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Minor Entrepreneurship BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
LPO I applicability
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree program in Business Administration.
Requirements
Language of instruction
English; however: course will be held in German if all participants are proficient in German and do not prefer an English-language format

Content
<ul style="list-style-type: none"> • Ethical issues are playing an increasingly important role in business start-ups. Particularly with regard to CSR- or purpose-oriented companies, it has recently been discussed how authentic ethical values can be part of a successful corporate concept. • It is increasingly being recognized that issues like purpose-washing can be avoided particularly well if ethical assumptions have already been well thought through in the design of the company. This course aims to provide students with opportunities to make independent, reliable ethical decisions in the start-up process.

<ul style="list-style-type: none"> In order to make these decisions usable in the context of effective corporate governance, the course introduces not only ethical content but also key aspects of stakeholder analysis.
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have participated in the course Ethical Entrepreneurship and Stakeholder Analysis</p> <ul style="list-style-type: none"> understand ethical problem areas in company foundation processes are able to base a company design on sound ethical foundations are able to make, discuss and present ethical decisions independently have the tools to formulate coherent and practicable ethical corporate objectives identify and characterize stakeholders according to specific situations and involve stakeholders in effective corporate governance
<p>Teaching methods</p>
<p>It is a lecture with seminar character, designed for a small group size (approx. 20 participants).</p> <p>The course is based on “problem-based learning” (PBL) as a method for acquiring knowledge and developing interdisciplinary competences and problem-solving skills.</p> <p>The learning process is structured by the so-called PBL cycle:</p> <ol style="list-style-type: none"> analyze problem scenario identify facts generate hypotheses identify knowledge deficits apply new knowledge abstract and the cycle begins again with the identification of further facts. <p>The teacher guides the students through the PBL cycle and imparts the necessary methodological knowledge (e.g. for hypothesizing).</p> <p>The students acquire knowledge about network management in start-up processes by means of 2-3 “vignettes” (= case studies). These practice-orientated case constellations, outlined on a few pages, illustrate the abstract topic of the course and require a practicable solution proposal, for which, however, a theoretical derivation is necessary. The groups therefore also develop the theoretical foundation for the topics of the course.</p> <p>The module (4 SWS) includes discussions, impulses from the teacher and presentations of the results in plenary sessions as well as teamwork in small groups (max. 7 people per group). The teacher supports the teamwork.</p> <p>All examinations are completed with the last week of the semester.</p>
<p>Required attendance</p>
<p>We expect you to attend. In case of absence (due to illness, meeting conflict, ...) please inform us in time.</p>
<p>Examination (type of examination, scope)</p>
<ul style="list-style-type: none"> slides of presentation, group presentation (50% of the final grade) individual solution proposal for one of the discussed case studies (vignettes) in the form of a written essay (17.000 characters, incl. spaces) (50% of the final grade)
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>In the event of failure, all courses can be repeated in accordance with Section 6 of the Study and Examination Regulations.</p>
<p>Recommended reading</p>
<p>Basic literature:</p> <ul style="list-style-type: none"> Brenkert, George G. (ed.), The Oxford Handbook of Business Ethics, Oxford Handbooks (2009; online edn, Oxford Academic, 2 Jan. 2010).

- Mueller, E.F. & Jungwirth, C. (2022): Are Cooperative Firms More Agile? A Contingency Perspective on Small and Medium-Sized Enterprises in Agglomerations and Peripheral Areas. *Small Business Economics*, 58(1), 281-302.

Further references will be announced during the course.

Additional notes

The course takes place as a face-to-face event during the semester. Students who are unable to attend due to illness can participate virtually. It is requested that virtual participation be announced before the respective lesson.

The number of participants is limited to 20 students. Places will be allocated on a first come, first served basis.

Further information can be found on the chair's homepage: <https://www.wiwi.uni-passau.de/governance/studium/lehrkonzept>

Fundamentals of Digitalization and Digital Trends
--

Module number
Course name
Interdisciplinary Lecture Series for Master Students: Fundamentals of Digitalization and Digital Trends
Module coordinator
Prof. Dr. Andreas König

Examination number	Credit points (ECTS)	Hours per week (SWS)
266700	5	2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture 2 SWS (30h presence time and 120h working time)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Entrepreneurship
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Business Administration Master's programme
Requirements
Language of instruction
English

Content
This interdisciplinary lecture series addresses digital trends and how they can be utilized within society. Each year, the lecture focuses on a different topic within the field, such as digital health, human-computer interaction, brain-computer interfaces, wearable computing, anthro-pomorphic hardware, visual analytics, cyber security, data and health, legal tech, blockchain, fin tech, 4DPrinting, and so forth. In the lectures, scholars from the university, distinguished guest scholars, and practitioners introduce a variety of technological developments and their impact on businesses,

the economy, and society. Students will gain a deeper insight into the topic through scientific reading assignments.
Intended learning outcomes (ILOs)
After successful participation in this course, students <ul style="list-style-type: none"> • Formulate the core tools and concepts of current digital trends • Explain the central theories of research in the context of digital trends and the research environment and the theoretical issues discussed in current innovation and entrepreneurial research • Reflect real-life digital trends using the discussed instruments and develop strategies based on them • Identify and utilize digital trends to create own new business models • Understand and utilize modern strategic decision making tools
Teaching methods
<ul style="list-style-type: none"> • Interactive teaching • Lectures by professors and practitioners • Self-study of assigned research papers
Required attendance
Examination (type of examination, scope)
Written exam, 60 minutes + 5 min reading time, 100% of the final grade No ERASMUS special exams
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
For more information regarding the next semester's topics and lecturers, please visit Stud.IP.

Intercultural Entrepreneurship

Module number
Module title
Intercultural Entrepreneurship – Québec-Bavaria
Module coordinator
Prof. Dr. Christoph Barmeyer

Examination number	Credit points (ECTS)	Hours per week (SWS)
	10	2
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Seminar Class: 2 SWS (28 hrs. class instruction, ca. 100 hrs. teamwork and self-study)
Module applicability
<p>This course does <u>not</u> replace a major seminar!</p> <p>BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Minor Entrepreneurship</p> <p>BA Version 1: International Management and Marketing – Vertiefung (ehemals: Hauptseminar Interkulturelle Kommunikation)</p>
Reference to the LPO I
Recommended requirements
None M.A. ICBS students are strongly recommended to have successfully completed the lecture "Intercultural Management" from module area A beforehand."
Obligatory requirements
Language
English

Content
The advanced seminar "Intercultural Entrepreneurship" is aimed at students from Bavaria and Québec and offers an exceptional opportunity to experience the challenges and opportunities of entrepreneurship on an international level. During the seminar, students will work in virtual teams on a joint business creation project, using their skills in entrepreneurship, creativity and innovation to break down complex problems and develop innovative solutions. A particular challenge will be working in multicultural teams, which will make interculturality clear and tangible. Furthermore,

<p>students will reflect on their intercultural experiences and synthesize their insights into a cohesive and insightful final presentation.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students will be introduced to the theories and concepts of intercultural entrepreneurship and will have the opportunity to learn how intercultural experiences and perspectives influence the creativity and innovative capacity of founders.</p> <p>Participants will also exchange ideas on target-oriented start-up practices and can create intercultural added value. The special feature of the event lies in the combination of the complementary areas of Constructive Intercultural Management and Québec-Bavaria Entrepreneurship.</p> <ul style="list-style-type: none"> • Networking between the business and science locations of Bavaria and Quebec • Application and development of key competencies in the areas of intercultural competence/entrepreneurship • Experience of intercultural-virtual teamwork / leadership / decision-making • Implementation of social innovations and entrepreneurial thinking and action • Strengthening intercultural exchange by bringing together different ways of thinking and working methods • Strengthening intercultural communication and language skills • Explore strategies, organizational approaches and structures that respond to the changing global environment. • Learn and improve to understand, classify, and structure (scientific) literature • Learn and improve to present scientific insights and transfer knowledge to case studies
<p>Teaching methods</p>
<ul style="list-style-type: none"> • Interactive teaching • Intercultural training • Virtual collaboration • Discussion of contents and case studies as “good practices” • Student presentations and classroom discussions
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Portfolio consisting of</p> <ul style="list-style-type: none"> • Reflection on intercultural teamwork • Final presentation of the start-up Project • Term paper
<p>Overall grade relevance</p>
<p>Possibility of retake exam</p>
<p>Reading list</p>
<p>Additional notes</p>
<p>This course aims to have a highly interactive character. We aim to engage in a lively discourse on entrepreneurial issues and mechanisms. We also require a high level of commitment from students and their multicultural teams in terms of developing their own ideas for a potential start-up.</p> <p>This course does <u>not</u> replace a major seminar!</p>

Network Management in Startup Processes

Module number
Course name
Network Management in Startup Processes
Module coordinator/ examiner(s)
Prof. Dr. Carola Jungwirth

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
4 SWS (hours per week) (= 60 hours attendance time and 90 hours own work time) The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is counted as 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Minor Entrepreneurship BA Version 1: International Management and Marketing – Vertiefung
LPO I applicability
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree program in Business Administration.
Requirements
Language of instruction
English; however: course will be held in German if all participants are proficient in German and do not prefer an English-language format

Content
<ul style="list-style-type: none"> • Entrepreneurs are increasingly faced with networking requirements, especially at the beginning of a business start-up. As these are very often crucial for the start-up success, this module aims to disclose the success factors and prepare students for possible hurdles in the context of founding a company. • In the course of the module, traditional principles of entrepreneurial networking are examined as well as those requirements that are specifically related to the start-up processes of purpose-driven companies.

<ul style="list-style-type: none"> The module is characterized by intensive feedback on questions of practical applicability as well as the endeavour to place network processes in a larger theoretical context.
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have participated in the Master's course "Network Management in Start-Up Processes":</p> <ul style="list-style-type: none"> understand the basic principles of network management in business start-ups, both theoretically and practically are able to identify and consider success factors for business start-ups know how challenges and hurdles in the network process of start-ups can be overcome are able to meet the special requirements of network management that exist when founding purpose-driven companies possess the ability to evaluate network requirements according to specific start-up contexts by themselves
<p>Teaching methods</p>
<p>It is a lecture with seminar character, designed for a small group size (approx. 20 participants).</p> <p>The course is based on "problem-based learning" (PBL) as a method for acquiring knowledge and developing interdisciplinary competences and problem-solving skills.</p> <p>The learning process is structured by the so-called PBL cycle:</p> <ol style="list-style-type: none"> 8. analyze problem scenario 9. identify facts 10. generate hypotheses 11. identify knowledge deficits 12. apply new knowledge 13. abstract 14. and the cycle begins again with the identification of further facts. <p>The teacher guides the students through the PBL cycle and imparts the necessary methodological knowledge (e.g. for hypothesizing).</p> <p>The students acquire knowledge about network management in start-up processes by means of 2-3 "vignettes" (= case studies). These practice-orientated case constellations, outlined on a few pages, illustrate the abstract topic of the course and require a practicable solution proposal, for which, however, a theoretical derivation is necessary. The groups therefore also develop the theoretical foundation for the topics of the course.</p> <p>The module (4 SWS) includes discussions, impulses from the teacher and presentations of the results in plenary sessions as well as teamwork in small groups (max. 7 people per group). The teacher supports the teamwork.</p> <p>All examinations are completed with the last week of the semester.</p>
<p>Required attendance</p>
<p>We expect you to attend. In case of absence (due to illness, meeting conflict, ...) please inform us in time.</p>
<p>Examination (type of examination, scope)</p>
<ul style="list-style-type: none"> slides of presentation, group presentation (50% of the final grade) individual solution proposal for one of the discussed case studies (vignettes) in the form of a written essay (17.000 characters, incl. spaces) (50% of the final grade)
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>In the event of failure, all courses can be repeated in accordance with Section 6 of the Study and Examination Regulations.</p>
<p>Recommended reading</p>

Basic literature:

- Hisrich, R. D., Shepherd, D. A. & Peters, M. P. (2016). Entrepreneurship. McGraw-Hill Education.
- Mueller, E.F. & Jungwirth, C. (2022): Are Cooperative Firms More Agile? A Contingency Perspective on Small and Medium-Sized Enterprises in Agglomerations and Peripheral Areas. Small Business Economics, 58(1), 281-302.

Further references will be announced during the course.

Additional notes

The course takes place as a face-to-face event during the semester. Students who are unable to attend due to illness can participate virtually. It is requested that virtual participation be announced before the respective lesson.

The number of participants is limited to 20 students. Places will be allocated on a first come, first served basis.

Further information can be found on the chair's homepage: <https://www.wiwi.uni-passau.de/governance/studium/lehrkonzept>

Organizational Behavior und Unternehmensführung

Module number
Course name
Organizational Behavior
Module coordinator/ examiner(s)
Prof. Dr. Marina Fiedler

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2 + 2
Availability	Duration	Recommended semester
Every summer semester	1 semester	1. - 4. semester

Workload
Workload (to be calculated in hours of 60 minutes each over 15 semester weeks, i.e. 14 weeks of lectures + 1 week of exams)
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
LPO I applicability (only for Teacher Education Programmes)
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's program in Business Administration. Bachelor's degree in economics or a related field.
Requirements
None
Language of instruction
English

Content
Numerous studies show that employee behavior has an impact on key business metrics such as employee turnover, profit and sales, and can thus create sustainable competitive advantages for the company. The aim of the course is to highlight the significance and importance of corporate governance and behavior in organizations with particular reference to change in organizations. The following aspects will be covered: <ul style="list-style-type: none"> • leadership styles • communication and feedback

<ul style="list-style-type: none"> • negotiation management • conflict management • teamwork and diversity • Further information on the module can be found in Stud.IP at the start of the course.
<p>Intended learning outcomes (ILOs)</p> <p>After successfully completing the module, students are able to:</p> <ul style="list-style-type: none"> • determine factors influencing the behavior of managers • understand the context and importance of leadership behavior in organizations • assess behavioral dynamics in organizations based on current trends
<p>Teaching methods</p> <ul style="list-style-type: none"> • The lecture will be conducted in German and audio-recorded. An AI-generated English audio translation will be available after each session. International participants are welcome to attend and contribute in either German or English. • Guest lectures by experts in the field • Group project • The exam can be taken in either German or English
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>This course is a portfolio course. The final grade is made up of two components: Part 1: Creation of a group project, 25 points Part 2: 60-minute written exam, 60 points Overall grade: A maximum of 85 points can be achieved in total (part 1 and part 2), from which the overall grade is calculated. Please note the current information in the course and in Stud.IP.</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>If you fail, you can repeat all courses in accordance with § 6 of the subject-specific study and examination regulations.</p>
<p>Recommended reading</p>
<p>Additional notes</p> <p>Strong leadership competencies and a deep understanding of organizational behavior are essential for professional success—both in leadership positions and teamwork. This course takes a research-oriented approach to analyzing the importance and implications of corporate leadership and organizational behavior, particularly in the context of digital transformation.</p> <p>The course develops subject-specific competencies in the field of organizational behavior and corporate leadership. This includes leadership style models, communication theories and models, feedback mechanisms, negotiation management, and conflict resolution techniques. Students gain a solid understanding of these concepts and learn to apply them evidence-based to real-world business situations.</p> <p>In addition to acquiring foundational knowledge, the course emphasizes methodological competencies. These include critical reflection, analytical problem-solving, and data-driven decision-making, which help students systematically assess management challenges and develop</p>

well-founded strategies. Furthermore, the course enhances **scientific analysis skills and the ability to apply empirical research findings to practical business issues**.

Through **interactive lectures and exercises**, students not only gain a **comprehensive understanding of corporate leadership and organizational behavior**, but also strengthen their **social competencies**. Students enhance their **communication skills, teamwork, and intercultural awareness** by discussing theories and methods in groups and applying them to practical case studies.

As part of the **group project, generative AI is strategically implemented**—whether to **support communication strategies, optimize negotiation processes, or analyze conflict resolution approaches**. At the same time, the course encourages **critical reflection on the limitations and potential of AI** in these areas. This fosters not only **digital literacy** but also **innovation capability and responsible engagement with AI-powered technologies**.

Special emphasis is placed on **critical reflection and independent thinking**. Students are encouraged to **make well-founded decisions independently, navigate uncertainties in leadership practice, and engage with ethical considerations**.

The final grade consists of a **group project (30%) and a written exam (70%)**. The exam can be taken in **German or English**.

International students are welcome! The lecture is conducted in **German**, but **AI-generated English audio translations** will be available. Contributions in both **German and English** are explicitly encouraged. Please note the current information in the course and in Stud.IP.

Organizations and Innovation Strategy

Module number
Course name
Organizations and Innovation Strategy
Module coordinator
Prof. Dr. Carolin Häussler, Dr. Patrick Figge

Examination number	Credit points (ECTS)	Hours per week (SWS)
264190	5	4
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Lecture: 2 SWS (30 hrs. class instruction, 65 hrs. self-study) Exercise Class: 2 SWS (15 hrs. class instruction, 40 hrs. self-study)
Calculation is based on: every hr. per semester week corresponds to 60 minutes. One semester presumably consists of 15 weeks, i.e., 14 course and 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Entrepreneurship
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
Requirements
Language of instruction
English

Content
This course focuses on the organizational and strategic challenges companies face in order to obtain a sustainable competitive advantage. It engages in an application-oriented analysis of intercompany interaction along the value chain. The course discusses how companies organize to innovate and decide for strategic moves in order to attain competitive advantage. Amongst others, topics covered

by this course will be pricing decisions, market entry decisions, intellectual property protection, network effects, and vertical relations within the value chain.
Intended learning outcomes (ILOs)
Students who have successfully participated in the module "Organizations and Innovation Strategy", <ul style="list-style-type: none"> • explain key theoretical concepts of management, competition and strategy science. • combine and compare knowledge of theoretical concepts with the understanding of emerging trends. In so doing, students discuss resulting consequences for strategic decision-making in organizations, e.g., the strategic implications of network effects on the management of platform ecosystems. • perform analyses to quantify abstract decision-making scenarios through game theoretic and economic models (e.g., simultaneous and sequential decision-making games). • assess corporate strategies through analyzing competitive environments surrounding organizations. • develop adequate recommendations for organizations.
Teaching methods
<ul style="list-style-type: none"> • Interactive lecture • Discussion of contents • Discussion of questions and case studies linked to the organizational and innovation strategy of companies • Interactive surveys and classroom experiments
Required attendance
Examination (type of examination, scope)
Written exam at the end of the course (60 Minutes)
Overall grade relevance
Exam (100%)
Exam resit opportunities
Gem. der Prüfungs- und Studienordnung für den Masterstudiengang
Recommended reading
Additional notes
<ul style="list-style-type: none"> • This lecture replaces the lecture "Organizational and Competitive Strategy" (you cannot include both courses in your degree program) • Guest lectures, integration of videos, case studies • A weekly exercise class (#32825) will supplement the lecture by repeating and intensifying core concepts. • The module is applicable to the Certificate Program in Digital Technology and Entrepreneurship: Entrepreneurial Pathfinder.

Price Management

Module number
Course name
Price Management
Module coordinator
Prof. Dr. Dirk Totzek

Examination number	Credit points (ECTS)	Hours per week (SWS)
200519	5	3
Availability	Duration	Recommended semester
Three-semester cycle	1 semester	

Workload
Lecture 2 SWS (30 hours attendance & 90 hours own study) Exercise 1 SWS (Nr. 33801) (15 hours attendance & 15 hours own study)
The calculation is based on 15 semester weeks (14 lecture weeks and 1 exam week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Minor Marketing
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
Knowledge in "Marketing" and basic mathematical skills are strongly recommended. Attendance of basic method modules (e.g. "Multivariate Methods") is of advantage.
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Fundamentals of price management • The economics of price (demand functions, price elasticity) • Estimation of demand functions and willingness-to-pay • The psychology of price • Pricing strategy and price structure • Methods of price determination • Key challenges of price implementation
Intended learning outcomes (ILOs)
Students who have participated in the module "Price Management",

<ul style="list-style-type: none"> • explain theories and concepts of price management reflecting the current state of research. • critically discuss procedures and application problems to estimate demand functions and willingness-to-pay. • determine optimal prices analytically. • explain and assess problems in the design of pricing strategies and price structures. • discuss problems of price implementation and possible solutions in marketing practice.
Teaching methods
Interactive teaching supplemented with guest lectures from practitioners.
Required attendance
Examination (type of examination, scope)
Written exam (duration 60 minutes, 100% of the total grade)
Overall grade relevance
Exam resit opportunities
in the following semester; Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Simon, H., Fassnacht, M. (2019), Price Management, Cham. A list with mandatory readings will be provided at the beginning of the lecture.
Additional notes
The module and the exam are in English language.

Services Marketing

Module number
Course name
Services Marketing
Module coordinator
Prof. Dr. Jan Hendrik Schumann

Examination number	Credit points (ECTS)	Hours per week (SWS)
265111	5	2
Availability	Duration	Recommended semester
Jeweils im Wintersemester nach Ankündigung	1 semester	

Workload
Vorlesung 2 SWS (30 Std. Präsenzzeit und 120 Std. Eigenarbeitszeit)
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Minor Marketing
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
reference to the LPO I
reference to the LPO I
Bachelor-Abschluss in einem wirtschaftswissenschaftlichen oder einem den Wirtschaftswissenschaften nahen Studiengang. Grundkenntnisse in "Marketing" sind vorteilhaft.
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Focus on the characteristics of services marketing • Distinction between services and products • Organizational challenges of service management • Tools used to market services • Overarching tools for planning strategic control and examples of selected service industries (media, financial services)
Intended learning outcomes (ILOs)
<p>Students who have successfully participated in the module "Services Marketing" ...</p> <ul style="list-style-type: none"> • ... compare the specific challenges regarding management and marketing of services versus physical products.

<ul style="list-style-type: none">• ... develop and establish the organizational preconditions for an effective service management.• ... plan and implement the marketing mix for services.• ... recognize and evaluate customers' perceptions of services.
Teaching methods
Interaktiver Frontalunterricht
Required attendance
Required attendance
schriftliche Klausur am Ende des Semesters, 60 Minuten, 100%
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Die relevante Literatur wird am Ende jeder Lehreinheit aufgelistet.
Additional notes
Das Modul kann sowohl als Grundlagen- als auch Vertiefungsmodul im Gebiet "International Management und Marketing" eingebracht werden. Es ist für alle Studiengänge geeignet, die ihren Studierenden in diesem Bereich ein Angebot machen möchten.

Strategy for High-Tech Startups

Module number
Course name
Strategy for High-Tech Startups
Module coordinator
Prof. Dr. Carolin Häussler, Dr. Patrick Figge

Examination number	Credit points (ECTS)	Hours per week (SWS)
264509	5	2+2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture: 2 SWS (30 hrs. class instruction, 65 hrs. self-study) Exercise Class: 2 SWS (15 hrs. class instruction, 40 hrs. self-study)
Calculation based on: every hr. per semester week corresponds to 60 minutes. One semester presumably consists of 15 weeks, i.e., 14 course and 1 exam week.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Entrepreneurship
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
In accordance with § 3 of the study and examination regulation for the master degree program Business Administration.
Requirements
Language of instruction
English

Content
Founding one's own company requires not only a promising business idea but also a successful management of upcoming strategic and organizational challenges. Successfully performing these management tasks is a substantial part of being a successful entrepreneur.

<p>This course focuses on these management tasks concerning the founding of a company, especially with regard to high-technology startups. Inspired by the real founding process, the course starts with an introduction to venture opportunities, concepts, and strategies. Following this introduction, concepts on venture formation, organizational planning, as well as technology development strategy are discussed in the context of high-technology start-ups. The course closes with answers to the question how to finance and how to build the venture.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have successfully participated in the module "Strategy for High-Tech Startups",</p> <ul style="list-style-type: none"> • explain and apply the key concepts and theories in entrepreneurship. • outline core findings of most influential and recent scientific studies in the field of entrepreneurship. • transfer knowledge of entrepreneurship theories into in-class discussions so that they can interpret recent developments in entrepreneurship with a particular focus on the influences of digitalization, new technologies, and strategic implications for high-tech startups. • analyze different entrepreneurial strategies and assess their implications, e.g., for the economy. • develop adequate suggestions for entrepreneurial high-tech organizations.
<p>Teaching methods</p>
<ul style="list-style-type: none"> • Interactive lecture • Discussion of Contents • Discussion of case studies
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Written exam at the end of the course (60 Minutes)</p>
<p>Overall grade relevance</p>
<p>Exam (100%)</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<ul style="list-style-type: none"> • Byers, T.H./Dorf, R. /Nelson, A.J. (2010): Technology Ventures – From Idea to Enterprise, McGraw-Hill. • Selection of essays, articles, and case-studies
<p>Additional notes</p>
<ul style="list-style-type: none"> • Guest lectures, integration of videos, case studies. • A weekly exercise class (#32905) will supplement the lecture by repeating and intensifying core concepts. • The module is applicable to the Certificate Program in Digital Technology and Entrepreneurship: Entrepreneurial Pathfinder.

Unternehmensverfassung

Module number
Course name
Practical Course: Governance
Module coordinator/ examiner(s)
Prof. Dr. Carola Jungwirth

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
4 SWS (hours per week) (= 60 hours attendance time and 90 hours own work time)
The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is counted as 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy
BA Version 1: International Management and Marketing – Vertiefung International Management and Marketing – Grundlagen
LPO I applicability
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree program in Business Administration.
Requirements
Language of instruction
English; however: course will be held in German if all participants are proficient in German and do not prefer an English-language format

Content
Corporate governance assigns decision-making authority and establishes decision-making rules at the management level of a company. The legal form, the articles of association and the management organization of a company are the essential elements of corporate governance (see Neus 2018, Einführung in die BWL, 10th ed.). The design of corporate constitutions is regulated by company law (e.g. GmbHG, AktG). The practical course "Governance" uses case studies to analyze how a corporate constitution should be designed in order to achieve corporate goals. It uses the methodology of Problem Based Learning (PBL) as a method for acquiring flexibly usable knowledge

and developing interdisciplinary skills and problem-solving abilities. The students work on the course content in teams, accompanied by the teacher.
Intended learning outcomes (ILOs)
<p>Students who have taken the “Practical Course Governance” module</p> <ul style="list-style-type: none"> • explain the hypotheses that justify the choice of a particular ownership structure • explain the alternatives for incentive-driven design of rules of procedure and list the advantages and disadvantages of each alternative • use the swarm intelligence of their working group to familiarize themselves with new topics in a short period of time • illustrate the solutions for the small cases (vignettes) with the help of well-structured presentations that include graphical and verbal elements • evaluate the business contexts described in the case and put them in the context of a sustainable solution strategy • develop clear criteria for the construction of a clear and fair corporate constitution that is conducive to an agile and growing company
Teaching methods
<p>It is a lecture with seminar character, designed for a small group size (approx. 20 participants).</p> <p>The course is based on “problem-based learning” (PBL) as a method for acquiring knowledge and developing interdisciplinary competences and problem-solving skills.</p> <p>The learning process is structured by the so-called PBL cycle:</p> <ol style="list-style-type: none"> 1. analyze problem scenario 2. identify facts 3. generate hypotheses 4. identify knowledge deficits 5. apply new knowledge 6. abstract 7. and the cycle begins again with the identification of further facts. <p>The teacher guides the students through the PBL cycle and imparts the necessary methodological knowledge (e.g. for hypothesizing).</p> <p>The students acquire knowledge about network management in start-up processes by means of 2-3 “vignettes” (= case studies). These practice-orientated case constellations, outlined on a few pages, illustrate the abstract topic of the course and require a practicable solution proposal, for which, however, a theoretical derivation is necessary. The groups therefore also develop the theoretical foundation for the topics of the course.</p> <p>The module (4 SWS) includes discussions, impulses from the teacher and presentations of the results in plenary sessions as well as teamwork in small groups (max. 7 people per group). The teacher supports the teamwork.</p> <p>All examinations are completed with the last week of the semester.</p>
Required attendance
We expect you to attend. In case of absence (due to illness, meeting conflict, ...) please inform us in time.
Examination (type of examination, scope)
<ul style="list-style-type: none"> • slides of presentation, group presentation (50% of the final grade) • individual solution proposal for one of the discussed case studies (vignettes) in the form of a written essay (17.000 characters, incl. spaces) (50% of the final grade)
Overall grade relevance
Exam resit opportunities
In the event of failure, all courses can be repeated in accordance with Section 6 of the Study and Examination Regulations.

Recommended reading

Basic literature:

- v. Werder, Axel (2015), Führungsorganisation: Grundlagen der Corporate Governance, Spitzen- und Leitungsorganisation, 3. Auflage. Gabler Verlag, Wiesbaden 2015, ISBN 978-3-8349-4447-4
- Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn? Educational Psychology Review, 2004, H. 16, S. 235-266
- Schulz von Thun, F. (1998): Miteinander reden 3 – Das 'innere Team' und situationsgerechte Kommunikation. Rowohlt, Reinbek 1998, ISBN: 3499605457
- Picot, A. et al. (2020), Organisation - Theorie und Praxis aus ökonomischer Sicht. Schäffer-Poeschel Verlag, 8. Auflage 2020, ISBN: 3791047086

Further references will be announced during the course.

Additional notes

The course takes place as a face-to-face event during the semester. Students who are unable to attend due to illness can participate virtually. It is requested that virtual participation be announced before the respective lesson.

The number of participants is limited to 20 students. Places will be allocated on a first come, first served basis.

Further information can be found on the chair's homepage: <https://www.wiwi.uni-passau.de/governance/studium/lehrkonzept>

Book of the Year

Module number
Course name
Book of the Year
Module coordinator/ examiner(s)
Prof. Dr. Carola Jungwirth

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
2 SWS (hours per week) (= 30 hours attendance time and 120 hours own work time) The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is counted as 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy BA Version 1: International Management and Marketing – Vertiefung International Management and Marketing – Grundlagen
LPO I applicability (only for Teacher Education Programmes)
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree program in Business Administration.
Requirements
Language of instruction
English; however: course will be held in German if all participants are proficient in German and do not prefer an English-language format

Content
The Master's course <i>Business Book of the Year</i> deals with economic concepts on the basis of reading and discussing a popular science book that changes from semester to semester and is widely discussed in the media . Students will independently research the literature on which the book is based and relate the source literature to the core statements of the 'book of the year'. Students are encouraged to critically analyze relevant book chapters independently.

<p>They learn to differentiate between the normative and descriptive aspects of a book and to separate them analytically. They discuss the socio-political categorization of the chosen literature.</p> <p>For the <u>summer term 2025</u> we have selected "<i>Supremacy: AI, ChatGPT, and the Race that Will Change the World</i>" by Parmy Olson as "<i>book of the year</i>". This book, honored as the FT 2024 Business Book of the Year, explores the development of Artificial General Intelligence (AGI) through the perspectives of Sam Altman of OpenAI and Demis Hassabis of DeepMind. It offers an analytical view into the influence that individual leaders in technology have over the trajectory of new innovations. By examining the internal dynamics at play within major tech companies, the book addresses broader themes of AI safety versus ethics, the impact of corporate power on technology development, and the strategic decisions that shape the future of AI. This detailed account will provide a foundation for our discussions on the interplay between technology and business strategy. It raises critical questions about the role of ethics in technology and the balance of power in the tech industry.</p>
<p>Intended learning outcomes (ILOs)</p> <p>Students who have taken part in the <i>Business Book of the Year</i> module</p> <ul style="list-style-type: none"> • explain their view of current economic policy events • explain how they relate the events presented in the Book of the Year to the theoretical repertoire of their Master's program • use self-selected examples from other courses to draw analogies to facts in the Business Book of the Year • illustrate the core statements of the book chapters with the help of analysis tools • evaluate the events described in the book from a business ethics perspective and develop guidelines for more sustainable business practices • develop clear criteria for constructive and appreciative teamwork as well as for informative and clear communication of their work and research results.
<p>Teaching methods</p> <p>This is a lecture with seminar character, designed for a small group size (approx. 20 participants).</p> <p>The module consists of the preparation and presentation of chapters of a popular science book by the course participants as well as the discussion of the book content in plenary. Depending on the size of the group, the presentation takes place as an individual or team effort.</p>
<p>Required attendance</p> <p>We expect you to attend. In case of absence (due to illness, meeting conflict, ...) please inform us in time.</p>
<p>Examination (type of examination, scope)</p> <ul style="list-style-type: none"> • set of presentation slides, presentation of set of book chapters, discussion contributions: 50% of the final grade • individual essay on a topic related to the book (12 000 characters, including spaces: 50% of the final grade)
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>In the event of failure, all courses can be repeated in accordance with Section 6 of the Study and Examination Regulations.</p>
<p>Recommended reading</p> <p>You will be informed at the beginning of the semester via Stud.IP.</p>
<p>Additional notes</p> <p>The course takes place as a face-to-face event during the semester. Students who are unable to attend due to illness can participate virtually. Students are requested to announce their virtual participation before the respective lesson.</p>

The number of participants is limited to 30 students. Places are allocated on a first come, first served basis.

Further information can be found on the chair's homepage: <https://www.wiwi.uni-passau.de/governance/studium/lehrkonzept>

Planspiel Scale Up

Modulnummer
Veranstaltungstitel
Planspiel Scale Up
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Carola Jungwirth

Prüfungsnummer	ECTS	SWS
	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Wintersemester	Blockseminar	Zweite Hälfte des Studiums

Workload
2 SWS Die Veranstaltung wird als Blockveranstaltung angeboten (Dauer: 2,5 Tage). In Vorbereitung zu den Präsenztagen ist ein Teilnehmerhandbuch zu lesen.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy
BA Version 1: International Management and Marketing – Grundlagen
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch; sollte die Mehrheit ein englischsprachiges Format bevorzugen, wäre dies möglich.

Inhalte
Das Planspiel bietet Gelegenheit, die theoretischen Grundlagen des strategischen Managements und der Unternehmensführung in einer realistischen, simulierten Umgebung anzuwenden. In diesem intensiven zweitägigen Blockseminar werden die Teilnehmer:innen vor die Herausforderung gestellt, zeitkritische und weitreichende Entscheidungen zu treffen, die für den Erfolg ihres fiktiven Unternehmens entscheidend sind.
In kleinen Gruppen, die miteinander um knappe Marktressourcen konkurrieren, entwickeln die Studierenden strategische Entscheidungen und passen ihre Strategien flexibel an zufällig generierte Ereignisse an. Diese realistischen Szenarien erfordern schnelle und kluge Reaktionen, wodurch die Teilnehmer:innen wertvolle Managementfähigkeiten erwerben.

<p>Durch die intensive Zusammenarbeit in den Teams wird nicht nur das theoretische Wissen vertieft, sondern es werden auch wichtige Soft Skills wie Problemlösung, Teamarbeit und analytische Fähigkeiten trainiert. Das Planspiel eignet sich besonders für Studierende, die sich für die strategische Unternehmensführung interessieren und bietet gleichzeitig eine Vorbereitung auf die Herausforderungen von Gründungsprozessen.</p>
<p>Lernergebnisse Lernziele</p>
<p>Nach Abschluss des Kurses sind die Studierenden in der Lage</p> <ul style="list-style-type: none"> • komplexe Herausforderungen im unternehmerischen Handeln zu identifizieren, zu analysieren und zu bewältigen • in einem Team erfolgreich und lösungsorientiert zusammenzuarbeiten • auf sich verändernde Situationen flexibel und zielgerichtet zu reagieren • Theorien der strategischen Unternehmensführung praktisch anzuwenden • Managementfähigkeiten auszubilden • Probleme bei einer Unternehmensgründung zu antizipieren
<p>Lehr- und Lernformen</p>
<p>Die Lehrveranstaltung findet als Planspiel statt. Es handelt sich hierbei um eine stark interaktive, praxisorientierte Lehrform mit einem hohen Eigenanteil der Studierenden.</p>
<p>Anwesenheitspflicht</p>
<p>Ja, durchgehende Anwesenheit verpflichtend.</p>
<p>Prüfungsleistung (Prüfungsform, Umfang)</p>
<ul style="list-style-type: none"> • Simulationsergebnis (50%) • Abschlusspräsentation (50%) <p>Die Anwesenheit während der gesamten Veranstaltungsdauer sind Voraussetzung für den Scheinerwerb.</p>
<p>Gesamtnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p>
<p>Literatur</p>
<ul style="list-style-type: none"> • TOPSIM Scale Up Teilnehmerhandbuch
<p>Weitere Hinweise</p>
<p>Die Simulation der Unternehmens- und Marktergebnisse erfolgt rechnergestützt anhand der Software TOP-SIM Scale Up.</p> <p>Am ersten Tag findet ein zweistündiges Briefing statt. Allen Teilnehmer:innen wird dringend empfohlen, das Teilnehmerhandbuch vor dem Briefing zu lesen. Die wichtigsten Spielregeln werden im Briefing wiederholt. Ohne eigenständige Vorbereitung und Teilnahme am Briefing ist eine Teilnahme am Planspiel nicht möglich.</p> <p>Die Gruppeneinteilung wird vom Lehrstuhl durchgeführt und am ersten Tag im Briefing kommuniziert.</p> <p>Weitere Informationen finden Sie auf der Homepage des Lehrstuhls: https://www.wiwi.uni-passau.de/governance/studium/lehrkonzept</p>

Master Thesis Colloquium

Module number
Course name
Master Thesis Colloquium
Module coordinator/ examiner(s)
Alternating, depending on the courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	1-3	0,5-1
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	4

Workload
30 h to 90 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulgruppe B: Major Accounting and Tax Modulgruppe B: Major Data Science Modulgruppe B: Major Entrepreneurship Modulgruppe B: Major Finance Modulgruppe B: Major Information Systems and Digital Business Modulgruppe B: Major Management and Strategy
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
The colloquium supports students in writing their scientific thesis with regard to the conception, presentation, further development and discussion of the goals, approach and results of the thesis.
Intended learning outcomes (ILOs)
After completing the module, students are able to independently present scientific issues at master level on the basis of scientific methods and analytical thinking. They can present and discuss their results conclusively and draw conclusions from them.
Teaching methods
Alternating, depending on the courses assigned to the module
Required attendance

Examination (type of examination, scope)
Alternating, depending on the courses assigned to the module
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Master Thesis Colloquium

Module number
Course name
Master Colloquium in Organization, Technology Management, and Entrepreneurship
Module coordinator/ examiner(s)
Prof. Dr. Carolin Häussler

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3	2
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	

Workload
<ul style="list-style-type: none"> • 2 SWS (30 hours of in-class time, 60 hours of independent study) • The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week), with each SWS accounting for 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy BA Version 1: International Management and Marketing – Vertiefung
LPO I applicability
Recommended prerequisites
<ul style="list-style-type: none"> • According to § 3 of the study and examination regulations for the Masters program in Business Administration and Economics. • Please observe the regulations for registering final theses at the chair.
Requirements
Admission to the final thesis is a prerequisite for participation in the colloquium.
Language of instruction
English

Content
The colloquium supports students in the process of writing their final thesis at the Chair of Organization, Technology Management, and Entrepreneurship.
Intended learning outcomes (ILOs)
Students who successfully complete the module " <i>Bachelor Colloquium in Organization, Technology Management, and Entrepreneurship</i> " will: <ul style="list-style-type: none"> • Structure the results produced by a scientific paper, present their interconnections, and deliver them in a plenary session. • Evaluate their own scientific work.

<ul style="list-style-type: none"> • Develop clear criteria for assessing scientific presentations and apply these to discussions of other scientific presentations. • Implement academic presentation skills in a slide-supported, free presentation of their own scientific thesis.
Teaching methods
<ul style="list-style-type: none"> • Lectures, discussions, and collaborative development of scientific methodology • Individual exposé coaching for students • Development, application, and discussion of empirical methods • Student presentations on specific topics
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none"> • Presentation of interim results of the student's own scientific work • Oral participation
Overall grade relevance
Exam resit opportunities
Recommended reading
Relevant literature will be provided in the accompanying sessions and during the first individual supervision meeting.
Additional notes
This module is mandatory for students writing their master's thesis at the chair. It must be completed alongside the preparation of the master's thesis.

Master Thesis Colloquium

Module number
39752
Module title
Masterkolloquium im Fach Internationales Management und Soziales Unternehmertum
Module coordinator
Prof. Dr. Suleika Bort

Examination number	Credit points (ECTS)	Hours per week (SWS)
264513	3	2
Availability	Duration	Recommended semester
Each semester	1 Semester	2

Workload
2 SWS (30 h attendance time, 60 h self-study). The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy
BA Version 1: International Management and Marketing – Vertiefung
reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's program in Business Administration.
Requirements
Please have a look at the application regulations for a final thesis at the Chair's webpage. Prerequisite for the participation in the colloquium is the admission to the final thesis. This course is mandatory for all students that want to write their final thesis at the Chair.
Language of instruction
English

Content
The colloquium enables students to prepare, present and discuss an independent scientific paper.
Intended learning outcomes (ILOs)
Students who have successfully participated in the Module „Masterkolloquium im Fach Internationales Management und Soziales Unternehmertum“ <ul style="list-style-type: none"> outline the fundamental ideas of their final thesis and describe the motivation assumptions and mechanics of their scientific work.

<ul style="list-style-type: none"> • present their scientific approach in their final thesis to other students and structure the key points in an individual exposé. • design a specific, empirical research method and implement these research methods in a scientific way. • justify the own work progress and reflect on their own scientific work and the work of other students and reflect on central organization theories used in the field of International Management & Social Entrepreneurship. • evaluate their own scientific work and progress and combine related scientific methods with specific research questions. • develop suggestions on possible ways forward regarding the theoretical and practical implications of their scientific work.
Teaching methods
Interactive teaching sessions with presentations, discussion and joint development of the course Content.
Required attendance
Examination (type of examination, scope)
Portfolio
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
Students who cannot credit the colloquium according to the examination regulations, receive a confirmation ("Schein") from the Chair upon request.

Seminar in Entrepreneurship

Module number
Course name
Module coordinator/ examiner(s)
Alternating, depending on the seminar courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	7	2
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	2-3

Workload
30 h presence and 180 h individual working hours
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship
LPO I applicability (only for Teacher Education Programmes)
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
<ul style="list-style-type: none"> • The Master's seminar is designed to promote independent scientific work in the field of entrepreneurship and to prepare students for their master's thesis. • As part of the Master's seminar, students should further develop their skills in dealing with scientific work in entrepreneurship. • Students are required to complete a scientific assignment such as a seminar paper or similar in a research field in entrepreneurship. • Students present their results and discuss them.
Intended learning outcomes (ILOs)
<p>Students who have successfully completed the module</p> <ul style="list-style-type: none"> • are prepared for their master's thesis in the Major Entrepreneurship. • can create a scientifically sound assignment that is formally correct according to the rules of scientific work, but also creatively in terms of content. • can present their research results and communicate their research findings to scientific and non-scientific audiences at the appropriate level. • are able to both provide qualified criticism and implement critical comments in their work.

Teaching methods
Alternating, depending on the seminar courses assigned to the module
Required attendance
Alternating, depending on the seminar courses assigned to the module
Examination (type of examination, scope)
Portfolio, depending on the seminar courses assigned to the module (100%)
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Seminar in Entrepreneurship (Prof. Dr. Häussler)

Module number
Course name
Masterseminar in Organization, Technology Management and Entrepreneurship
Module coordinator/ examiner(s)
Prof. Dr. Carolin Häussler

Examination number	Credit points (ECTS)	Hours per week (SWS)
264820	7	2
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
2 SWS (3h class instruction, 180h self-study)
Calculation based on: every hr. per semester week corresponds to 60 minutes. One semester presumably consists of 15 weeks, i.e., 14 course and 1 exam week.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship (Seminar in Entrepreneurship) Modulbereich B: Major Management and Strategy (Seminar in Management and Strategy)
BA Version 1: International Management and Marketing – Vertiefung
LPO I applicability
Recommended prerequisites
In accordance with § 3 of the examination and study regulations for the Master`s degree program in Business Administration and Economics and after successful application.
Requirements
Language of instruction
English

Content
The seminar aims to teach or improve scientific research skills in the fields of organization, technology management, and entrepreneurship, with a particular focus on preparing for the Master's thesis.
Intended learning outcomes (ILOs)
Students who successfully complete the module "Master Seminar in Organization, Technology Management, and Entrepreneurship" will: <ul style="list-style-type: none"> Identify and assess the topics currently discussed in the research within the fields of organization, technology management, and entrepreneurship.

<ul style="list-style-type: none"> • Conduct a systematic search for relevant academic literature effectively and independently. • Derive an interesting and relevant research question for the existing literature within the topic and independently develop a scientific paper based on the principles of good academic practice, adhering to formal standards. • Structure and integrate the identified literature critically into their own argumentation. They will transfer and combine insights from other disciplines or scientific discussions. • Relate research and practical topics to their own work and engage in well-founded, professional discussions. • Develop theoretical ideas (e.g., in the form of propositions) independently using the identified literature. • Reflect on their scientific work and implement critical feedback during the process of creating the academic paper. • Present the results of their scientific work convincingly and thoughtfully.
Teaching methods
<ul style="list-style-type: none"> • Discussion and collaborative development of seminar content • Student presentations on specific topics
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none"> • Scientific seminar paper (12 pages) • Presentation (15 minutes) • Short peer review presentation (5 minutes) • Active participation in discussions
Overall grade relevance
Scientific seminar paper (60%) Presentation (20%) Short peer review presentation (10%) Active participation in discussions (10%)
Exam resit opportunities
According to the examination and study regulations for the master's program.
Recommended reading
Additional notes
Relevant literature will be announced at the beginning of the seminar according to the seminar topic. The master's seminar is supplemented by a corresponding colloquium.

Seminar in Entrepreneurship (Prof. Dr. Bort)

Module number
39761
Module title
Masterseminar: Advances in International Management and Social Entrepreneurship
Module coordinator
Prof. Dr. Suleika Bort

Examination number	Credit points (ECTS)	Hours per week (SWS)
264570	7	2
Availability	Duration	Recommended semester
Summer or winter semester	1 semester	

Workload
30 hours of class instruction and 180 hours of self-study. Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e., 14 course + 1 exam week.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship (Seminar in Entrepreneurship) Modulbereich B: Major Management and Strategy (Seminar in Management and Strategy)
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
Requirements
According to § 3 of the study and examination regulations for the Master's degree program in Business Administration.
Language of instruction
English

Content
<ul style="list-style-type: none"> • This module provides students with skills for academic writing, critical discussion and interpretation of results based on current topics in the field of international management and social entrepreneurship. • Specific research topics are addressed, systematized and reflected upon. • Empirical methods of management research are introduced, applied in practice and critically evaluated.
Intended learning outcomes (ILOs)
Students who have successfully completed the module "Master's Seminar: Advances in International Management and Social Entrepreneurship", <ul style="list-style-type: none"> • become familiar with the research process,

<ul style="list-style-type: none">• are able to identify and explain the state of the literature on the seminar topic,• learn how to draft an academic paper,• learn how to structure and evaluate literature and embed it in their own argumentation,• become familiar with the common empirical methods applied in management research,• are able to present their results in an oral presentation,• learn how to reflect on critical comments in the process of writing a paper.
Teaching methods
<ul style="list-style-type: none">• Preparation of a seminar paper• Presentation of scientific projects and joint discussion
Required attendance
Participation is mandatory
Examination (type of examination, scope)
<ul style="list-style-type: none">• Seminar paper: 60%• Presentation: 40%
Overall grade relevance
Exam resit opportunities
None; Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Literature recommendations and mandatory readings will be announced at the beginning of the seminar.
Additional notes
To participate in the seminar an application is necessary. More information is available on our chair homepage (https://www.wiwi.uni-passau.de/en/international-management/teaching/seminars). The seminar is limited up to 10 students.

Seminar in Entrepreneurship (Prof. Dr. Fiedler)

Module number
Course name
Seminar in Management, People and Information
Module coordinator/ examiner(s)
Prof. Dr. Marina Fiedler

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Workload (to be calculated in hours of 60 minutes each over 15 semester weeks, i.e. 14 weeks of lectures + 1 week of exams)
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship (Seminar in Entrepreneurship) Modulbereich B: Major Management and Strategy (Seminar in Management and Strategy)
BA Version 1: International Management and Marketing – Vertiefung
LPO I applicability
Recommended prerequisites
According to § 3 of the study and examination regulations for the International Economics and Business Master's program.
Requirements
Language of instruction
English

Content
This seminar addresses topics from current research in the fields of management, people and information.
Intended learning outcomes (ILOs)
After successfully participating in the seminar, students are able to: <ul style="list-style-type: none"> • Explain, structure and assess topics currently being discussed in research in the fields of management, human resources and information. • Effectively conduct research on relevant scientific literature, structure and assess the literature and embed it in their own argumentation in a scientific paper in a reflective way.

<ul style="list-style-type: none"> • Reflect critically on the process of writing a scientific paper and critically evaluate other works. • Create an independent scientific paper that is formally correct according to the rules of good scientific work and structured and creative in terms of content. • Present the results of their scientific work effectively. • Put topics from research and practice in the context of their own work and participate in a well-founded professional exchange.
Teaching methods
Discussion and joint development of the teaching content and presentations of individual topics by the students
Required attendance
Examination (type of examination, scope)
Theoretical and empirical seminar paper and presentation of the results in the form of a presentation (approx. 30 minutes). Depending on the design of the course, this can be done as group work or as an individual assignment.
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
Students who have successfully completed the Master's seminar (grade 2.3 or better) are accepted to do their Master's theses at the chair. The seminar will be conducted in German. The submission of coursework can be arranged in either German or English. International students are welcome to participate and may contribute in German or English.

Seminar in Entrepreneurship (Prof. Dr. Jungwirth)

Modulnummer
39994
Modultitel
Masterseminar „Governance – Compliance“
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Carola Jungwirth

Prüfungsnummer	ECTS	SWS
	7	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Wintersemester	1 Semester	

Workload
Kurs 2 SWS (30 h Präsenzzeit und 180 h Eigenarbeitszeit)
Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Entrepreneurship (Seminar in Entrepreneurship) Modulbereich B: Major Management and Strategy (Seminar in Management and Strategy)
BA Version 1: International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
Eine vertiefende Behandlung von Themenschwerpunkten des Lehrstuhls erweitert die Befähigung zum wissenschaftlichen Arbeiten und dient als Vorbereitung auf die Masterarbeit. Die Studierenden führen eine wissenschaftliche Untersuchung durch und präsentieren die Ergebnisse. Sie führen eine Diskussion zu ihrem jeweiligen Themenschwerpunkt und setzen sich mit den Forschungsergebnissen ihrer Kommiliton*innen auseinander.
Das Masterseminar behandelt die Themenbereiche Governance und Compliance forschungsorientiert. Aus diesem Grund wird der Vertiefung methodischer Kenntnisse ein besonderer Stellenwert eingeräumt.

<p>Weitere Hinweise zur thematischen Ausrichtung des Seminars werden rechtzeitig auf der Homepage eingestellt (https://www.wiwi.uni-passau.de/governance/).</p>
<p>Lernergebnisse Lernziele</p>
<p>Studierende, die an dem Modul „Masterseminar: Governance – Compliance“ teilgenommen haben,</p> <ul style="list-style-type: none"> • erläutern ihre Vorgehensweise beim Verfassen einer Seminararbeit und • erklären den Aufbau ihrer Arbeit, die Wahl der theoretischen Grundlagen und die inhaltlichen Schwerpunkte • nutzen selbst gewählte Theorien aus dem ökonomischen Repertoire zur theoretischen Untermauerung ihrer Kernfragen. • veranschaulichen die Kernaussagen ihrer Arbeit qualitativ mit Hilfe von grafischen Analyseinstrumenten. • bewerten die Ergebnisse ihrer eigenen Arbeitsschritte und die ihrer Kommilitoninnen und Kommilitonen wertschätzend und konstruktiv. • entwickeln klare Kriterien für eine konstruktive und wertschätzende Teamarbeit sowie für eine informative und klare Kommunikation der eigenen Arbeitsergebnisse. • treffen angemessene Entscheidungen hinsichtlich der methodischen Herangehensweise an Forschungsfragen. • können zu Forschungsproblemen in den Bereichen Governance/Compliance begründet Stellung nehmen.
<p>Lehr- und Lernformen</p>
<ul style="list-style-type: none"> • Seminararbeit in Einzel- oder Gruppenarbeit • Präsentation von Lernfortschritt und Ergebnis • Praktische Übungen zum wissenschaftlichen Arbeiten
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang)</p>
<p>Seminararbeit und Präsentation der Ergebnisse in Form eines Referats.</p>
<p>Gesamtnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p>
<p>Literatur</p>
<p>Weitere Hinweise</p> <p>Der Kurs findet semesterbegleitend als Präsenzveranstaltung statt. Studierende, die aus Krankheitsgründen nicht anwesend sein können, können virtuell teilnehmen. Es wird darum gebeten, die virtuelle Teilnahme vor der jeweiligen Unterrichtsstunde anzukündigen.</p> <p>Die Teilnahmezahl ist auf 15 Studierende begrenzt.</p> <p>Weitere Informationen finden Sie auf der Homepage des Lehrstuhls: https://www.wiwi.uni-passau.de/governance/</p>

Seminar in Entrepreneurship (Prof. Dr. König)

Module number
38571
Module title
Theory and Methods in Strategy, Leadership, and Innovation Research
Module coordinator
Prof. Dr. Andreas König

Examination number	Credit points (ECTS)	Hours per week (SWS)
261150	7	4
Availability	Duration	Recommended semester
Every semester	1 semester	

Workload
Seminar 4 SWS (60h presence time and 150h own working time)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship (Seminar in Entrepreneurship) Modulbereich B: Major Management and Strategy (Seminar in Management and Strategy)
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Business Administration Master's programme.
Requirements
Language of instruction
English

Content
Participants will acquire knowledge about the fundamentals of quantitative and qualitative empirical social research. Furthermore, they develop a critical basic attitude and their own approaches towards theories of management, leadership and innovation research (e.g. Behavioral and Attention-based View of the Firm, Cognitive Framing, Executive Rhethorics, Institutional Theory, Leader-Member Exchange Theory, Managerial Cognition Theory, Socioemotional Wealth, Theory of Cognitive Sensemaking, Theory of Discontinuous Technology, Upper Echelons Theory, Value-Process-Framework).
Intended learning outcomes (ILOs)

<p>After successful participation in this course, students</p> <ul style="list-style-type: none"> • Understand different methods of empirical social research and their application. • Can outline current research questions in the areas of strategy, leadership and innovation. • Develop a critical basic attitude and their own approaches towards theories of management, leadership and innovation research • Evaluate research based on international scientific standards, which are also important for the preparation of a Master's thesis at the chair.
<p>Teaching methods</p> <ul style="list-style-type: none"> • Interactive teaching • Interactive discussions • Presentation of scientific studies and exercises
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>Presentation, 40% Correspondence presentation, 20% Essay, 40%</p> <p>For the successful completion of the course all examinations must be passed.</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p> <ul style="list-style-type: none"> • Backhaus, K., Erichson, B., Plinke W., Weiber, R.: Multivariate Analysemethoden. Eine anwendungsorientierte Einführung, 11. Aufl., Berlin, 2006. • Diekmann, A.: Empirische Sozialforschung, 12. Aufl., Hamburg, 2004. • Schnell, R., Hill, P., Esser, E.: Methoden der empirischen Sozialforschung, 7.Aufl.,München, 2005. • Research articles (will be announced during the first course session)
<p>Additional notes</p> <p>This course will be held in English. Please note that you have to apply for this seminar within the designated application period (typically during July and January of the preceding semester).</p> <p>For more information, please visit Stud.IP or our homepage via the following link: https://www.wiwi.uni-passau.de/strategie-innovation/studium/seminare-und-workshops/</p>

Seminar in Entrepreneurship (Prof. Dr. Schumann)

Module number
34520
Module title
Masterseminar im Schwerpunkt International Management and Marketing
Module coordinator
Prof. Dr. Jan Hendrik Schumann

Examination number	Credit points (ECTS)	Hours per week (SWS)
264590	7	2
Availability	Duration	Recommended semester
Every semester	1 semester	2 nd or 3 rd semester

Workload
2 SWS = 30 hours attendance time + 180 hours own work time
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship (Seminar in Entrepreneurship) Modulbereich B: Major Management and Strategy (Seminar in Management and Strategy)
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
In accordance with §3 of the study and examination regulations for the Master's degree program in Business Administration. Recommended prerequisite: Successful completion of two Master's lectures in Marketing, at least one of which must be offered by the Chair of Marketing and Innovation.
Requirements
Language of instruction
English

Content
The topic of the seminar is empirical research (using qualitative or quantitative methods). The seminar is conducted on current topics in the field of B2C marketing. Based on theories of consumer behavior, the aim is to independently conduct empirical research on a topic from specified areas as part of group work. Students gain experience in collecting and analysing data and presenting research findings.
Intended learning outcomes (ILOs)
Students who have successfully participated in the module "Master's Seminar Marketing & Innovation" ...

<ul style="list-style-type: none"> - ... recognize the principles of good scientific practice and methods of scientific writing. - ... outline the state of the literature on their specific topic. - ... present the main results of their work in an understandable way in a seminar paper and in two presentations. - ... practice qualified criticism and are able to implement critical comments in their work. - ... know and apply basic skills of scientific work.
Teaching methods
<ul style="list-style-type: none"> - Active participation in the seminar - Group work on a scientific question
Required attendance
Attendance is mandatory for all dates.
Examination (type of examination, scope)
<p>Group work on a scientific question</p> <p>Intermediate presentation 20%</p> <p>Final presentation 20%</p> <p>Seminar paper (approx. 15 pages) 60%</p> <p>Active participation in the seminar.</p> <p>The final grade is determined according to the portfolio principle.</p> <p>*We reserve the right to adapt the schedule and group assignments to the specific Content requirements of the seminar at a later date.</p>
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
The module is a specialization module in the field of "International Management and Marketing". It is suitable for all degree programs that would like to offer their students a course in this area.

Seminar in Entrepreneurship (Prof. Dr. Totzek)

Modulnummer
33901
Modultitel
Masterseminar Marketing
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Dirk Totzek

Prüfungsnummer	ECTS	SWS
264910	7	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Winter- oder Sommersemester	1 Semester	Zweite Hälfte des Studiums

Workload
30 Std. Präsenz- und 180 Std. Eigenarbeitszeit. Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- und 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Entrepreneurship (Seminar in Entrepreneurship) Modulbereich B: Major Management and Strategy (Seminar in Management and Strategy)
BA Version 1: International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Erfolgreiche Teilnahme an mindestens zwei Marketing-Veranstaltungen im Masterstudium, davon mindestens eine am Lehrstuhl für Marketing und Services.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
<ul style="list-style-type: none"> • Das Masterseminar dient dem selbstständigen wissenschaftlichen Arbeiten im Fach Marketing und als Vorbereitung auf die Masterarbeit. • Im Rahmen des Masterseminars sollen die Studierenden ihre Kompetenzen im Umgang mit wissenschaftlichen Arbeiten im Marketing weiter vertiefen. • Die Studierenden fertigen in Einzelarbeit eine Seminararbeit zu aktuellen wissenschaftlichen Themen aus den Forschungsfeldern des Lehrstuhls an. • Die Studierenden präsentieren die zentralen Ergebnisse ihrer Arbeit und diskutieren diese.
Lernergebnisse Lernziele
Studierende, die erfolgreich an dem Modul "Masterseminar Marketing" teilgenommen haben, <ul style="list-style-type: none"> • wenden die Grundsätze guter wissenschaftlicher Praxis sowie Strategien des wissenschaftlichen Schreibens sicher an. • recherchieren selbständig aktuelle und anspruchsvolle Forschungsliteratur.

<ul style="list-style-type: none">• beschreiben, strukturieren und analysieren den aktuellen Forschungsstand zu einem spezifischen Thema.• stellen die wesentlichen Ergebnisse ihrer Arbeit in einer Seminararbeit und einer Seminarpräsentation dar.• beurteilen kritisch den Stand der Forschung im Hinblick auf seine Implikationen für Forschung, Praxis und Gesellschaft.• entwickeln Ansatzpunkte für neue Forschungsfragen zu einem spezifischen Thema.
Lehr- und Lernformen
<ul style="list-style-type: none">• Anfertigung der Seminararbeit in Einzelarbeit• Präsentation der Seminararbeit
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang)
Portfolio (Seminararbeit: 60%, Präsentation: 40%)
Gesamtnotenrelevanz
Wiederholungsmöglichkeit
Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.
Literatur
Weitere Hinweise
Für eine Masterarbeit werden die mit der erfolgreichen Teilnahme am Seminar erworbenen Kenntnisse der wissenschaftlichen Arbeitstechniken vorausgesetzt. Das Seminar findet in der Regel mindestens alle zwei Semester statt.

Data Science in Entrepreneurship

Module number
Course name
Data Science in Entrepreneurship
Module coordinator/ examiner(s)
Alternating, depending on the courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-5	2-4
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	2-3

Workload
90 h to 150 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
<ul style="list-style-type: none"> This module provides in-depth specialist knowledge in the field of data science, including computer-aided, theoretical and applied methods of statistics, econometrics and operations research and closely related fields. All courses from the major in Data Science are eligible.
Intended learning outcomes (ILOs)
<ul style="list-style-type: none"> Alternating, depending on the courses assigned to the module
Teaching methods
Alternating, depending on the courses assigned to the module
Required attendance
Examination (type of examination, scope)
Exam (written or oral) or Portfolio, depending on the courses assigned to the module (100%)
Overall grade relevance

Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Modulbereich B: Major Finance

Corporate Finance and Capital Markets

Module number
Course name
Corporate Finance and Capital Markets
Module coordinator
Prof. Dr. Oliver Entrop

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2+2
Availability	Duration	Recommended semester
Every summer semester	1 semester	1-3

Workload
Lecture 2 SWS (30 h presence and 45 h individual working hours) Exercise session (30 h presence and 45 h individual working hours)
Module applicability
BA Version 2025: Modulbereich B: Major Finance Modulbereich B: Minor Finance
BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
Reference to the LPO I
Recommended prerequisites
Introductory module in Finance
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Advanced methods of company valuation (APV, entity, equity approach, autonomous vs. value-based financing, annuity vs. two-phase model, equity costs and beta leverage, capital structure, taxes, multiplier method) • Determinants of stock price performance (basic performance measures, multifactor models, size and value factors, advanced factors such as liquidity) • Risk-oriented corporate management concepts (RORAC, RAROC, optimal capital allocation for different target values)

<ul style="list-style-type: none"> • Optimal risk policy and hedging (basics, foreign currency risks, hedging of currency risks, risk policy for perfect and imperfect markets, risk policy and optimal capital structure, empirical evidence: company value and risk policy for currency risks)
Intended learning outcomes (ILOs)
<p>Students who have successfully completed the module,</p> <ul style="list-style-type: none"> • identify and interpret in-depth methods of company valuation and characterize the possibilities and limitations of different methods. They apply these methods to specific problems. • identify and interpret the influence of various value determinants on the share price performance of companies and apply methods of external performance measurement. • identify and interpret capital market-oriented methods for internal corporate management and capital allocation and characterize the possibilities and limitations of the methods. • identify and interpret the theoretical foundations of optimal corporate risk policy and implement specific risk reduction decisions using the appropriate financial instruments.
Teaching methods
<p>Interactive lecture Exercices</p>
Required attendance
Examination (type of examination, scope)
Exam 60 minutes (100%)
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Given in class
Additional notes

Empirical Finance

Module number
Module name
Empirical Finance
Module coordinator
Dr. Patrizia Perras / Prof. Dr. Niklas Wagner

Examination number	Credit points (ECTS)	Hours per week (SWS)
200413	5	3
Availability	Duration	Recommended semester
summer semester	1 semester	3 or 4

Workload
Lecture 3 SWS (33,75 hours class instruction; 116,50 hours self-study)
Calculation is based on: every hr./sem.-week
Module applicability
BA Version 2025: Modulbereich B: Major Finance Modulbereich B: Minor Finance
BA Version 1: Methoden Accounting, Finance and Taxation – Vertiefung
Reference to the LPO I
Recommended prerequisites
Recommended prerequisites are fundamental skills in statistics and probability (random variables and their distributions, statistical methods, testing and inference), as well as the Contents of an introductory course in corporate finance (valuation of bonds and stocks, capital market theory, asset pricing).
Requirements
According to § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration
Language of instruction
English

Content
The course introduces to the principles of empirical methods in modern capital market research. Among the major issues to be discussed are the underlying economic models and assumptions, common statistical and econometric methods, as well as their application. Students participate actively via self-prepared presentations on studies in capital market research.
Intended learning outcomes (ILOs)
Students who have successfully participated in the module “Empirical Finance”

<ul style="list-style-type: none"> • know the fundamental problems of empirical capital market research. • learn the various methods of empirical capital market research. • apply the methods learned to carry out well-founded forecasts of capital market time series, event studies and asset pricing analyses. • understand and evaluate results of empirical studies. • present empirical research results. • independently work on problems in the area of empirical capital market research, especially as part of a master's thesis.
Teaching methods
The module consists of a lecture (interactive frontal teaching) with intensive preparation and follow-up of the individual sessions and a seminar accompanying the lecture. In addition to comprehensively deepening knowledge in the area of empirical capital market research, the module equips students with the ability to acquire new knowledge and independently formulate research-oriented problems.
Required attendance
Examination (type of examination, scope)
100% final exam (60 minutes) / summer semester
Overall grade relevance
Exam resit opportunities
None; Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Campbell/Lo/McKinlay (1997), The Econometrics of Financial Markets, Princeton University Press
Additional notes

Environmental, Social and Corporate Governance Analytics

Module number
Course name
Environmental, Social and Corporate Governance Analytics
Module coordinator
Prof. Dr. Ralf Kellner

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	1-4

Workload
150 h (60 h contact studies / 90 h self-studies)
Module applicability
BA Version 2025: Modulbereich B: Major Finance Modulbereich B: Minor Sustainability
BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
Reference to the LPO I
Recommended prerequisites
Fundamentals of statistics
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Definition of physical and transitory risks of climate change on financial markets • Definition of the environmental, social and governance risk factors • Integration of risks in capital market theories - what connection to the market value of companies can be expected? • Content analysis and discussion of empirical studies in this context • Measurement and identification of financial climate risks and ESG risks • Hedging systematic climate risks
Intended learning outcomes (ILOs)
Students gain a basic understanding of the role that climate-friendly, social, fair and transparent behavior of companies has for their market value on capital markets. Students learn how to correctly

interpret empirical studies on these topics and gain the knowledge to correctly categorize corporate disclosures in these areas.
Teaching methods
<ul style="list-style-type: none">• Interactive lectures• Own presentations• Teaching materials on the contents of the course
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none">• Presentation• Written exam
Overall grade relevance
Exam resit opportunities
Recommended reading
Additional notes

Financial Data Analytics and Machine Learning

Module number
Course name
Financial Data Analytics and Machine Learning
Module coordinator
Prof. Dr. Ralf Kellner

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
150 h (60 h contact studies / 90 h self-studies)
Module applicability
BA Version 2025: Modulbereich B: Major Finance Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Finance
Reference to the LPO I
Recommended prerequisites
Fundamentals of mathematics and statistics
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Asset classes on capital markets • Stocks, bonds and options • Descriptive analysis of one- and multi-dimensional distributions of asset prices and returns • Introduction to portfolio theory • Factor models • Empirical analysis within and between asset classes • Principles of machine learning • Neural networks • Machine learning in the financial sector
Intended learning outcomes (ILOs)
Students gain a basic understanding of various asset classes on financial markets and the associated fundamental theories. Students are able to name the special features of financial data

and apply the knowledge acquired in the course to real financial market developments. In addition, students understand how machine learning can be used in the financial sector in an insightful and informative way. Students interpret their own analyses, through which profound references to financial market theories are established.
Teaching methods
<ul style="list-style-type: none"> • Interactive lectures incl. digital documents • Interactive exercise units
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none"> • Written Exam
Overall grade relevance
Exam resit opportunities
Recommended reading
<ul style="list-style-type: none"> • Options, Futures and other Derivatives (2021) – John C. Hull, Pearson Verlag • Machine Learning in Finance (2021) – Dixon, M.F., Halperin, I., Bilokon, P.; Springer Verlag • Statistics and Data Analysis for Financial Engineering (2015) – Ruppert, D., Matteson, D. S.; Springer
Additional notes

Financial Engineering and Structured Finance

Module number
Course name
Financial Engineering and Structured Finance
Module coordinator
Prof. Dr. Oliver Entrop

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2+2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (30 h presence and 45 h individual working hours) Exercise class 2 SWS (30 h presence and 45 h individual working hours)
Module applicability
BA Version 2025: Modulbereich B: Major Finance Modulbereich B: Minor Finance
BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
Reference to the LPO I
Recommended prerequisites
Introductory module in Finance; further (Bachelor) Finance modules are an advantage.
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Fixed income: spot market and symmetric derivatives (yield curve estimation, swaps, forwards, futures) • Equities: Options (value limits, single and multi-period binomial trees, Black/Scholes, European and American derivatives) • Fixed income: interest rate and bond options (caps, floors, Black model, yield curve models such as Vasicek and Cox/Ingersoll/Ross) • Fixed-income: certificates and structured products (market overview, capped, floored, collared floaters, reverse and fixed-maxi floaters, callable step-up bonds, capital market floaters, etc.)

<ul style="list-style-type: none"> • Equities: certificates and structured products (market overview, index certificates, reverse convertibles, discount certificates, quanto certificates, turbo certificates, etc.) • Structural models (liability positions as derivatives on corporate assets, agency-conflicts between equity and debt capital providers, covenants, determinants of optimal corporate default, impact analysis of capital structure measures, rating from market prices, estimation of asset values and volatilities from liability positions and derivatives) • Reduced form models • Asset backed securities (ABS, CLOs etc), credit default swaps and structured debt
<p>Intended learning outcomes (ILOs)</p> <p>Students who have successfully completed the module,</p> <ul style="list-style-type: none"> • explain and interpret the theoretical principles of modern financial securities and particularly derivatives valuation in depth. They characterise the economic principles as well as their possibilities and limitations. • recognise and structure valuation problems and develop practical solutions. • Recognise and assess possible applications of various financial instruments and their risk structure. • quickly transfer their knowledge to the valuation of innovative financial instruments. • recognise and analyse a company as a complex system of derivative claims and, in particular, characterise the impact of specific capital structure measures on existing financing instruments.
<p>Teaching methods</p> <p>Interactive lecture Exercises</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>Exam 60 minutes (100%)</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>According to the examination and study regulations for the Master's degree program.</p>
<p>Recommended reading</p> <p>Given in class</p>
<p>Additional notes</p>

Finanzcontrolling

Modulnummer
Veranstaltungstitel
Finanzcontrolling
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Niklas Wagner

Prüfungsnummer	ECTS	SWS
200414	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Sommersemester	1 Semester	

Workload
Zusammensetzung / Aufteilung des Workload: Veranstaltungen Vorlesung 2 SWS, Übung 1 SWS = Summe 3 SWS, 5 ECTS
Aufteilung des Workload (zu berechnen in Stunden à 60 Minuten auf 15 Semesterwochen, d.h. 14 Vorlesungs- + 1 Prüfungswoche)
Präsenzzeit: Vorlesung 30, Übung 15, Eigenarbeitszeit: Vorlesung 70, Übung 35
Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Finance Modulbereich B: Minor Finance
BA Version 1: Methoden Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration. Inhalte des Moduls Corporate Finance sowie solide Grundkenntnisse in Statistik und Wahrscheinlichkeitstheorie werden empfohlen.
Verpflichtende Voraussetzungen
Bachelor-Abschluss in einem wirtschaftswissenschaftlichen oder den Wirtschaftswissenschaften nahen Studiengang
Unterrichtssprache
Deutsch

Inhalt
<p>Die aus dem Grundmodul Corporate Finance bekannten Konzepte Kapitalstruktur, Barwert und Risiko-Return Profil werden in stochastische Kapitalmarktmodelle eingebettet, um auf dieser Basis die fortgeschrittenen Konzepte des Risikomanagements wie Hedging, Einsatz von Derivaten und Value at Risk in ihrer Funktionsweise zu erschließen. Dabei werden anhand folgender spezieller Inhalte Charakteristika einzelner Instrumente sowie die Dynamik der Ausdifferenzierung der Instrumentenvielfalt dargelegt:</p> <ul style="list-style-type: none"> • Anleihebewertung und Asset-Liability Management mittels Duration und Konvexität • Begriffe der Finanzmarktstochastik: Arbitrage, Hedging-Strategien, stochastische Prozesse, Risikoneutrale Bewertung • Bewertung von Derivaten im Black-Scholes-Merton Modell • Risikomanagement auf der Basis von Value at Risk • Prinzipien der Bonitätsbeurteilung und Kreditrisikomessung • Analyse von Rating-Methoden
Lernergebnisse Lernziele
<p>Studierende, die erfolgreich an dem Model „Finanzcontrolling“ teilgenommen haben,</p> <ul style="list-style-type: none"> • wissen, dass die fundierte Risiko-Return Analyse im Zentrum vieler praktischer Entscheidungen steht. • kennen die zwingende sachliche Kontinuität zwischen den traditionellen Konzepten der Finanzierung und deren moderner Ausdifferenzierung. • erlernen die Ambivalenz von Arbitrage- und Hedgingstrategien, die in die Struktur des Risiko-Return trade-offs eingelassen ist und können deren Zielsetzung beurteilen. • verstehen, dass das Bewertungsproblem für Derivate sich auch unabhängig von der Entwicklung innovativer Kapitalmarktprodukte stellt, da viele Aspekte der Finanzierungsentscheidung synthetisch durch Auszahlungsprofile von Derivaten replizierbar sind. • erläutern in fundierter Weise, wie die Komplexität von Instrumenten mit Bewertungsaufwand, Bewertungsunsicherheit und Marktdatenbedarf zusammenhängt. • bearbeiten selbstständig Problemstellungen im Bereich des Finanzcontrollings, insbesondere im Rahmen einer Master-Arbeit.
Lehr- und Lernformen
Interaktiver Frontalunterricht, Bearbeitung von Übungsaufgaben, Lösung und Präsentation von Übungsaufgaben
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)
Endklausur 60 Minuten, Endklausur: 100%
Gesamnotenrelevanz
Wiederholungsmöglichkeit
Literatur
Weitere Hinweise

Quantitatives Risikomanagement

Modulnummer
Veranstaltungstitel
Quantitatives Risikomanagement (ehemals Finanzcontrolling II)
Modulverantwortliche*r / Prüfer*innen
PD Dr. Harald Kinateder, Prof. Dr. Niklas Wagner

Prüfungsnummer	ECTS	SWS
	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Wintersemester	1 Semester	

Workload
Aufteilung des Workload (zu berechnen in Stunden à 60 Minuten auf 15 Semesterwochen, d.h. 14 Vorlesungs- + 1 Prüfungswoche) Vorlesung 2 SWS (30 Std. Präsenzzeit und 70 Std. Eigenarbeitszeit) Übung 1 SWS (15 Std. Präsenzzeit und 35 Std. Eigenarbeitszeit) Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Finance BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration. Solide Grundkenntnisse in Statistik und Wahrscheinlichkeitstheorie werden empfohlen.
Verpflichtende Voraussetzungen
Bachelor-Abschluss in einem wirtschaftswissenschaftlichen oder den Wirtschaftswissenschaften nahen Studiengang
Unterrichtssprache
Deutsch

Inhalt
Zielsetzung des Moduls „Finanzcontrolling II“ ist den Studierenden mit den Methoden des Managements von finanziellen Risiken vertraut zu machen.

<p>Insbesondere werden die neusten Modelle im Bereich des Marktrisiko und -liquiditäts-managements sowie der Adressierung von systemischen Risiken behandelt. Der Schwerpunkt der Veranstaltung liegt dabei auf der Anwendung der entsprechenden Methoden sowie den zugrundeliegenden statistischen und ökonometrischen Modellen. Zu den behandelten Themen gehören unter anderem:</p> <ul style="list-style-type: none"> • Ermittlung des regulatorischen Kapital gemäß des Basel Akkords • Fundamentale Eigenschaften von Risikomaßen: Kohärenz und Elicitability • Value-at-Risk • Expected Shortfall • Marktliquiditätsmessung mittels quantitativer Ansätze • Prognose finanzieller Risiken • Entscheidungstheorie unter Unsicherheit • Grundlagen der Portfoliooptimierung
<p>Lernergebnisse Lernziele</p>
<p>Studierende, die erfolgreich an dem Modul „Finanzcontrolling II“ teilgenommen haben,</p> <ul style="list-style-type: none"> • kennen die verschiedenen Arten von finanziellen Risiken. • wissen welche Eigenschaften quantitative Risikomaße haben müssen, damit sie für das Risikomanagement geeignet sind. • erlernen die gängigen Methoden des Managements finanzieller Risiken. • wenden quantitative Risikomaße an, um Prognosen des zukünftigen Marktrisikos zu erhalten. • erläutern wie finanzielle Entscheidungen unter Berücksichtigung von Unsicherheit getroffen werden. • bearbeiten selbstständig Problemstellungen im Bereich des Finanzcontrollings, insbesondere im Rahmen einer Master-Arbeit.
<p>Lehr- und Lernformen</p>
<p>Interaktiver Frontalunterricht. Bearbeitung von Übungsaufgaben. Lösung und Präsentation von Übungsaufgaben.</p>
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)</p>
<p>Endklausur 60 Minuten Endklausur: 100%</p>
<p>Gesamtnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p>
<p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
<p>Literatur</p>
<p>Weitere Hinweise</p>
<p>Implementierung der theoretischen Modelle anhand von Fallbeispielen mit realen Daten. Kann unabhängig von Finanzcontrolling I gehört werden.</p>

Green and Sustainable Finance

Module number
Course name
Sustainable and Green Finance
Module coordinator/ examiner(s)
Prof. Dr. Oliver Entrop

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2
Availability	Duration	Recommended semester
Every winter semester	1 semester	1-3

Workload
30h presence time and 180h own working time
Module applicability
BA Version 2025: Modulbereich B: Major Finance Modulbereich B: Minor Sustainability
BA Version 1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Introduction to Sustainable and Green Finance • ESG criteria and their relevance for financial markets • Regulatory framework (EU taxonomy, SFDR, TCFD, ISSB) • Sustainable investment strategies (impact investing, ESG screening, best-in-class approaches) • Financial instruments for sustainability (such as green bonds, social bonds, sustainability-linked bonds) • The role of banks and institutional investors in sustainable finance • Risk and return aspects of ESG investments • Empirical analysis of sustainable financial products

<ul style="list-style-type: none"> • Case studies on sustainable investment decisions • Future prospects of sustainable and green finance
Intended learning outcomes (ILOs)
<p>Students who have successfully completed the module</p> <ul style="list-style-type: none"> • understand and apply the principles and concepts of sustainable finance • identify the most important players and instruments in the area of sustainable and green finance and evaluate them • analyse relevant regulatory frameworks • value sustainability risks and opportunities for companies and investors • explain financial instruments such as green bonds, sustainability-linked bonds and ESG investment strategies and critically question them • understand the role of banks, institutional investors and companies in the transformation to a sustainable economy • apply empirical methods to analyse sustainable financial investments
Teaching methods
<p>Lecture with seminar character Interactive Lecture Vorlesung mit Seminarcharakter</p>
Required attendance
Examination (type of examination, scope)
Exam 60 minutes (100%)
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Given in class
Additional notes

Mergers & Acquisitions: International Corporate Transactions

Modulnummer
Modultitel
Mergers & Acquisitions: Internationale Unternehmenstransaktionen
Modulverantwortliche*r / Prüfer*innen
Dr. Matthias Merkel

Prüfungsnummer	ECTS	SWS
	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Wintersemester	1 Semester	1-3

Workload
Vorlesung/Fallstudien 2 SWS (Vorlesung: 20 St. Präsenzzeit und 50 St. Eigenarbeitszeit; Fallstudien: 10 St. Präsenzzeit und 70 St. Eigenarbeitszeit)
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Finance
BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. §3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration; empfohlen werden Kenntnisse wie im Einführungsmodul in Finance vermittelt; weitere Finance-Module von Vorteil.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalt
<ul style="list-style-type: none"> • Definition • Entwicklung und Trends • Gründe • Beteiligte Akteure • Eigenschaften eines idealen Übernahmeobjektes • Identifikation von geeigneten Objekten • M&A Prozess • Due Dilligence • Bewertung • Analyse und Beurteilung

<ul style="list-style-type: none"> • Vertragsverhandlung und Vertragsgestaltung • Post Merger Integration
Lernergebnisse Lernziele
<p>Studierende, die an dem Modul erfolgreich teilgenommen haben,</p> <ul style="list-style-type: none"> • benennen und interpretieren M&A-Transaktionen und ihre Gründe. • analysieren und identifizieren Übernahmeobjekte. • strukturieren Transaktionen und bewerten Übernahmeobjekte. • erstellen Präsentation zur Bewertung von Übernahmeobjekten, präsentieren ihre Ergebnisse effektiv und diskutieren diese konstruktiv.
Lehr- und Lernformen
<ul style="list-style-type: none"> • Interaktiver Frontalunterricht • Fallstudien
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)
<p>Portfolio: Fallstudien (70%), Klausur (45 Min., 30%). Es wird eine Gesamtnote vergeben.</p>
Gesamtnotenrelevanz
Wiederholungsmöglichkeit
<p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
Literatur
Weitere Hinweise
<p>Die Teilnahme an der Master-Vorlesung Mergers & Acquisitions: Internationale Unternehmenstransaktionen ist nur durch vorherige Anmeldung am Lehrstuhl möglich.</p>

Quantitative Methods in Finance

Module number
Course name
Quantitative Methods in Finance
Module coordinator/ examiner(s)
Prof. Dr. Oliver Entrop

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2+2
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	1-3

Workload
Lecture 2 SWS (30 h presence and 45 h individual working hours) Exercise session (30 h presence and 45 h individual working hours)
Module applicability
BA Version 2025: Modulbereich B: Major Finance
BA Version 1: Methoden Accounting, Finance and Taxation – Grundlagen
LPO I applicability
Recommended prerequisites
An introductory module in finance is recommended; further (bachelor's) finance modules are an advantage. A solid knowledge of Excel and statistics and of a statistics program is helpful.
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Introduction to empirical analysis of financial data • Cross-sectional, time series and panel regressions in Stata • Logit and probit regressions in Stata • Stata programming and automation as well as advanced commands • Numerical methods in VBA • Valuation of derivatives using simulation in VBA
Intended learning outcomes (ILOs)
Students who have successfully completed the module

<ul style="list-style-type: none"> • explain and interpret key quantitative methods that are very frequently used in finance and related fields to solve business management issues. • assess the possibilities and limitations of the methods. • apply the methods in a targeted manner using Stata and VBA. • develop solution concepts based on the methods to answer complex business management questions.
Teaching methods
Interactive Lecture; in the exercise, the concepts covered in the corresponding lecture are implemented directly afterwards on real data sets in Stata (part 1) or in real valuation problems in VBA (part 2).
Required attendance
Examination (type of examination, scope)
Exam, 60 minutes, 100%
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Master-Workshop Finance and Banking

Module number
Course name
Master-Workshop Finance and Banking
Module coordinator/ examiner(s)
Prof. Dr. Oliver Entrop

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2
Availability	Duration	Recommended semester
Every summer semester	1 semester	1-3

Workload
2 SWS (30h presence time and 120h own working time)
Module applicability
BA Version 2025: Modulbereich B: Major Finance
BA Version 1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Introductory module in Finance and solid knowledge of statistics recommended; further (Bachelor) Finance modules an advantage.
Requirements
Language of instruction
English

Content
In this module, teams of two students work on the content of selected papers that have been published in leading international journals in the field of finance. The papers are usually empirical in nature. The focus of the workshop varies.
Intended learning outcomes (ILOs)
Students who have successfully completed the module, <ul style="list-style-type: none"> • explain, structure and assess topics currently discussed in research in the field of finance. • explain and summarize the main methods and results of the papers presented. • recognize the international rules and standards for academic work and research. • assess the strengths and weaknesses of the papers presented. • create a presentation, present the papers effectively and discuss them constructively.

Teaching methods
Vorlesung mit Seminarcharakter Presentation, discussion
Required attendance
Obligatory
Examination (type of examination, scope)
Portfolio: Presentation (approx. 40 min. per person, 70%), discussion (30%). An overall grade is awarded.
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Given in class
Additional notes
Participation in the Master-Workshop Finance and Banking is only possible by prior registration at the chair. The registration form and further information can be found in Stud.IP.

Master Thesis Colloquium

Module number
Course name
Master Thesis Colloquium
Module coordinator/ examiner(s)
Alternating, depending on the courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	1-3	0,5-1
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	4

Workload
30 h to 90 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulgruppe B: Major Accounting and Tax Modulgruppe B: Major Data Science Modulgruppe B: Major Entrepreneurship Modulgruppe B: Major Finance Modulgruppe B: Major Information Systems and Digital Business Modulgruppe B: Major Management and Strategy
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
The colloquium supports students in writing their scientific thesis with regard to the conception, presentation, further development and discussion of the goals, approach and results of the thesis.
Intended learning outcomes (ILOs)
After completing the module, students are able to independently present scientific issues at master level on the basis of scientific methods and analytical thinking. They can present and discuss their results conclusively and draw conclusions from them.
Teaching methods
Alternating, depending on the courses assigned to the module
Required attendance

Examination (type of examination, scope)
Alternating, depending on the courses assigned to the module
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Master Thesis Colloquium

Modulnummer
Modultitel
Masterkolloquium
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Niklas Wagner, PD Dr. Harald Kinateder

Prüfungsnummer	ECTS	SWS
	3	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Semester	1 Semester	

Workload						
Zusammensetzung / Aufteilung des Workload: Seminar 2 SWS						
Aufteilung des Workload (zu berechnen in Stunden à 60 Minuten auf 15 Semesterwochen, d.h. 14 Vorlesungs- + 1 Prüfungswoche)						
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 25%;">Präsenzzeit</th> <th style="width: 25%;">Eigenarbeitszeit</th> </tr> </thead> <tbody> <tr> <td>Seminar</td> <td style="text-align: center;">30</td> <td style="text-align: center;">60</td> </tr> </tbody> </table>		Präsenzzeit	Eigenarbeitszeit	Seminar	30	60
	Präsenzzeit	Eigenarbeitszeit				
Seminar	30	60				
Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.						
Verwendbarkeit						
BA Version 2025: Modulgruppe B: Major Finance						
BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung						
Bezug zur LPO I						
Empfohlene Voraussetzungen						
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration bzw. Bachelor-Abschluss in einem wirtschaftswissenschaftlichen oder einem den Wirtschaftswissenschaften nahen Studiengang und Masterarbeit am Lehrstuhl für Finanzcontrolling.						
Verpflichtende Voraussetzungen						
Unterrichtssprache						
Deutsch						

Inhalt
In dem Kolloquium werden verschiedene ausgewählte Themenfelder des Finanzcontrollings näher beleuchtet werden. Hierbei handelt es sich beispielsweise um Themen aus folgenden Bereichen: <ul style="list-style-type: none"> • Finanzierung und Kapitalmärkte • Empirische Kapitalmarktforschung • Asset Management • Quantitatives Bank- und Risikomanagement • Derivate und Financial Engineering
Lernergebnisse Lernziele
Studierende, die erfolgreich an dem Model „Kolloquium für Masterarbeiten“ teilgenommen haben, <ul style="list-style-type: none"> • kennen die Methodik des wissenschaftlichen Arbeitens. • verstehen wie die für die Arbeit relevante Literatur bestimmt wird. • wenden die Methodik des wissenschaftlichen Schreibens an. • erstellen Exposés für geplante Forschungsvorhaben. • diskutieren Implikationen und Erweiterungen ihrer Forschungsexposés. • präsentieren ihre Ergebnisse anhand eines wissenschaftlichen Vortrags.
Lehr- und Lernformen
<ul style="list-style-type: none"> • Selbstständige Bearbeitung wissenschaftlicher Fragestellungen anhand quantitativer Forschungsmethoden • Präsentation der einzelnen Ergebnisse durch Studierende
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)
Mündliche Präsentation (ca. 30 Minuten) 100% mündliche Präsentation
Gesamtnotenrelevanz
Wiederholungsmöglichkeit
Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.
Literatur
Weitere Hinweise
Das Seminar richtet sich an alle Masterstudierende, die am Lehrstuhl ihre Abschlussarbeiten schreiben. In der Veranstaltung werden aktuelle Probleme im Zusammenhang mit der Erstellung der Arbeiten diskutiert.

Seminar in Finance

Module number
Course name
Module coordinator/ examiner(s)
Alternating, depending on the seminar courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	7	2
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	2-3

Workload
30 h presence and 180 h individual working hours
Module applicability
BA Version 2025: Modulgruppe B: Major Finance (Seminar in Finance)
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
<ul style="list-style-type: none"> • The Master's seminar is designed to promote independent scientific work in the field of finance and to prepare students for their master's thesis. • As part of the Master's seminar, students should further develop their skills in dealing with scientific work in finance. • Students are required to complete a scientific assignment such as a seminar paper or similar in a research field in finance. • Students present their results and discuss them.
Intended learning outcomes (ILOs)
<p>Students who have successfully completed the module</p> <ul style="list-style-type: none"> • are prepared for their master's thesis in the Major Finance. • can create a scientifically sound assignment that is formally correct according to the rules of scientific work, but also creatively in terms of content. • can present their research results and communicate their research findings to scientific and non-scientific audiences at the appropriate level.

<ul style="list-style-type: none"> • are able to both provide qualified criticism and implement critical comments in their work.
Teaching methods
Alternating, depending on the seminar courses assigned to the module
Required attendance
Alternating, depending on the seminar courses assigned to the module
Examination (type of examination, scope)
Portfolio, depending on the seminar courses assigned to the module (100%)
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Seminar in Finance (Prof. Dr. Wagner)

Modulnummer
Veranstaltungstitel
Master-Seminar Nachhaltiges Finanzcontrolling
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Niklas Wagner, Dr. Harald Kinateder

Prüfungsnummer	ECTS	SWS
Klicken oder tippen Sie hier, um Text einzugeben.	7	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
jedes Semester	1 Semester	

Workload						
Zusammensetzung/Aufteilung des Workload: Seminar 2 SWS						
Aufteilung des Workload (zu berechnen in Stunden à 60 Minuten auf 15 Semesterwochen, d.h. 14 Vorlesungs- + 1 Prüfungswoche)						
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 20%;">Präsenzzeit</th> <th style="width: 70%;">Eigenarbeitszeit</th> </tr> </thead> <tbody> <tr> <td>Seminar</td> <td style="text-align: center;">30</td> <td style="text-align: center;">180</td> </tr> </tbody> </table>		Präsenzzeit	Eigenarbeitszeit	Seminar	30	180
	Präsenzzeit	Eigenarbeitszeit				
Seminar	30	180				
Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.						
Verwendbarkeit						
BA Version 2025: Modulgruppe B: Major Finance (Seminar in Finance)						
BA Version 1: Accounting, Finance and Taxation – Vertiefung						
Bezug zur LPO I						
Empfohlene Voraussetzungen						
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration. Bachelor-Abschluss in einem wirtschaftswissenschaftlichen oder einem den Wirtschaftswissenschaften nahen Studiengang.						
Verpflichtende Voraussetzungen						
Unterrichtssprache						
Deutsch						

Inhalt

<p>In dem Seminar Finanzcontrolling sollen verschiedene, ausgewählte Themenfelder des Finanzcontrollings näher beleuchtet werden. Hierbei handelt es sich beispielsweise um Themen aus folgenden Bereichen:</p> <ul style="list-style-type: none"> • Wertpapierallokation und Asset Management • Performancemessung • Beteiligungscontrolling • Fondsmanagement (z.B. Hedge Fonds, Fondsratings) • Risikomanagement (Markt- und Kreditrisiko) • Bonität und Kreditcontrolling • Zinsstrukturmodelle • Aspekte ökonomischer Modelle im Finanzcontrolling
<p>Lernergebnisse Lernziele</p>
<ul style="list-style-type: none"> • Primäres Qualifikationsziel des Moduls besteht darin, die Teilnehmer mit der Methodik des wissenschaftlichen Arbeitens vertraut zu machen. • Die Studierenden bearbeiten die oben angesprochenen Fragestellungen nicht nur theoretisch, sondern führen empirische Analysen mit einschlägiger Fincon-Software durch. • Anfertigung einer wissenschaftlichen Arbeit.
<p>Lehr- und Lernformen</p>
<ul style="list-style-type: none"> • Selbstständige Bearbeitung wissenschaftlicher Fragestellungen anhand quantitativer Forschungsmethoden • Präsentation der einzelnen Ergebnisse durch Studierende
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)</p>
<p>Schriftliche Hausarbeit (12 – 15 Seiten) und mündliche Präsentation (ca. 20 Minuten) der Teilnehmer. Hausarbeit: 2/3 Präsentation: 1/3</p>
<p>Gesamtnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p>
<p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
<p>Literatur</p>
<p>Weitere Hinweise</p>
<p>Persönliche Anmeldung per E-Mail nur am Lehrstuhl Finanzcontrolling (s. Infos auf der Homepage) und zwingend über StudIP im vorgegebenen Bewerbungszeitraum.</p>

Seminar in Finance (Prof. Dr. Entrop)

Module number
Course name
Master Seminar Finance and Banking
Module coordinator/ examiner(s)
Prof. Dr. Oliver Entrop

Examination number	Credit points (ECTS)	Hours per week (SWS)
	7	2
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	2 or 3

Workload
30h presence time and 180h own working time
Module applicability
BA Version 2025: Modulgruppe B: Major Finance (Seminar in Finance)
BA Version 1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
In the best case, the other Master's lectures of the chair have already been completed or are attended in parallel. This includes in particular 'Quantitative Methods in Finance'. Other courses in the Finance major and in statistics/econometrics are recommended.
Requirements
Language of instruction
English

Content
In this module, two-person student teams carry out their own, clearly defined scientific investigation, which is usually based on a current research paper from a leading international journal. As a rule, the students' own research is empirically orientated.
Intended learning outcomes (ILOs)
Students who completed the module successfully, - explain, structure and assess topics currently being discussed in research in the field of finance. - prepare an independent academic research paper. - effectively conduct, structure and reflect on relevant literature research. - create a database for their analyses. - understand the necessary empirical methods and apply them independently.

- recognize the international rules and standards for scientific work and research and apply these to their research work. - present their research work effectively and discuss it constructively.
Teaching methods
Presentation, discussion
Required attendance
Compulsory
Examination (type of examination, scope)
Portfolio: seminar paper (approx. 25,000 characters per person, 60%), presentation (approx. 40 minutes per person, 30%), discussion (10%). An overall grade is awarded.
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Given in class
Additional notes

Seminar in Finance (Prof. Dr. Kellner)

Module number
39904
Course name
Master seminar: Machine Learning in Finance and Economics
Module coordinator/ examiner(s)
Prof. Dr. Ralf Kellner

Examination number	Credit points (ECTS)	Hours per week (SWS)
262504	7	2
Availability	Duration	Recommended semester
Every semester	1 semester	

Workload
Module applicability
BA Version 2025: Modulgruppe B: Major Data Science (Seminar in Data Science) Modulgruppe B: Major Finance (Seminar in Finance)
BA Version 1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
1. You have successfully completed at least one course at our department with a grade of 2.7 or better. 2. You have completed at least one thesis with a grade of 2.7 or better. 3. The seminar papers at our chair usually include empirical evaluations, therefore basic knowledge of the programming language PYTHON is desirable.
Requirements
Language of instruction
English

Content
- Introduction to scientific work - Statistical learning using data - Data collection - Carrying out your own empirical analyses - Preparation of an independent scientific paper
Intended learning outcomes (ILOs)
Students understand the principles of independent scientific work. After completing the seminar, students can familiarize themselves independently with statistical models and use them for

independent empirical analysis. With the knowledge acquired in the seminar, students are prepared for writing their master's thesis
Teaching methods
Self-study and regular individual support
Required attendance
Examination (type of examination, scope)
Seminar paper
Overall grade relevance
Exam resit opportunities
Recommended reading
Additional notes
<p>Application procedure</p> <p>You must apply for the Master's seminars at the Faculty of Business, Economics and Informatics in the respective previous semester. To provide every applicant with a seminar place, there are both basic requirements and a structured procedure for registering for Bachelor's seminars at our department.</p> <p>Application procedure Please submit the following documents to our chair:</p> <ul style="list-style-type: none"> - Application form for the Master's seminar at the Chair of Business Administration with a focus on Financial Data Analytics - Current HISQIS excerpt <p>Please send your documents during the respective application period to: heike.wahsner@uni-passau.de</p> <p>Please note that your acceptance is binding after the withdrawal period has expired. In case of non-attendance or no examination performance, the seminar will be graded with 5.0.</p>

Data Science in Finance

Module number
Course name
Data Science in Finance
Module coordinator/ examiner(s)
Alternating, depending on the courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-5	2-4
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	2-3

Workload
90 h to 150 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulbereich B: Major Finance
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
<ul style="list-style-type: none"> This module provides in-depth specialist knowledge in the field of data science, including computer-aided, theoretical and applied methods of statistics, econometrics and operations research and closely related fields. All courses from the major in Data Science are eligible.
Intended learning outcomes (ILOs)
<ul style="list-style-type: none"> Alternating, depending on the courses assigned to the module
Teaching methods
Alternating, depending on the courses assigned to the module
Required attendance
Examination (type of examination, scope)
Exam (written or oral) or Portfolio, depending on the courses assigned to the module (100%)

Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Modulbereich B: Major Information Systems and Digital Business

Advanced IT-Security

Module number
Course name
Advanced IT Security
Module coordinator
Prof. Dr. Joachim Posegga

Examination number	Credit points (ECTS)	Hours per week (SWS)
	6	3V + 1Ü
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
60 contact hours + 40 hrs exercises + 80 hrs independent study and exam preparation
Module applicability
Modulbereich B: Major Information Systems and Digital Business
Reference to the LPO I
Recommended prerequisites
None
Requirements
None
Language of instruction
English

Content
In the module, the following topics are treated: Introduction to IT Security, Cryptographic Basics, Confidentiality, Integrity, Availability, Authentication & Authorization, security modules; OTPs, tokens, security protocols, foundations, SSL, IPSEC, user management, access protection, security of TCP/IP services, Basic security protocols and standards; Symmetric encryption (DES, AES, etc.); Asymmetric encryption (RSA, PGP), AAA in distributed systems, Kerberos, X.509 authentication, network and Internet security, IPsec, TLS/SSL, introduction to PKI, certificates, key generation, certificate authorities, certificate revocation and CA hierarchy.
Intended learning outcomes (ILOs)
Skills/Knowledge Basic knowledge of the key concepts for the operation of secure and (mostly) distributed computing systems. These include sub-components in the areas of operating systems, communications and IT security, especially cryptographic basics including PKI, principles of network security, principles of

<p>operating system security, basic security protocols and standards, security architectures, AAA in distributed systems.</p> <p>Abilities Students have a firm grasp of concepts from selected subareas, based on exercises solved by the students themselves. Furthermore, they are able to analyse the security of operating systems and networks. Students are able to select appropriate encryption methods for various applications and implement communication mechanisms in different scenarios. Students have the ability to correctly implement encryption methods.</p> <p>Competencies Students are able to identify, evaluate and select concepts and architectural alternatives for communication mechanisms (services and protocols). Students are expected to be competent in the use of PKI technology in various scenarios and to be able to assess the security of symmetric and asymmetric encryption methods. Students are well-versed in security protocols and standards and are able to classify and assess security architectures. Students have learnt cooperation and teamwork in the classroom and practical computer tutorials. Students have also honed their problem-solving skills by working through the exercises in the tutorials, autonomously arriving at a solution. Students are able to systematically address the complexity and perform critical assessment of approaches and its algorithmic implementation.</p>
<p>Teaching methods</p> <p>Presentation and projector, blackboard</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>90-minute written examination or 15-minute oral examination, depending on the number of listeners, in English or German. The exact mode of assessment will be indicated at the beginning of the semester</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p> <p>H.-P. Gumm, M. Sommer: „Einführung in die Informatik“, 5. Auflage Oldenbourg-Verlag, München, 2002 Dieter Gollmann: Computer Security, John Wiley, 1999 W. Stallings: Cryptography and Network Security, Pearson, 2003 Niemi and Nyberg: UMTS Security, John Wiley, 2003</p>
<p>Additional notes</p>

Advanced Topics in Data Science

Module number
Course name
Advanced Topics in Data Science
Module coordinator
Prof. Dr. Michael Granitzer

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2V + 1Ü
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
45 contact hours + 105 hrs exercises, preparation and follow-up
Module applicability
Modulbereich B: Major Information Systems and Digital Business
Reference to the LPO I
Recommended prerequisites
Data Science
Requirements
None
Language of instruction
English

Content
<p>The following topics will be covered:</p> <ul style="list-style-type: none"> • Natural Computing • Deep Neural Networks • Representational Learning with Deep Networks including Autoencoder Networks (Denoising, Variational, Sparse), Hopfield Networks, Boltzmann Machines • (Deep) Convolutional Neural Networks • Recurrent Neural Networks • Deep Residual Networks • Deep Reinforcement Learning • Selected Application Areas
Intended learning outcomes (ILOs)
<p><u>Skills/Knowledge</u> The students will engage advanced topics and recent developments in the field of data science.</p>

<p>Special emphasize will be placed on natural computing techniques, like genetic algorithms and deep neural networks, as well as on reinforcement learning. The students will obtain in-depth knowledge on the particular algorithms and application areas (with focus web-based information systems).</p> <p><u>Abilities</u> The students will be able to implement data analytical algorithms, in particular deep neural network and reinforcement learning approaches. They will be able to run advanced experiments on large data sets.</p> <p><u>Competencies</u> The students will obtain the competencies to utilize recent data analytical methods, like deep learning, for analysing large data sets from web-based information systems (e.g. social media). Students will be enabled to setup experiments, conduct and evaluate them properly.</p>
Teaching methods
Blackboard, projector
Required attendance
Examination (type of examination, scope)
90-minute examination or 20-minute oral examination. The precise mode of assessment will be announced at the start of the semester
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Own Lecture Notes and selected publications. Literature will be announced depending on the concrete topics.
Additional notes

AI-Based Business Information Systems

Module number
Course name
Artificial Intelligence (AI)-Based Business Information Systems
Module coordinator
Prof. Dr. Ulrich Gnewuch

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (30 h attendance and 45 h self-study) Exercise 2 SWS (30 h attendance and 45 h self-study) Calculation basis: 15 weeks in a semester, including an examination week; each SWS corresponds to 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Information Systems and Digital Business BA Version 1: Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the master’s degree program in Business Administration. Basic skills in data analysis and/or programming (e.g., Python, R) are highly recommended.
Requirements
Language of instruction
English

Content
Artificial intelligence (AI) offers significant opportunities while also creating new challenges for businesses. In light of these dynamics, this course focuses on the design, management, use, and impact of AI-based business information systems. It is not a technical course, but rather takes a managerial/organizational perspective on the use of AI in businesses. Topics covered will include: <ul style="list-style-type: none"> - Theoretical and conceptual foundations of AI-based business information systems

<ul style="list-style-type: none"> - Business capabilities enabled by AI-based information systems: automation, engagement, insights & decisions, and innovation - Challenges in and strategies for designing and managing AI-based information systems - Exercises and case studies on selected AI-based information systems (e.g., robotic process automation, conversational AI, explainable AI, generative AI)
<p>Intended learning outcomes (ILOs)</p>
<p>After successful participation in this course, students will be able to:</p> <ul style="list-style-type: none"> - Explain what AI-based business information systems are and how they enable important business capabilities - Describe the theoretical and conceptual foundations that guide the design and management of different AI-based business information systems - Identify key challenges in designing and managing different types of AI-based business information systems and develop strategies for addressing these challenges <p>In addition, students will gain some hands-on experience with explainable AI techniques and human-centered design approaches.</p>
<p>Teaching methods</p> <ul style="list-style-type: none"> - Interactive lectures and classroom discussions - Exercises, case studies, and student presentations - Readings and pre-recorded videos
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Portfolio: Group work and presentations during the course (40%); final exam (60%)</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>According to the study and examination regulations for the master's degree program in Business Administration/ Annually.</p>
<p>Recommended reading</p>
<p>Benbya, H., Pachidi, S., & Jarvenpaa, S. (2021). Artificial intelligence in organizations: Implications for information systems research. <i>Journal of the Association for Information Systems</i>, 22(2), 281-303.</p> <p>Berente, N., Gu, B., Recker, J., & Santhanam, R. (2021). Managing artificial intelligence. <i>MIS Quarterly</i>, 45(3), 1433-1450.</p> <p>Shneiderman, B. (2022). <i>Human-centered AI</i>. Oxford University Press.</p>
<p>Additional notes</p>
<p>All teaching material in English language. Teaching language is English.</p> <p>Replaces the course "Design and Management of AI-Based Business Information Systems": Students who have already completed the course "Design and Management of AI-Based Business Information Systems" (35000) cannot register for this course.</p>

Business Intelligence & Analytics Systems

Module number
Course name
Business Intelligence & Analytics Systems
Module coordinator
Prof. Dr. Ulrich Gnewuch

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture 2 SWS (30 h attendance and 45 h self-study) Exercise 2 SWS (30 h attendance and 45 h self-study)
Calculation basis: 15 weeks in a semester, including an examination week; each SWS corresponds to 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Information Systems and Digital Business
BA Version 1: Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the master’s degree program in Business Administration.
Basic skills in data analysis and/or programming (e.g., Python, R) are recommended.
Requirements
Language of instruction
English

Content
With the exponential growth of data and technological advancements in analytics, organizations have recognized the value of using data to drive their business decisions. In order to enable employees across all facets of the business to become more data-driven in their decision-making, organizations employ a variety of business intelligence & analytics (BI&A) systems. Examples include BI&A systems for data provisioning (e.g., data warehouses), information generation (e.g., process mining platforms), and information presentation and distribution (e.g., dashboards). This

<p>course focuses on the fundamental concepts and core components of BI&A systems as well as their role in data-driven decision-making within organizations. It is not a technical course, but rather takes a managerial perspective on the design, use, and impact of BI&A systems. In the exercise, students will work on real-world BI&A case studies and get hands-on experience with state-of-the-art BI&A tools.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>After successful participation in this course, students will be able to:</p> <ul style="list-style-type: none"> - Explain what business intelligence & analytics (BI&A) systems are and how they enable data-driven decision-making in organizations - Differentiate between BI&A systems for data provisioning, information generation, and information presentation and distribution - Explain the theoretical and conceptual foundations guiding the design, implementation, and management of BI&A systems - Identify key challenges with different types of BI&A systems and develop strategies for addressing these challenges <p>In addition, students will gain hands-on experience with state-of-the-art BI&A tools.</p>
<p>Teaching methods</p> <ul style="list-style-type: none"> - Interactive lectures and classroom discussions - Exercises, case studies, and student presentations - Readings and pre-recorded videos
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Portfolio: Group work and presentations during the course (40%); final exam (60%)</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>According to the study and examination regulations for the master's degree program in Business Administration/ Annually.</p>
<p>Recommended reading</p>
<p>Chen, H., Chiang, R. H. L., & Storey, V. C. (2012). Business intelligence and analytics: From big data to big impact. <i>MIS Quarterly</i>, 36(4), 1165–1188.</p> <p>Sharda, R., Delen, D., & Turban, E. (2014). Business intelligence and analytics: systems for decision support. 10th edition. Pearson.</p>
<p>Additional notes</p>
<p>All teaching material in English language. Teaching language is English.</p>

Deep Learning and Text Analysis in Finance

Module number
Course name
Deep Learning and Text Analysis in Finance
Module coordinator
Prof. Dr. Ralf Kellner

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	4

Workload
150 h (60 h contact studies / 90 h self-studies)
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Artificial Intelligence
BA Version 1: Accounting, Finance and Taxation – Vertiefung Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
Fundamentals of mathematics and statistics.
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Text Preprocessing • Simple frequency-based text models • Quantitative basics for understanding advanced text models • Word2Vec, Doc2Vec • Text models with attention mechanisms: encoder and decoder models • Use of text models in the financial sector <ul style="list-style-type: none"> ○ Information processing of capital market participants ○ Quantification of capital market reactions ○ Identification of companies with risks in relation to climate change and the transformation to a CO2-neutral economy

Intended learning outcomes (ILOs)
Students who have successfully completed this course
<ul style="list-style-type: none"> • develop a deep understanding of how modern text models work • establish the connection between general machine learning methods and modern text modelling • assess which form of text analysis is suitable for different situations • use modern text models to analyse and evaluate important documents from the field of economics
Teaching methods
<ul style="list-style-type: none"> • Interactive lectures incl. digital documents • Interactive exercise units
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none"> • Written exam
Overall grade relevance
Exam resit opportunities
Recommended reading
<ul style="list-style-type: none"> • Machine Learning for Text (2018) – Aggarwal, C. C., Springer Verlag • When Is a Liability Not a Liability? Textual Analysis, Dictionaries, and 10-Ks (2011) – Loughran and McDonald, The Journal of Finance 66(1) • Disclosure Sentiment: Machine Learning vs. Dictionary Methods (2022) – Frankel et. al, Management Science 68(7)
Additional notes

Digital Markets and Online Platforms

Module number
Course name
Digital Markets and Online Platforms
Module coordinator
Prof. Dr. Jan Krämer

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 Semester	

Workload
Lecture 2 SWS (30 hrs. attendance and 45 hrs. self-study) Tutorial 2 SWS (30 hrs. attendance and 45 hrs. self-study) Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Module applicability
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Information Systems and Digital Business BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung Wirtschaftsinformatik / Information Systems – Grundlagen Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
Gem. § 4 der Prüfungs- und Studienordnung für den Masterstudiengang Wirtschaftsinformatik (Information Systems). Basic knowledge of economics is highly recommended. Ideally, but not necessarily, basic knowledge of the Internet economy.
Requirements
Language of instruction
English

Content
The lecture lays a methodological foundation in the economics of digital markets and online platforms, while paying special attention to strategic, technological and behavioral aspects of platform design. Particularly, this includes the following topics:

<ul style="list-style-type: none"> • Strategies for successful launch and governance of platforms • Managing openness of platform ecosystems • Reviews, Ratings and Recommender Systems • Pricing on two-sided platforms • Data-driven platform design and consumer behavior • Regulating market power and competition issues in digital markets
<p>Intended learning outcomes (ILOs)</p> <p>Students who have successfully participated in the module “Digital Markets and Online Platforms”,</p> <ul style="list-style-type: none"> • explain the current state of research on online platforms, firms’ strategies in digital markets and the ongoing policy debate on regulation of digital markets. • interpret business models, governance and design, and competition in the Internet economy. • perform a complete analytical (algebraic) equilibrium analysis of game-theoretic models for competition between two-sided platforms. • understand the design of and computations performed by various types of recommender systems. • illustrate how platform design decisions shape behavior of economic actors on a platform. • assess how different methodological approaches in the literature contribute to a better understanding of the topic and, where appropriate, to academic or policy debates. • develop holistic strategies for platform businesses taking into account the idiosyncratic characteristics of digital markets.
<p>Teaching methods</p> <ul style="list-style-type: none"> • Interactive lecture • Tutorial
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>Final exam 60 minutes - 100 %</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p> <ul style="list-style-type: none"> • Parker, G., van Alstyne M., Choudary S. (2016). Platform Revolution. W. W. Norton & Company, Inc. • Belleflamme, P & M. Peitz (2021). The Economics of Platforms: Concepts and Strategies. Cambridge University Press.
<p>Additional notes</p> <ul style="list-style-type: none"> • All teaching material in English language • Teaching language in English • Replaces the course “Electronic Markets”, students who have already completed the course “Electronic Markets” (PN: 266200) cannot register for this course.

Financial Data Analytics and Machine Learning

Module number
Course name
Financial Data Analytics and Machine Learning
Module coordinator
Prof. Dr. Ralf Kellner

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
150 h (60 h contact studies / 90 h self-studies)
Module applicability
BA Version 2025: Modulbereich B: Major Finance Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Finance
Reference to the LPO I
Recommended prerequisites
Fundamentals of mathematics and statistics
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Asset classes on capital markets • Stocks, bonds and options • Descriptive analysis of one- and multi-dimensional distributions of asset prices and returns • Introduction to portfolio theory • Factor models • Empirical analysis within and between asset classes • Principles of machine learning • Neural networks • Machine learning in the financial sector

Intended learning outcomes (ILOs)
Students gain a basic understanding of various asset classes on financial markets and the associated fundamental theories. Students are able to name the special features of financial data and apply the knowledge acquired in the course to real financial market developments. In addition, students understand how machine learning can be used in the financial sector in an insightful and informative way. Students interpret their own analyses, through which profound references to financial market theories are established.
Teaching methods
<ul style="list-style-type: none"> • Interactive lectures incl. digital documents • Interactive exercise units
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none"> • Written exam
Overall grade relevance
Exam resit opportunities
Recommended reading
<ul style="list-style-type: none"> • Options, Futures and other Derivatives (2021) – John C. Hull, Pearson Verlag • Machine Learning in Finance (2021) – Dixon, M.F., Halperin, I., Bilokon, P.; Springer Verlag • Statistics and Data Analysis for Financial Engineering (2015) – Ruppert, D., Matteson, D. S.; Springer
Additional notes

IT Architecture Management

Module number
Course name
IT Architecture Management
Module coordinator
Prof. Dr. Thomas Widjaja

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture 2 SWS (30 hours class attendance; 45 hours self-study) Exercise 2 SWS (30 hours class attendance; 45 hours self-study) Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Information Systems and Digital Business
BA Version 1: Wirtschaftsinformatik/ Information Systems - Vertiefung
LPO I applicability
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree programme in Business Information Systems. Successful attendance of the module "IT Management" (or comparable knowledge requirement) is recommended.
Requirements
Language of instruction
English

Content
IT architectures define the company's IT components and their interactions. This module provides an overview of the tasks and objectives of IT architecture management and covers the following topics in more detail: 1. Introduction and Overview (information systems, systems theory, IT architecture, enterprise architecture, IT architectures as models, meta-models, and goals of IT architecture management).

<p>2. Operating Model (standardization, integration, types of operating models, enterprise architecture core diagrams)</p> <p>3. Frameworks for IS architecture management</p> <p>4. Maturity levels of IT architectures (cost, management, outsourcing, and agility aspects of maturity levels of IT architectures)</p> <p>5. Management of IT complexity (complex adaptive systems, emergence, IT complexity, IT heterogeneity, Ashby's Law of Requisite Variety, standards, management of functional redundancy)</p> <p>6. Modularity (design structure matrices, IT architecture modularity and IT governance decentralization, design parameters, bi-modal architectures, and organizational ambidexterity)</p> <p>7. Architecture of digital platforms and Decentralized Autonomous Organizations (DAOs) (layered modular architecture, generativity, platform governance and boundary resources, platform openness).</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students, who have successfully participated in the module,</p> <ul style="list-style-type: none"> • classify enterprise architecture management as a sub-field of IT management. • explain the goals of IT architecture management and their dependencies. • explain the interactions between enterprise architectures and IT architectures. • model enterprise and IT architectures from different perspectives. • classify the management of redundancy and degree of standardization as central tasks of IT architecture management. • explain the essential frameworks and methods for IT architecture management. • implement the essential frameworks and methods for IT architecture management.
<p>Teaching methods</p> <ul style="list-style-type: none"> • Interactive frontal teaching • Case studies • Working on exercises
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <ul style="list-style-type: none"> • Exam, 60 Minutes, 100 %
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p> <ul style="list-style-type: none"> •
<p>Additional notes</p> <p>The course will be extended by guest lectures if necessary. Literature references will follow at the beginning of the course.</p>

IT-Services und IT-Servicemanagement

Modulnummer
Veranstaltungstitel
IT-Services und IT-Servicemanagement
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Thomas Widjaja

Prüfungsnummer	ECTS	SWS
266180	5	4
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
jedes Wintersemester Nicht im WiSe 25/26	1 Semester	

Workload
Vorlesung 2 SWS (30 St. Präsenzzeit und 45 St. Eigenarbeitszeit) Übung 2 SWS (30 St. Präsenzzeit und 45 St. Eigenarbeitszeit) Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Information Systems and Digital Business BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration. IT-Management sowie Geschäftsprozessmanagement aus dem Bachelor-Studiengang Wirtschaftsinformatik oder gleichwertige Kenntnisse empfohlen.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalt
Die Vorlesung setzt sich mit den zentralen IT-Managementaufgaben zur Erbringung von Services auseinander. Folgende Themen werden unter anderem behandelt: 1. Einführung und Überblick über digitale Dienstleistungen und das Management Digitaler Dienstleistungen aus zwei Perspektiven 2. Service Dominant Logic (SDL)

<p>3. Digitalisierungsgrad von Services 4. Qualität von Services: u. a. „SERVQUAL“ zur Messung der Servicequalität sowie IT-spezifische Anpassungen (z. B. e-SERVQUAL) 5. Serviceorientierte Architekturen 6. Cloud Computing und Software as a Service (SaaS) 7. Nutzerdatenbasierte Services 8. IT-Service-Management: Aufgaben des IT-Service-Managements, Modelle und Rahmenkonzepte (ITIL, COBIT), Unterstützung durch Software-Werkzeuge</p>
<p>Lernergebnisse Lernziele</p>
<p>Studierende, die an diesem Modul teilgenommen haben,</p> <ul style="list-style-type: none"> • erklären die wichtigsten Grundbegriffe aus dem Bereich des IT-Service-Managements. • spezifizieren IT-Services korrekt. • unterstützen Organisationen bei der Entscheidung, ob ein IT-Service selbst erstellt oder vom Markt bezogen werden sollte. • setzen Verfahren zur Messung der IT-Servicequalität um. • bestimmen den Digitalisierungsgrad von Services. • erklären die wesentlichen Parameter beim Erstellen von nutzerdatenbasierten Services nennen und deren Zusammenhänge. • beschreiben die Wirkung von IT-Service-Management auf IT-Business-Alignment.
<p>Lehr- und Lernformen</p>
<ul style="list-style-type: none"> • Interaktiver Frontalunterricht • Bearbeitung von Fallstudien in Gruppenarbeit • Praktische Übung
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)</p>
<p>Klausur, 60 Minuten, 100 %</p>
<p>Gesamtnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p>
<p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
<p>Literatur</p>
<p>Weitere Hinweise</p>
<p>Die Veranstaltung wird ggf. um Gastvorträge erweitert. Literaturhinweise folgen zu Beginn der Lehrveranstaltung.</p>
<p>WICHTIG: Im WiSe 25/26 findet diese Veranstaltung NICHT statt.</p>

Management of Information Security and Privacy

Module number
Course name
Management of Information Security and Privacy
Module coordinator
Prof. Dr. Jin Gerlach

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2+2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (30 hrs. attendance time and 45 hrs. self-study time) Exercise 2 SWS (30 hrs. attendance time and 45 hrs. self-study time)
The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Information Systems and Digital Business
BA Version 1: Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree programme Information Systems.
Requirements
Language of instruction
English

Content
The ongoing digitization increases the importance for organizations to protect their digital assets, customer information, and privacy. To ensure such protection, organizations must adequately manage information security and customer privacy, which is associated with numerous challenges. This course addresses central organizational and management issues, processes, frameworks, theories, and challenges associated with the management of information security and privacy. Note: the course focuses on a management/organizational perspective. It is not a technical course.
Topics covered by this course are:

<ul style="list-style-type: none"> • Basic concepts associated with information security and privacy • Risk management techniques for information security • Organization of information security and privacy management • Investment decisions with respect to information security • Countermeasures for preventing information security and privacy incidents • Measures for detecting security breaches • Responding to information security breaches • Tensions and tradeoffs with respect to privacy management • Ethical perspectives on managing information security and privacy
<p>Intended learning outcomes (ILOs)</p> <p>This course aims to provide advanced knowledge on the management of information security and privacy in organizations. After attending this course, students</p> <ul style="list-style-type: none"> • explain key challenges regarding the management of information security and privacy in organizations, • conceptualize organizational measures that help to improve information security and privacy protection, • and, based on the knowledge they have acquired, students develop well-founded management decisions in organizations to enhance information security and privacy protection.
<p>Teaching methods</p> <p>Interactive frontal teaching Processing of exercise tasks</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>Exam, 60 minutes, 100 %</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Additional notes</p> <p>- All teaching material in English language - Teaching language also in English</p>

Principles of AI Engineering

Module number
6120
Course name
Principles of AI Engineering
Module coordinator
Prof. Dr. Steffen Herbold

Examination number	Credit points (ECTS)	Hours per week (SWS)
455410	6	2V + 2Ü
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
60 contact hours + 45 hrs exercises + 75 hrs independent study and exam preparation
Module applicability
Modulbereich B: Major Information Systems and Digital Business
Reference to the LPO I
Recommended prerequisites
Software Engineering, Introduction to AI Engineering
Requirements
None
Language of instruction
English

Content
<p>This module covers the following topics:</p> <ul style="list-style-type: none"> • Requirements engineering for systems with AI components • Architecture and design of systems with AI components • AI/ML pipelines • Testing of AI components • Data quality • Continuous deployment and MLOps • Responsible development of AIs • Ethical and regulatory aspects
Intended learning outcomes (ILOs)
<p><u>Skills/Knowledge:</u> The students know the terminology and methods for the development of applications with components powered by Artificial Intelligence (AI) and how they can be used in operation. They know how to define requirements for AI systems, can define and implement suitable architectures, and ensure</p>

<p>their quality of such systems. They can assess non-functional aspects of AI systems to ensure a responsible, ethical, and regulatory compliant use.</p>
<p>Teaching methods</p>
<p>Presentation with a projector, blackboard</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Portfolio: Implementation of a semester project completed with a presentation of approximately 10 minutes duration and a 2 page written report featuring a demonstration of results at the end of the semester. A 60-minute written or oral examination of approximately 15 minutes duration conducted either in German or English. The form of assessment is announced at the beginning of the semester.</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Will be announced at the beginning of the lecture</p>
<p>Additional notes</p>
<p></p>

Responsible Machine Learning

Module number
Course name
Responsible Machine Learning
Module coordinator
Prof. Dr. Florian Lemmerich

Examination number	Credit points (ECTS)	Hours per week (SWS)
	6	2V + 2Ü
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
60 contact hours + 120 h independent study and implementation
Module applicability
Modulbereich B: Major Information Systems and Digital Business
Reference to the LPO I
Recommended prerequisites
Advanced Topics in Data Science and/or Introduction to AI Engineering, Python Programming Language
Requirements
None
Language of instruction
English

Content
<p>The course will give an overview on the main challenges and current approaches for responsible machine learning. This module will focus on explainable and interpretable approaches to machine learning, specifically for classification. It will discuss the relevancy of interpretability and will introduce white-box learning algorithms (e.g., decision tree learning, rule-based classification and simple regression models) and methods to explain black-box solutions (e.g., LIME, counterfactual explanations).</p> <p>The course will also cover the challenges of biases and fairness in machine learning, and will cover how these can be measured at an individual or at a group level. Students will also get to know about algorithms to counteract such biases with pre-, in-, or post-processing methods. In addition, the course will also provide an overview and introduce key approaches of privacy-aware machine learning, and reproducibility issues in machine learning.</p>
Intended learning outcomes (ILOs)
<p><u>Skills/Knowledge</u> Students will get to know about the main aspects of applying machine learning responsibly in sensitive settings, e.g., when working with behavioral data. This covers the problem settings,</p>

<p>challenges, and main algorithmic approaches for explainable, fair, privacy-aware, and reliable machine learning.</p> <p><u>Abilities</u> The students will be able to identify potential issues of machine learning and artificial intelligence applications and apply appropriate measures to address them. Students will improve their ability to assess, select and implement solutions for machine learning tasks, specifically when working with data from or about human behavior.</p> <p><u>Competencies</u> Students will strengthen their awareness with respect to algorithmic transparency, fairness, privacy, and reliability. They will improve their competence to critically assess artificial intelligence approaches with sensitive data. Participants will learn to develop problem-oriented machine learning solutions for sensitive data independently.</p>
<p>Teaching methods</p>
<p>Presentation projector, whiteboard</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>90-minute written or 20-minute oral examination depending on the number of participants. The students will be informed about the exact type of exam by the beginning of the semester.</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<ul style="list-style-type: none"> • Molnar, Christoph: Interpretable machine learning, 2nd edition, 2020. Online book available at https://christophm.github.io/interpretable-ml-book/. • Solon Barocas, Moritz Hardt, Arvind Narayanan: Fairness and Machine learning - Limitations and Opportunities, 2017. Online book available at https://fairmlbook.org/pdf/fairmlbook.pdf • Additional literature can be announced at the beginning of the semester.
<p>Additional notes</p>
<p></p>

Scientific Computing and Digital Reporting with Python

Module number
Course name
Scientific Computing and Digital Reporting with Python
Module coordinator
Prof. Dr. Ralf Kellner

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
150 h (60 h contact studies / 90 h self-studies)
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Artificial Intelligence
BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
Mathematics and statistics from the Bachelor's programme. At best, the course 'Fundamentals of Business Analytics' (39720) has already been taken beforehand.
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Introduction to programming with Python • Statistical models (sklearn, statsmodels, etc. and own implementation) • Optimization using gradient-based algorithms (Scipy, Tensorflow, Pytorch) • Matrix decompositions with application examples such as principal component analysis • Access to data using APIs and web scraping • Digital reporting with the help of a specially programmed web application

<ul style="list-style-type: none"> Final project: data reference, analysis using a model, reporting of the results using a customized web app
<p>Intended learning outcomes (ILOs)</p>
<p>After successfully completing the course, students will be able to carry out advanced data analyses using the Python programming language and inform external parties about the relevant results of the analyses in an appropriate manner. This includes all individual steps from collecting their own data, identifying and carrying out their own analyses to making the results accessible. In addition, course participants gain in-depth knowledge of the statistical modelling of financial market data. In addition to specific applications, the general competence of independent learning of new statistical models is trained.</p>
<p>Teaching methods</p>
<ul style="list-style-type: none"> Interactive lectures Interactive exercises Digital teaching materials on programming with Python and the methodological basics of the course
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<ul style="list-style-type: none"> Written exam Digital exam
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Recommended reading</p>
<ul style="list-style-type: none"> Deep Learning (2016) – Goodfellow, I., Bengio, Y., Courville, A.; MIT Press The Elements of Statistical Learning (2017) - Hastie, T., Tibshirani, R., Friedman, J.; Springer Hands-On Machine Learning with Scikit-Learn, Keras & Tensorflow (2017) – Geron, A.; Wiley Learn Python Programming (2018) – Romano, F., Packt Publishing Ltd. Web Scraping with Python (2018) - Ryan Mitchell, O'Reilly Media, Inc.
<p>Additional notes</p>

Strategic IT-Management (IT-Management für Fortgeschrittene)

Module number
37500
Course name
Strategic IT Management
Module coordinator
Prof. Dr. Thomas Widjaja

Examination number	Credit points (ECTS)	Hours per week (SWS)
283003	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (30 hours class attendance; 45 hours self-study) Exercise 2 SWS (30 hours class attendance; 45 hours self-study) Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Information Systems and Digital Business BA Version 1: Wirtschaftsinformatik/Information Systems – Grundlagen Wirtschaftsinformatik/Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree program in Information Systems. Successful attendance of the module "IT Management" (or comparable knowledge requirement) is recommended.
Requirements
Language of instruction
English

Content
This module provides conceptual and analytical skills for designing, managing, and implementing information technology and information systems for organizations. The course provides an overview of the main tasks and goals of strategic IT management. In addition, selected current challenges of IT management will be discussed. Among others, the following topics will be addressed: 1. Value of IT 2. IT governance

<p>3. IT outsourcing 4. Management of IT architectures 6. Standardization of IT 7. IT integration 8. Business intelligence and big data 9. Data-driven business models</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have successfully participated in the module are able to</p> <ul style="list-style-type: none"> • describe and explain the value contribution of IT. • discuss the advantages and disadvantages of different IT governance archetypes. • evaluate the economic benefits of IT outsourcing. • describe the tasks of business intelligence. • explain the goals of IT architecture management. • perform selected methods of IT architecture management. • evaluate the advantages and disadvantages of IT standardization. <p>explain the key characteristics of data-driven business models.</p>
<p>Teaching methods</p>
<ul style="list-style-type: none"> • Interactive frontal teaching • Case studies • Working on exercises
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Exam, 60 Minutes, 100%</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Literature references will follow at the beginning of the course.</p>
<p>Additional notes</p>
<p>The course will be extended by guest lectures and case studies if necessary. The course is a lecture with seminar character. The emphasis is on an interactive form of teaching and learning and is achieved, among others, through the work on and presentation of practical case studies.</p>

Strategies in the Software Industry

Module number
Course name
Strategies in the Software Industry
Module coordinator
Prof. Dr. Jin Gerlach

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2+2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (30 hrs. attendance time and 45 hrs. self-study time) Exercise 2 SWS (30 hrs. attendance time and 45 hrs. self-study time)
The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Information Systems and Digital Business
BA Version 1: Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree programme Information Systems.
Requirements
Language of instruction
English

Content
With many of the big tech companies being software companies nowadays, software is no longer only a product. Instead, a business model has developed around software. However, software characteristics differ from physical products, making it important to take specific strategic considerations into account. This course addresses the specifics of software as a good as well as the software industry and resulting consequences for strategies of software providers (e.g., software startups or established tech firms). Essential Contents include:
<ul style="list-style-type: none"> - Characteristics of digital goods

<ul style="list-style-type: none"> - Network effects and network effect markets - Digital value chains - Platforms - Fundamental principles of the software industry - Cloud computing and Software as a Service - Pricing strategies for software vendors - Cooperation strategies for software vendors - The value of data - Data-based business models - Privacy in data-based business models - Specifics of Open Source Software
<p>Intended learning outcomes (ILOs)</p>
<p>This course aims to provide fundamental knowledge on the specifics of the software industry with a focus on strategies in the software industry for software providers. After attending this course, the students</p> <ul style="list-style-type: none"> - explain central factors and specifics of software from an economic point of view, - explain important aspects of the market for software, - and, based on their acquired knowledge, students develop management decisions for software companies and develop strategies for software vendors.
<p>Teaching methods</p>
<p>Interactive frontal teaching Processing of exercise tasks</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Exam, 60 minutes, 100 %</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation..</p>
<p>Recommended reading</p>
<p>Additional notes</p>
<ul style="list-style-type: none"> - All teaching material in English language - Teaching language also in English

Governance of Platforms and Ecosystems

Module number
Module title
Governance of Platforms and Ecosystems
Module coordinator
Dr. Chayanin Wipusanawan

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	3
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Lecture 2 SWS (30 hrs. attendance and 70 hrs. self-study) Tutorial 1 SWS (15 hrs. attendance and 35 hrs. self-study) The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business BA Version 1: International Management and Marketing – Vertiefung Wirtschaftsinformatik/ Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
Gem. § 4 der Prüfungs- und Studienordnung für den Masterstudiengang Wirtschaftsinformatik (Information Systems). Basic knowledge of microeconomics is highly recommended.
Requirements
Language of instruction
English

Content
This module explores the economic principles that shape the governance and regulation of relationships between firms in digital network industries. Key topics include: <ul style="list-style-type: none"> • Compatibility and the standardization process • Competition policy in digital markets • Sector-specific regulations for network industries and digital platforms

Students will gain insights into the economic dynamics driving digital markets and the regulatory frameworks that influence competition, innovation, and industry standards.
Intended learning outcomes (ILOs)
Students who have successfully completed the module are able to <ul style="list-style-type: none"> • solve basic game-theoretical models of competition between firms and discuss the implications of the results on firm strategies and public policies • explain the economic theories on compatibility and standardization, including their implications on competition and consumers • explain and analyze competition policy issues pertaining to digital markets and platforms based on economic theory
Teaching methods
<ul style="list-style-type: none"> • Interactive lecture • Tutorial
Required attendance
Examination (type of examination, scope)
Final exam (60 minutes): 100%
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
<ul style="list-style-type: none"> • All teaching material in English language • Teaching language in English

Master Thesis Colloquium

Module number
Course name
Master Thesis Colloquium
Module coordinator/ examiner(s)
Alternating, depending on the courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	1-3	0,5-1
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	4

Workload
30 h to 90 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulgruppe B: Major Accounting and Tax Modulgruppe B: Major Data Science Modulgruppe B: Major Entrepreneurship Modulgruppe B: Major Finance Modulgruppe B: Major Information Systems and Digital Business Modulgruppe B: Major Management and Strategy
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
The colloquium supports students in writing their scientific thesis with regard to the conception, presentation, further development and discussion of the goals, approach and results of the thesis.
Intended learning outcomes (ILOs)
After completing the module, students are able to independently present scientific issues at master level on the basis of scientific methods and analytical thinking. They can present and discuss their results conclusively and draw conclusions from them.
Teaching methods
Alternating, depending on the courses assigned to the module

Required attendance
Examination (type of examination, scope)
Alternating, depending on the courses assigned to the module
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Master Thesis Colloquium

Module number
Module title
Master Colloquium: AI-Based Information Systems
Module coordinator
Prof. Dr. Ulrich Gnewuch

Examination number	Credit points (ECTS)	Hours per week (SWS)
	1	1
Availability	Duration	Recommended semester
Every semester	1 semester	While working on the master thesis

Workload
Colloquium 1 SWS (15 h attendance and 15 h self-study)
Calculation basis: 15 weeks in a semester, including an examination week; each SWS corresponds to 60 minutes.
Module applicability
BA Version 2025: Modulgruppe B: Major Information Systems and Digital Business
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to the study and examination regulations for the respective degree program.
Requirements
Admission to write a master thesis at the chair is a requirement for participating in the colloquium.
Language of instruction
English

Content
The colloquium introduces students to the foundations of scientific research and equips them with essential skills for writing a master thesis. Additionally, it provides an opportunity for students to present their thesis project and receive feedback from both their peers and members of the chair.
Intended learning outcomes (ILOs)
After participating in the colloquium, students will be able to: <ul style="list-style-type: none"> - Describe the principles of good scientific practice and key guidelines for academic writing - Present and explain their own scientific work effectively - Handle and implement critical feedback - Provide constructive and respectful feedback on others' work

Teaching methods
- Interactive sessions with student presentations and classroom discussions - Readings and self-study videos
Required attendance
Yes
Examination (type of examination, scope)
Presentation
Overall grade relevance
Exam resit opportunities
According to the study and examination regulations for the respective degree program.
Recommended reading
Additional notes
Participation is mandatory for all students who are writing their master thesis at the chair. Admission to write a master thesis at the chair is a requirement for participating in the colloquium. Further information on the thesis process is provided on the chair's website.

Master Thesis Colloquium

Module number
39607
Module title
Masterkolloquium im Schwerpunkt Information Systems
Module coordinator
Prof Dr Jan Krämer

Examination number	Credit points (ECTS)	Hours per week (SWS)
283001	1	1
Availability	Duration	Recommended semester
every semester	1 semester	The module must be completed alongside the Master's thesis.

Workload
Colloquium 1 SWS (15 hours attendance time and 15 hours individual work time) The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is counted as 60 minutes.
Module applicability
BA Version 2025: Modulgruppe B: Major Information Systems and Digital Business
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Reference to LPO I
Recommended prerequisites
In accordance with § 3 of the study and examination regulations for the Master's degree programme in Information Systems. The module must be completed alongside the Master's thesis.
Requirements
Admission to the final thesis and completion at the chair is a prerequisite for participation in the colloquium.
Language of instruction
English

Contents
The colloquium provides an introduction to scientific work and supplements any previous knowledge. It provides the necessary knowledge for the final thesis in i) scientific research and assessment of the quality of sources, ii) scientific writing and citation, iii) scientific presentation, as well as iv) an introduction to LaTeX. In addition, the colloquium allows students to present and discuss their own Master's thesis in a plenary session.
Intended learning outcomes (ILOs)

<p>Students who have taken part in the module "Master's Colloquium in Internet and Telecommunications Business":</p> <ul style="list-style-type: none"> • explain their own scientific approach when writing their thesis • use their knowledge of scientific literature to write their thesis in accordance with the rules of good scientific work, formally correct and structured in terms of Content • present connections between their own work and topics from research in the field of Internet and telecommunications business • illustrate and present their final thesis, taking into account the requirements of academic writing and citation • assess the quality of sources • develop a deeper understanding of scientific work and presentation and how to deal with criticism and the realisation of critical comments
<p>Teaching methods</p>
<ul style="list-style-type: none"> • Discussion and joint development of the teaching Content • Presentation of individual topics by students and doctoral candidates
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>An initial bibliography will be provided during the first counselling interview.</p>
<p>Additional notes</p>
<p>The module is compulsory for students writing their Master's thesis at the chair. Please note the regulations for registering theses at the chair. Admission to the thesis is a prerequisite for participation in the colloquium.</p>

Seminar in Information Systems and Digital Business

Module number
Course name
Module coordinator/ examiner(s)
Alternating, depending on the seminar courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	7	2
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	2-3

Workload
30 h presence and 180 h individual working hours
Module applicability
BA Version 2025: Modulgruppe B: Major Information Systems and Digital Business (Seminar in Information Systems and Digital Business)
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
<ul style="list-style-type: none"> • The Master's seminar is designed to promote independent scientific work in the field of information systems and digital business and to prepare students for their master's thesis. • As part of the Master's seminar, students should further develop their skills in dealing with scientific work in information systems and digital business. • Students are required to complete a scientific assignment such as a seminar paper or similar in a research field in information systems and digital business. • Students present their results and discuss them.
Intended learning outcomes (ILOs)
<p>Students who have successfully completed the module</p> <ul style="list-style-type: none"> • are prepared for their master's thesis in the Major Information Systems and Digital Business. • can create a scientifically sound assignment that is formally correct according to the rules of scientific work, but also creatively in terms of content. • can present their research results and communicate their research findings to scientific and non-scientific audiences at the appropriate level.

<ul style="list-style-type: none"> • are able to both provide qualified criticism and implement critical comments in their work.
Teaching methods
Alternating, depending on the seminar courses assigned to the module
Required attendance
Alternating, depending on the seminar courses assigned to the module
Examination (type of examination, scope)
Portfolio, depending on the seminar courses assigned to the module (100%)
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Seminar in Information Systems and Digital Business (Prof. Dr. Gnewuch)

Module number
Course name
Masterseminar AI-Based Information Systems
Module coordinator
Prof. Dr. Ulrich Gnewuch

Examination number	Credit points (ECTS)	Hours per week (SWS)
	7	2
Availability	Duration	Recommended semester
Summer and/or winter semester	1 semester	The module should be taken close to the end of the master's program as preparation for the master thesis.

Workload
Seminar 2 SWS (30 h attendance and 180 h own work).
Calculation basis: 15 weeks in a semester, including an examination week; each SWS corresponds to 60 minutes.
Module applicability
BA Version 2025: Modulgruppe B: Major Information Systems and Digital Business (Seminar in Information Systems and Digital Business)
BA Version 1: Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to the study and examination regulations for the respective degree program.
Good English skills are required. Participants are expected to write their seminar paper and deliver their presentation in English.
Requirements
Language of instruction
English

Content
In this seminar, we examine and discuss current topics in the field of information systems that are situated within the research focus areas of the chair. The theme of the seminar varies and is announced in advance. The seminar involves the review of scientific literature on a selected topic. Participants will document their method and results in a written seminar paper and present their findings to other seminar participants at the end of the semester.

Intended learning outcomes (ILOs)
After successful participation in this seminar, students will be able to: - describe the principles of good scientific practice and key guidelines for academic writing - identify, review, and analyze scientific literature on a specific topic - write a scientific paper based on the reviewed literature - present the main results of their scientific work effectively - provide constructive and respectful feedback on others' work
Teaching methods
Seminar meetings, interactive presentations, and discussions Advice and feedback on the seminar paper and the final presentation
Required attendance
Examination (type of examination, scope)
Portfolio: Seminar paper (70%); presentation and discussion (30%).
Overall grade relevance
Exam resit opportunities
Recommended reading
Core literature depends on the theme of the seminar and will be communicated beforehand. Participants are expected to read additional literature on their specific topic.
Additional notes
The course language is English.
The number of participants is limited. Prior application for this course is necessary. Information on the application process are provided on the chair's website.

Seminar in Information Systems and Digital Business (Prof. Dr. Widjaja)

Module number
Course name
Master's seminar in Business Information Systems
Module coordinator/ examiner(s)
Prof. Dr. Thomas Widjaja

Examination number	Credit points (ECTS)	Hours per week (SWS)
	7	2
Availability	Duration	Recommended semester
Irregularly	1 semester	

Workload
Seminar 2 SWS (30 hours class attendance; 180 hours self-study) Exercise 2 SWS (30 hours class attendance; 45 hours self-study) Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulgruppe B: Major Information Systems and Digital Business (Seminar in Information Systems and Digital Business)
BA Version 1: Wirtschaftsinformatik / Information Systems – Vertiefung
LPO I applicability
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree program in Business Administration
Requirements
Language of instruction
English

Content
The aim of the seminar is to examine current, practice-relevant issues in business information systems in a theory-driven way. The seminar topics are based on the research areas of the chair. Written work: Students must write a seminar paper on current topics in business informatics. The work can also include own empirical research. Oral presentation: Presentation and discussion of the seminar paper.
Intended learning outcomes (ILOs)

<p>After successfully completing the seminar, students are able to:</p> <ul style="list-style-type: none">• explain, structure and evaluate topics that are currently being discussed in research in the field of business informatics.• effectively research, structure and evaluate relevant scientific literature and embed it in their own argumentation in a reflective way in a scientific paper.• reflect on critical comments in the process of writing a scientific paper and critically evaluate other works themselves.• create an independent scientific paper that is formally correct according to the rules of good scientific work and is structured and creative in terms of content.
Teaching methods
<ul style="list-style-type: none">• Workshops for presenting and discussing interim results in the group and with the supervising lecturers• Individual support• Individual preparation of a seminar paper• Presentation of the seminar paper and discussion of the results
Required attendance
Examination (type of examination, scope)
<p>Portfolio:</p> <ul style="list-style-type: none">• Term paper, approx. 15 pages• Oral performance (presentation and discussion), presentation approx. 10 minutes, discussion approx. 5 minutes
Overall grade relevance
Exam resit opportunities
<p>If you fail, you can repeat all courses in accordance with § 6 of the subject-specific study and examination regulations.</p>
Recommended reading
Additional notes
<p>Registration is required for both the chair and Stud.IP! Further information can be found on the chair's homepage.</p> <p>If requested by all participants, the course can be held in German. The term paper can be submitted in either English or German.</p>

Seminar in Information Systems and Digital Business (Prof. Dr. Krämer)

Module number
Course name
Master Seminar Telecommunications and Internet Business
Module coordinator
Prof. Dr. Jan Krämer

Examination number	Credit points (ECTS)	Hours per week (SWS)
	7	2
Availability	Duration	Recommended semester
Every semester	1 semester	One semester before writing the Master's thesis

Workload
Seminar 2 SWS (30 hours attendance time and 180 hours individual work time) The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is counted as 60 minutes.
Module applicability
BA Version 2025: Modulgruppe B: Major Information Systems and Digital Business (Seminar in Information Systems and Digital Business)
BA Version 1: Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to LPO I
Recommended prerequisites
In accordance with § 3 of the study and examination regulations for the Master's degree programme in Wirtschaftsinformatik.
Requirements
Language of instruction
English

Content
Preparation of a seminar paper in the field of the Internet and telecommunications business. Thesis must be problem-orientated and contain own work in the form of a critical analysis of literature or a discussion of scientific methodology. The problem, objectives and approach of the work as well as the results of the study must be presented and discussed.
Intended learning outcomes (ILOs)
Students who have taken part in the module "Master Seminar Telecommunications and Internet Business": <ul style="list-style-type: none"> • explain their own scientific approach in the preparation of their seminar paper

<ul style="list-style-type: none"> • know the basics of scientific work and can analyse and interpret their research topic scientifically. • present connections between their own work and topics from research in the field of Internet and telecommunications business • acquire knowledge of presentation and communication techniques and are able to formulate and argue in defence of their subject-related positions and problem solutions. • assess the quality of sources • develop the ability to systematically and structurally analyse the scientific literature on a specific issue and to summarise and evaluate the Content.
Teaching methods
<ul style="list-style-type: none"> • Individual preparation of a seminar paper • Presentation of the seminar paper • Discussion of the results
Required attendance
Examination (type of examination, scope)
<p>Successful participation in the seminar requires written and oral performance. The written assignment consists of a 15-page term paper. The oral performance consists of a presentation of your own work (approx. 20 minutes) and an active discussion of your own and other students' work.</p> <p>Portfolio examination</p>
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
Please register via the chair. Further information can be found on the chair's website.

Seminar in Information Systems and Digital Business (Prof. Dr. Gerlach)

Modulnummer
Veranstaltungstitel
Masterseminar Wirtschaftsinformatik Daten- und Informationsmanagement
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Jin Gerlach

Prüfungsnummer	ECTS	SWS
	7	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Wintersemester	1 Semester	

Workload
Seminar 2 SWS (30 St. Präsenzzeit und 180 St. Eigenarbeitszeit)
Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulgruppe B: Major Information Systems and Digital Business (Seminar in Information Systems and Digital Business)
BA Version 1: Wirtschaftsinformatik / Information Systems – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnungen für den Masterstudiengang Wirtschaftsinformatik.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
Im Rahmen des Seminars werden aktuelle Themen der Wirtschaftsinformatik untersucht, die im Bereich der Forschungsschwerpunkte des Lehrstuhls angesiedelt sind.
Schriftliche Leistung: Anfertigung einer Seminararbeit zu ausgewählten Seminarthemen. Im Rahmen der Seminararbeit soll eine wissenschaftliche Auseinandersetzung mit bestehender Theorie und ggf. Methoden im jeweiligen Themenbereich erfolgen. Auch eine eigene empirische Untersuchung kann Bestandteil der Seminararbeit sein.

Mündliche Leistung: Im Rahmen einer Präsentation wird die eigene Arbeit (Problemstellung, Ziele, Vorgehen und Ergebnisse) vorgestellt und mit den anderen Seminarteilnehmenden diskutiert.
Lernergebnisse Lernziele
Studierende, die an dem Modul „Masterseminar Daten- und Informationsmanagement“ teilgenommen haben: <ul style="list-style-type: none"> • erläutern ihr eigenes wissenschaftliches Vorgehen bei der Erstellung ihrer Seminararbeit, • nutzen die Grundlagen wissenschaftlichen Arbeitens und interpretieren ihr Forschungsthema wissenschaftlich, • stellen Zusammenhänge zwischen ihrer eigenen Arbeit und der Themenstellung aus der Forschung im Bereich Daten- und Informationsmanagement dar, • erwerben Kenntnisse der Präsentations- und Kommunikationstechniken, • formulieren ihre fachbezogenen Positionen und Problemlösungen und verteidigen diese argumentativ, • beurteilen die Qualität von Quellen, • und entwickeln die Fähigkeiten, die Fachliteratur zu einer spezifischen Fragestellung systematisch und strukturiert zu erfassen und die Inhalte zu beurteilen. <p>Ziel des Seminars ist die Vertiefung der Kenntnisse in ausgewählten Themenbereichen der Wirtschaftsinformatik. Die Studierenden erlernen dabei Grundlagen des wissenschaftlichen Arbeitens, um sich kritisch mit den Grenzen des bestehenden Wissens auseinandersetzen zu können. Im Rahmen der Präsentation verbessern die Studierenden ihre Präsentations- und Kommunikationsfähigkeiten und lernen, sich an wissenschaftlichen Diskussionen zu beteiligen.</p>
Lehr- und Lernformen
<ul style="list-style-type: none"> • Workshops zur Präsentation und Diskussion von Zwischenergebnissen, gemeinsam mit anderen Seminarteilnehmenden und Dozenten • Individuelle Betreuung der Studierenden • Individuelle Erstellung der Seminararbeit • Präsentation der Seminararbeit und Diskussion der Ergebnisse
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang)
Portfolio. Hausarbeit, ca. 15-seitige Mündliche Leistung (Vortrag und Diskussion), Vortrag ca. 20 Minuten, Diskussion ca. 10 Minuten
Gesamtnotenrelevanz
Wiederholungsmöglichkeit
Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.
Literatur
Weitere Hinweise
Anmeldung über den Lehrstuhl. Weitere Informationen dazu finden Sie auf der Lehrstuhl-Homepage.

Data Science in Information Systems and Digital Business

Module number
Course name
Data Science in Information Systems and Digital Business
Module coordinator/ examiner(s)
Alternating, depending on the courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-5	2-4
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	2-3

Workload
90 h to 150 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
<ul style="list-style-type: none"> This module provides in-depth specialist knowledge in the field of data science, including computer-aided, theoretical and applied methods of statistics, econometrics and operations research and closely related fields. All courses from the major in Data Science are eligible.
Intended learning outcomes (ILOs)
<ul style="list-style-type: none"> Alternating, depending on the courses assigned to the module
Teaching methods
Alternating, depending on the courses assigned to the module
Required attendance
Examination (type of examination, scope)
Exam (written or oral) or Portfolio, depending on the courses assigned to the module (100%)

Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Modulbereich B: Major Management and Strategy

Advanced Strategic Sensitivity and Digitalization

Module number
Course name
Advanced Strategic Sensitivity and Digitalization
Module coordinator
Prof. Dr. Andreas König

Examination number	Credit points (ECTS)	Hours per week (SWS)
264507	5	4
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Workshop 4 SWS (60h presence time and 90h own working time)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Business Administration Master's programme.
Requirements
Language of instruction
English

Content
This workshop is concerned with two focal questions: (1) How can we identify digital trends? (2) How can we develop innovative digital business models and communicate them in a way that important stakeholders appreciate, remember, use, and/or fund them? In this quest, we teach approaches and methods from management, innovation and entrepreneurship research, communication research, and leadership studies. The central, unifying concept participants learn to apply and leverage is that

<p>of strategic sensitivity, i.e., deliberate and research-driven search for anomalies to taken-for-granted business assumptions and the purposefully entrepreneurial implementation of innovative ideas. Once acquainted with these theories and methods, the participants will work in teams to develop recommendations and communicate concepts for a current real world managerial problem. This semester, an international manufacturer of passive electronic components will present a digital challenge to the students.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>After successful participation in this course, students can:</p> <ul style="list-style-type: none"> • Explain the concept of strategic sensitivity and are familiar with recent developments in digitalization. • Apply a set of empirical methodologies to induce and test hypotheses that underlie and feed their strategic thinking. • Solve digital challenges strategically and develop own digital business models. • Develop their presentation skills by pitching their own innovations to an expert panel and communicate them successfully.
<p>Teaching methods</p>
<ul style="list-style-type: none"> • Interactive teaching • Classroom discussions and case study in group work • Digital presentation methods
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<ul style="list-style-type: none"> • Portfolio
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Chevallier, A. and Enders, A., 2022. <i>Solveable</i>. Pearson UK.</p>
<p>Additional notes</p>
<ul style="list-style-type: none"> • The course is offered as a block course. • The course can be credited in the DTE Pathfinder • The course will be held in English. • Typically, the course will be blocked within the first two weeks of the semester. • There will be a mid-term presentation and a final presentation. • Please note that you have to apply for this workshop. <p>For further information, please visit Stud.IP or our homepage via https://www.wiwi.uni-passau.de/strategie-innovation/studium/seminare-und-workshops/</p>

B2B Marketing and Sales Management

Module number
33840
Course name
B2B Marketing and Sales Management
Module coordinator
Prof. Dr. Dirk Totzek

Examination number	Credit points (ECTS)	Hours per week (SWS)
264790	5	2
Availability	Duration	Recommended semester
Three-semester cycle	1 semester	

Workload
Lecture 2 SWS (30 hours attendance & 120 hours own study)
The calculation is based on 15 semester weeks (14 lecture weeks and 1 exam week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Management and Strategy Modulbereich B: Minor Marketing
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
Knowledge of "Marketing" and prior attendance of basic methods modules (e.g. "Multivariate Methods") is of advantage.
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Fundamentals of sales management • Design and management of sales systems • Managing the sales force and personal selling • Specifics of B2B marketing • Theories and concepts of organizational buying behavior • Relationship marketing • Peculiarities and central decision areas in the marketing mix • B2B marketing across different business types
Intended learning outcomes (ILOs)
Students who have participated in the module "B2B Marketing and Sales Management",

<ul style="list-style-type: none"> • explain central concepts and theories of sales management and B2B marketing. • evaluate the design and management of sales systems and the sales force based on theory and empirical evidence. • explain the particularities of B2B markets and organizational purchasing behavior. • discuss the implications of these particularities for the design of the marketing mix in B2B markets in different contexts. • develop an integrated understanding of B2B marketing and sales management reflecting the current state of research.
Teaching methods
Interactive teaching supplemented with guest lectures from practitioners.
Required attendance
Examination (type of examination, scope)
Written exam (duration 60 minutes, 100% of the total grade)
Overall grade relevance
Exam resit opportunities
in the following semester; Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
<p>Homburg, Christian, Schäfer, Heiko, Schneider, Janna (2012), Sales Excellence: Systematic Sales Management, Berlin.</p> <p>Palmatier, Robert W., Stern, Louis W., El-Ansary, Adel I. (2014), Marketing Channel Strategy, 8th edition, Upper Saddle River, New Jersey.</p> <p>Anderson, James C., Narus, James A., Narayandas, Das (2009), Business Market Management, 3rd edition, Upper Saddle River, New Jersey.</p> <p>Lilien, Gary L., Petersen, J. Andrew, Wuyts, Stefan (2022) (Eds.), Handbook of Business-to-Business Marketing, 2nd edition, Cheltenham.</p>
A list with mandatory readings will be provided at the beginning of the lecture.
Additional notes
The module and the exam are in English language.

Customer Relationship Management

Module number
34540
Course name
Customer Relationship Management (ehemals: Kundenmanagement)
Module coordinator/ examiner(s)
Prof. Dr. Jan Hendrik Schumann

Examination number	Credit points (ECTS)	Hours per week (SWS)
264940	5	2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (30 hours attendance time and 120 hours individual work time)
Module applicability
BA Version 2025: Modulbereich B: Major Management and Strategy Modulbereich B: Minor Marketing
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
LPO I applicability
Recommended prerequisites
Bachelor's degree in an economics or business-related degree program. Basic knowledge of marketing is advantageous.
Requirements
Language of instruction
English

Content
The lecture covers the basics of (data-based) customer management. As part of the lecture, students learn about typical customer management problems and how to solve them. Basic methods and concepts (e.g. customer acquisition, cross-selling, customer loyalty, complaint management and churn) and their implementation in practice are discussed.
Intended learning outcomes (ILOs)
Students who have participated in the course "Customer Relationship Management" ...
<ul style="list-style-type: none"> - ... understand the CRM approach and concepts of value-oriented customer management. - ... internalize the difference between past-based customer evaluation and - ... forecasted customer evaluation as well as their respective strengths and weaknesses.

<ul style="list-style-type: none"> - ... know important customer management strategies and key figures. - ... understand the specific challenges that the introduction of value-oriented customer management and know suitable approaches to meet them. - ... take a critical look at typical customer management scenarios. - ... derive suitable customer management strategies based on the key variables of customer lifetime value and customer equity.
Teaching methods
Required attendance
Examination (type of examination, scope)
Written exam at the end of the semester (duration: 60 minutes)
Weighting of the individual performances in the module grade: Final exam 100%
Overall grade relevance
Exam resit opportunities
Recommended reading
Additional notes

Empirische Methoden für Masterstudierende im Bereich Management, Personal und Information

Modulnummer
Veranstaltungstitel
Empirische Methoden für Masterstudierende im Bereich Management, Personal und Information
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Marina Fiedler

Prüfungsnummer	ECTS	SWS
	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
jedes Semester	1 Semester	

Workload
2 SWS (Präsenzzeit 30 h, Eigenarbeitszeit 120 h)
Verwendbarkeit
BA Version 1: Modulbereich B: Major Management and Strategy
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Bitte beachten Sie das Anmeldeverfahren und zugehörige Hinweise auf Stud.IP. Max. 10 Studierende.
Verpflichtende Voraussetzungen
keine
Unterrichtssprache
Deutsch

Inhalt
Die Veranstaltung thematisiert die verschiedenen empirischen Methoden im Bereich Management, Personal und Information. Dabei werden folgende Fragen behandelt: Welche Methoden stehen in der empirischen Managementforschung zur Verfügung? Welche Arten von Daten gibt es? Wie werden sie erhoben? Wie können diese Daten mittels der Verwendung von statistischer Analysesoftware (SPSS) aufbereitet werden? Welche Möglichkeiten zur Auswertung stehen zur Verfügung? Wie werden deskriptive, bi- und multivariate Verfahren mit der Software durchgeführt? Worauf muss hierbei geachtet werden? Wie können die Ergebnisse interpretiert werden? Wie können qualitative Daten mithilfe von MAXQDA ausgewertet werden?

<p>Wie können Datenanalysen selbstständig durchgeführt werden? Die Veranstaltung soll durch die interaktive Konzeption den Studierenden ermöglichen das erlernte Wissen direkt an konkreten Beispielen zu vertiefen und selbst erste empirische Erfahrungen zu sammeln. Nähere Informationen zur Veranstaltung finden sich jeweils zum Start der Veranstaltung in Stud.IP.</p>
<p>Lernergebnisse Lernziele</p>
<p>Nach erfolgreicher Teilnahme am Modul sind die Studierenden in der Lage:</p> <ul style="list-style-type: none"> • Mit der Statistiksoftware SPSS erfolgreich umzugehen • Verschiedene statistische Methoden und Instrumente anzuwenden • Quantitative Daten auszuwerten und zu interpretieren • Selbstständig mit quantitativen Daten zu arbeiten
<p>Lehr- und Lernformen</p>
<p>Interaktiver Frontalunterricht Individuelle Bearbeitung von Datensätzen</p>
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)</p>
<p>Projektarbeit Präsentation</p>
<p>Gesamtnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p>
<p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
<p>Literatur</p>
<p>Weitere Hinweise</p>
<p>Für die Veranstaltung ist ein spezielles Anmeldeverfahren erforderlich. Nähere Informationen finden Sie ca. eine Woche vor Beginn des Semesters in Stud.IP.</p> <p>Dieser Kurs richtet sich besonders an Masterstudierende, die ihre Abschlussarbeit am Lehrstuhl für Management, Personal und Information planen. Eine zeitgleiche Teilnahme an dem Masterseminar des Lehrstuhls ist empfehlenswert.</p>

Entwicklung von Managementfähigkeiten

Module number
Course name
Developing Management Skills
Module coordinator/ examiner(s)
Prof. Dr. Marina Fiedler

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2+2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Workload (to be calculated in hours of 60 minutes over 15 semester weeks, i.e. 14 lecture weeks + 1 exam week)
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
LPO I applicability (only for Teacher Education Programmes)
Recommended prerequisites
Requirements
Language of instruction
English

Content
The aim of the module is to emphasize the importance and significance of management skills, to lean basic management skills, to explain a learning model for developing management skills and to critically reflect on the lecture content. The following aspects will be covered: <ul style="list-style-type: none"> • Personal skills • Happiness, well-being and work • Developing self-awareness • Stress management • Analytical and creative problem solving

<ul style="list-style-type: none"> • Power and influence • Motivation and engagement • Management of positive change <p>Further information about the course will be available in Stud.IP at the start of the course.</p>
<p>Intended learning outcomes (ILOs)</p> <p>After successfully completing the module, students are able to:</p> <ul style="list-style-type: none"> • explain the importance and development of various management skills. • assess their own management skills in terms of strengths and weaknesses. • analyze the management skills necessary for companies. • develop a management skills development program that is aligned with organizational goals, values and strategies. • use social skills to work effectively in a team. • argue and present their own ideas and concepts in a targeted and concise manner.
<p>Teaching methods</p> <ul style="list-style-type: none"> • The lecture will be conducted in German and audio-recorded. An AI-generated English audio translation will be available after each session. International participants are welcome to attend and contribute in either German or English. • Guest lectures by experts in the field • Group project • The exam can be taken in either German or English
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>This course is a portfolio course. The overall grade is composed of two parts:</p> <ul style="list-style-type: none"> • Part 1: group work, 25 points • Part 2: 60-minute written exam, 60 points • Overall grade: A maximum of 85 points can be achieved in total (part 1 and written exam), which is used to calculate the overall grade.
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>If you fail, you can repeat all courses in accordance with § 6 of the subject-specific study and examination regulations.</p>
<p>Recommended reading</p>
<p>Additional notes</p> <p>Strong management skills are essential for professional success—both in leadership positions and teamwork. This course provides a research-oriented yet practical approach to developing these competencies and preparing for real-world challenges. The focus is on theory development and knowledge generation, enabling not only the application of existing concepts but also their critical evaluation and further development.</p> <p>The course covers key management skills, including self-awareness (e.g., emotional intelligence, attribution style, strengths and virtues, resilience), stress and time management, analytical and creative problem-solving, and the impact of artificial intelligence on learning and management. In addition to theoretical foundations, the course emphasizes methodological competencies such as critical thinking, academic research, and data-driven decision-making.</p>

Through interactive lectures and a semester-long group project, students will develop a comprehensive understanding of what management skills are and how to enhance them effectively. The course is not just about theoretical concepts but also their practical application. Teamwork, communication skills, and intercultural competence are as much in focus as the independent development of innovative approaches to improving management skills.

As part of the group project, generative AI will be used in a targeted manner—whether to support creative processes or optimize problem-solving strategies. At the same time, the course encourages critical reflection on the limitations of AI and how it can be effectively and value-adding in practice. In addition to developing management skills, students will also engage with digital literacy and the reflective use of AI-driven methods.

The final grade consists of a group project (30%) and a written exam (70%). The exam can be taken in German or English.

International students are welcome! The lecture is conducted in German, but AI-generated English audio translations will be available. Contributions in both German and English are explicitly encouraged. Please note the current information provided in the course and in Stud.IP.

Fundamentals of Digitalization and Digital Trends

Module number
Course name
Interdisciplinary Lecture Series for Master Students: Fundamentals of Digitalization and Digital Trends
Module coordinator
Prof. Dr. Andreas König

Examination number	Credit points (ECTS)	Hours per week (SWS)
266700	5	2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture 2 SWS (30h presence time and 120h working time)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Entrepreneurship
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Business Administration Master's programme
Requirements
Language of instruction
English

Content
This interdisciplinary lecture series addresses digital trends and how they can be utilized within society. Each year, the lecture focuses on a different topic within the field, such as digital health, human-computer interaction, brain-computer interfaces, wearable computing, anthro-pomorphic hardware, visual analytics, cyber security, data and health, legal tech, blockchain, fin tech, 4DPrinting, and so forth. In the lectures, scholars from the university, distinguished guest scholars, and practitioners introduce a variety of technological developments and their impact on businesses,

the economy, and society. Students will gain a deeper insight into the topic through scientific reading assignments.
Intended learning outcomes (ILOs)
After successful participation in this course, students <ul style="list-style-type: none"> • Formulate the core tools and concepts of current digital trends • Explain the central theories of research in the context of digital trends and the research environment and the theoretical issues discussed in current innovation and entrepreneurial research • Reflect real-life digital trends using the discussed instruments and develop strategies based on them • Identify and utilize digital trends to create own new business models • Understand and utilize modern strategic decision making tools
Teaching methods
<ul style="list-style-type: none"> • Interactive teaching • Lectures by professors and practitioners • Self-study of assigned research papers
Required attendance
Examination (type of examination, scope)
Written exam, 60 minutes + 5 min reading time, 100% of the final grade No ERASMUS special exams
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
For more information regarding the next semester's topics and lecturers, please visit Stud.IP.

Governance – Compliance und Governance Kodex (PBL)

Module number
39997
Course name
Practical Course: Compliance
Module coordinator/ examiner(s)
Prof. Dr. Carola Jungwirth

Examination number	Credit points (ECTS)	Hours per week (SWS)
264519	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
4 SWS (hours per week) (= 60 hours attendance time and 90 hours own work time) The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is counted as 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Management and Strategy
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
LPO I applicability
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree program in Business Administration.
Requirements
Language of instruction
English; however: course will be held in German if all participants are proficient in German and do not prefer an English-language format

Content
Compliance refers to the adherence of businesses to rules, encompassing laws, guidelines, and voluntary codes—often referred to as 'soft laws.' A Compliance Management System (CMS) is the framework within which a company operates to ensure adherence to these rules and to prevent violations. This course explores the CMS in depth, focusing on its need for constant adaptation to social developments and ESG (Environmental, Social, and Governance) criteria. Topics include gender equality, environmental sustainability, and broader governance issues that companies must

<p>navigate. We delve into the 'comply or explain' strategy, where companies must either adhere to certain ESG standards or clearly explain their reasons for non-compliance. Additionally, we discuss decision-making challenges within the realm of soft law, which occupies the intermediate space between market-driven and legally mandated behaviors. By examining these areas, the course provides a comprehensive understanding of the dynamic field of compliance management.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have taken the “PBL Compliance” module</p> <ul style="list-style-type: none"> • explain the hypotheses that justify the choice of a particular compliance rule • explain the alternatives for designing compliance guidelines and give specific advantages and disadvantages for choosing the respective alternative <p>use the swarm intelligence of their working group to familiarize themselves with new topics in a short period of time</p> <ul style="list-style-type: none"> • illustrate the solutions for the small cases (vignettes) with the help of well-structured presentations that include graphical and verbal elements • evaluate the company contexts described in the case and put them into the context of a sustainable solution strategy
<p>Teaching methods</p>
<p>It is a lecture with seminar character, designed for a small group size (approx. 20 participants).</p> <p>The course is based on “problem-based learning” (PBL) as a method for acquiring knowledge and developing interdisciplinary competences and problem-solving skills.</p> <p>The learning process is structured by the so-called PBL cycle:</p> <ol style="list-style-type: none"> 8. analyze problem scenario 9. identify facts 10. generate hypotheses 11. identify knowledge deficits 12. apply new knowledge 13. abstract 14. and the cycle begins again with the identification of further facts. <p>The teacher guides the students through the PBL cycle and imparts the necessary methodological knowledge (e.g. for hypothesizing).</p> <p>The students acquire knowledge about network management in start-up processes by means of 2-3 “vignettes” (= case studies). These practice-orientated case constellations, outlined on a few pages, illustrate the abstract topic of the course and require a practicable solution proposal, for which, however, a theoretical derivation is necessary. The groups therefore also develop the theoretical foundation for the topics of the course.</p> <p>The module (4 SWS) includes discussions, impulses from the teacher and presentations of the results in plenary sessions as well as teamwork in small groups (max. 7 people per group). The teacher supports the teamwork.</p> <p>All examinations are completed with the last week of the semester.</p>
<p>Required attendance</p>
<p>We expect you to attend. In case of absence (due to illness, meeting conflict, ...) please inform us in time.</p>
<p>Examination (type of examination, scope)</p>
<ul style="list-style-type: none"> • slides of presentation, group presentation (50% of the final grade) • individual solution proposal for one of the discussed case studies (vignettes) in the form of a written essay (17.000 characters, incl. spaces) (50% of the final grade)
<p>Overall grade relevance</p>

Exam resit opportunities
In the event of failure, all courses can be repeated in accordance with Section 6 of the Study and Examination Regulations.
Recommended reading
Basic literature: <ul style="list-style-type: none">• Cialdini, R.B. & Goldstein, N.J. (2004): Social Influence: Compliance and Conformity. Annual Review of Psychology, 55(1), 591-621.• Griffith, S.J. (2016): Corporate Governance in an Era of Compliance, William & Mary Law Review, 57(6), 2075-2147.• Mueller, E.F. & Jungwirth, C. (2022): Are Cooperative Firms More Agile? A Contingency Perspective on Small and Medium-Sized Enterprises in Agglomerations and Peripheral Areas. Small Business Economics, 58(1), 281-302.• Noeth, K. (2024): Understanding ESG: Factors, Foundations, and Differentiators (Chapter 1), in: The ESG and Sustainability Deskbook for Business, Apress, 1-24.
Further references will be announced during the course.
Additional notes
The course takes place as a face-to-face event during the semester. Students who are unable to attend due to illness can participate virtually. It is requested that virtual participation be announced before the respective lesson. The number of participants is limited to 20 students. Places will be allocated on a first come, first served basis. Further information can be found on the chair's homepage: https://www.wiwi.uni-passau.de/governance/studium/lehrkonzept

International Cooperation and Networks

Module number
Course name
International Cooperation and Networks
Module coordinator/ examiner(s)
Prof. Dr. Suleika Bort

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2
Availability	Duration	Recommended semester
winter semester	1 semester	

Workload
Lecture 2 SWS (30 hours class instruction; 45 hours self-study) Tutorial 2 SWS (30 hours class instruction; 45 hours self-study)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week.
Module applicability
BA Version 2025: Modulbereich B: Minor Digital Management and Strategy
BA Version 1: International Management and Marketing – Grundlagen; International Management and Marketing – Vertiefung
LPO I applicability
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree program in Business Administration.
Requirements
Language of instruction
English

Content
International cooperation and networks have drawn a substantial amount of interest in recent years. This lecture focuses on the formation, design, management and performance evaluation of international cooperation and networks. We analyze social networks and discuss how companies can form, design, management and utilize international cooperation and networks in order to gain and maintain a competitive advantage. Amongst others, central topics will be cooperation formation motives, partner selection, governance,

and design, management and performance evaluations as well as the analysis of social networks via the UCInet software.
Intended learning outcomes (ILOs)
<p>Students who have successfully participated in the Module „International Cooperation and Networks“</p> <ul style="list-style-type: none"> • explain fundamental concepts of corporate cooperations and networks as well as assumptions and mechanics of the main fundamental theories and framework to apply them, especially in an international setting. • interpret recent developments in “International Cooperations and Networks” in the light of these theories, scientific literature, and apply them to contemporary real-world examples. • perform case study analysis of suitable companies with the help of an active application of theoretical and practical knowledge gathered in this course. • illustrate key elements of a life cycle of a network or cooperation, which includes the formation, design, management, performance evaluation and termination of this network or cooperation. • assess the role of trust, negotiations, and decision making-processes in international cooperations and networks and the relevance of these behavioral processes for business in an international context as well as reflection on the benefits and challenges of cooperation and networks. • develop criteria for a critical and independent evaluation and interpretation of related scientific findings as well as specific administrative situations in cooperation and networks that enable them to formulate, critically appraise, and argue for practical and theoretical solutions for when encountering typical issues of International Cooperation and Networks.
Teaching methods
<ul style="list-style-type: none"> • Mix of asynchronous virtual and interactive on-site lectures • Discussion of questions, readings and case studies linked to the topic of international cooperation and networks • Tutorial with exercises, group work and student presentations
Required attendance
Examination (type of examination, scope)
Portfolio. Detailed information will be provided in the first lecture.
Overall grade relevance
Exam resit opportunities
Recommended reading
Additional notes
Guest lectures may be offered.
Lecture and exercise classes will be held in English.

Managing and Leading Strategic Innovation and Change

Module number
38561
Course name
Managing and Leading Strategic Innovation and Change
Module coordinator
Prof. Dr. Andreas König

Examination number	Credit points (ECTS)	Hours per week (SWS)
265070	5	2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture 2 SWS (30h presence time and 120h own working time)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Management and Strategy
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the International Economics and Business Master's program.
Requirements
Language of instruction
English

Content
Over the past decades, few challenges have become more vital to organizations than creating value and growth through strategic innovation. This course illuminates the focal issues involved in such breakthroughs of creating and capturing value in an industry. Our journey starts by looking at the specific difficulties of incumbent firms when engaging in strategic innovation and ends by investigating the opportunities that emerge as a consequence of the inertia of incumbent organizations. We particularly focus on how leaders of teams and organizations can shape strategic change, both by looking at real-life cases and by reading, and reflecting on, state-of-the-art scholarly work on strategic innovation.

Intended learning outcomes (ILOs)
<p>After successful participation in this course, students</p> <ul style="list-style-type: none"> • Understand and elaborate what strategic innovation is • Explain and evaluate the specific challenges involved in strategic innovation • Transfer frameworks and knowledge to real-life cases of strategic change, both from the perspective of established organizations as well as entrepreneurial start-ups
Teaching methods
<ul style="list-style-type: none"> • Classroom discussions • Critical reflection of current research papers • Presentation of case studies and exercises
Required attendance
Examination (type of examination, scope)
Written exam, 60 minutes, 100% of the final grade
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
<ul style="list-style-type: none"> • Backhaus, K., Erichson, B., Plinke W., Weiber, R.: Multivariate Analysemethoden. Eine anwendungsorientierte Einführung, 11. Aufl., Berlin, 2006. • Diekmann, A.: Empirische Sozialforschung, 12. Aufl., Hamburg, 2004. • Schnell, R., Hill, P., Esser, E.: Methoden der empirischen Sozialforschung, 7. Aufl., München, 2005. • Research articles (will be announced during the semester)
Additional notes
For more information, please visit Stud.IP

Organization Theory and Sustainable Leadership

Module number
39756
Course name
Organization Theory and Sustainable Leadership
Module coordinator
Prof. Dr. Suleika Bort

Examination number	Credit points (ECTS)	Hours per week (SWS)
264517	5	3
Availability	Duration	Recommended semester
Summer semester	1 Semester	

Workload
3 SWS
Module applicability
BA Version 2025: Modulbereich B: Major Management and Strategy Modulbereich B: Minor Sustainability
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree program in Business Administration.
Requirements
Language of instruction
English

Content
This course provides an overview of the key issues and arguments within organization theory and critically discusses and applies them in the context of sustainability, justice, and social responsibility. Furthermore, the course discusses various sustainable and ethical leadership ideas and highlights the value of theory for organizational analysis, leadership and decision making.
Intended learning outcomes (ILOs)
After successful participation in this course, students <ul style="list-style-type: none"> • develop the perspective that leaders and organizations have agency and a role in addressing issues such as social inequality and environmental degradation. • understand different theoretical approaches to explain the activities of organizations and apply them to examples and practical cases. • critically reflect the boundaries of these theories, asking whether there are alternative ways to manage firms and engage in sustainable leadership.

<ul style="list-style-type: none">• examine different cases of leaders and firms that have reimagined their roles, objectives, and directions they have followed.
Teaching methods
<ul style="list-style-type: none">• Interactive lecture with seminar character• Discussion of questions, readings and case studies linked to the topic
Required attendance
Yes
Examination (type of examination, scope)
Portfolio
Overall grade relevance
Exam resit opportunities
No; Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
References will be given in the course.
Additional notes

Organizational Behavior und Unternehmensführung

Module number
Course name
Organizational Behavior
Module coordinator/ examiner(s)
Prof. Dr. Marina Fiedler

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2 + 2
Availability	Duration	Recommended semester
Every summer semester	1 semester	1. - 4. semester

Workload
Workload (to be calculated in hours of 60 minutes each over 15 semester weeks, i.e. 14 weeks of lectures + 1 week of exams)
Module applicability
<p>BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy</p> <p>BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung</p>
LPO I applicability (only for Teacher Education Programmes)
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's program in Business Administration. Bachelor's degree in economics or a related field.
Requirements
None
Language of instruction
English

Content
Numerous studies show that employee behavior has an impact on key business metrics such as employee turnover, profit and sales, and can thus create sustainable competitive advantages for the company. The aim of the course is to highlight the significance and importance of corporate governance and behavior in organizations with particular reference to change in organizations. The following aspects will be covered: <ul style="list-style-type: none"> • leadership styles • communication and feedback

<ul style="list-style-type: none"> • negotiation management • conflict management • teamwork and diversity • Further information on the module can be found in Stud.IP at the start of the course.
<p>Intended learning outcomes (ILOs)</p> <p>After successfully completing the module, students are able to:</p> <ul style="list-style-type: none"> • determine factors influencing the behavior of managers • understand the context and importance of leadership behavior in organizations • assess behavioral dynamics in organizations based on current trends
<p>Teaching methods</p> <ul style="list-style-type: none"> • The lecture will be conducted in German and audio-recorded. An AI-generated English audio translation will be available after each session. International participants are welcome to attend and contribute in either German or English. • Guest lectures by experts in the field • Group project • The exam can be taken in either German or English
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>This course is a portfolio course. The final grade is made up of two components: Part 1: Creation of a group project, 25 points Part 2: 60-minute written exam, 60 points Overall grade: A maximum of 85 points can be achieved in total (part 1 and part 2), from which the overall grade is calculated. Please note the current information in the course and in Stud.IP.</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>If you fail, you can repeat all courses in accordance with § 6 of the subject-specific study and examination regulations.</p>
<p>Recommended reading</p>
<p>Additional notes</p> <p>Strong leadership competencies and a deep understanding of organizational behavior are essential for professional success—both in leadership positions and teamwork. This course takes a research-oriented approach to analyzing the importance and implications of corporate leadership and organizational behavior, particularly in the context of digital transformation.</p> <p>The course develops subject-specific competencies in the field of organizational behavior and corporate leadership. This includes leadership style models, communication theories and models, feedback mechanisms, negotiation management, and conflict resolution techniques. Students gain a solid understanding of these concepts and learn to apply them evidence-based to real-world business situations.</p> <p>In addition to acquiring foundational knowledge, the course emphasizes methodological competencies. These include critical reflection, analytical problem-solving, and data-driven decision-making, which help students systematically assess management challenges and develop</p>

well-founded strategies. Furthermore, the course enhances **scientific analysis skills and the ability to apply empirical research findings to practical business issues**.

Through **interactive lectures and exercises**, students not only gain a **comprehensive understanding of corporate leadership and organizational behavior**, but also strengthen their **social competencies**. Students enhance their **communication skills, teamwork, and intercultural awareness** by discussing theories and methods in groups and applying them to practical case studies.

As part of the **group project, generative AI is strategically implemented**—whether to **support communication strategies, optimize negotiation processes, or analyze conflict resolution approaches**. At the same time, the course encourages **critical reflection on the limitations and potential of AI** in these areas. This fosters not only **digital literacy** but also **innovation capability and responsible engagement with AI-powered technologies**.

Special emphasis is placed on **critical reflection and independent thinking**. Students are encouraged to **make well-founded decisions independently, navigate uncertainties in leadership practice, and engage with ethical considerations**.

The final grade consists of a **group project (30%) and a written exam (70%)**. The exam can be taken in **German or English**.

International students are welcome! The lecture is conducted in **German**, but **AI-generated English audio translations** will be available. Contributions in both **German and English** are explicitly encouraged. Please note the current information in the course and in Stud.IP.

Organizations and Innovation Strategy

Module number
Course name
Organizations and Innovation Strategy
Module coordinator
Prof. Dr. Carolin Häussler, Dr. Patrick Figge

Examination number	Credit points (ECTS)	Hours per week (SWS)
264190	5	4
Availability	Duration	Recommended semester
irregular	1 semester	

Workload
Lecture: 2 SWS (30 hrs. class instruction, 65 hrs. self-study) Exercise Class: 2 SWS (15 hrs. class instruction, 40 hrs. self-study)
Calculation is based on: every hr. per semester week corresponds to 60 minutes. One semester presumably consists of 15 weeks, i.e., 14 course and 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Entrepreneurship
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
Requirements
Language of instruction
English

Content
This course focuses on the organizational and strategic challenges companies face in order to obtain a sustainable competitive advantage. It engages in an application-oriented analysis of intercompany interaction along the value chain. The course discusses how companies organize to innovate and decide for strategic moves in order to attain competitive advantage. Amongst others, topics covered

by this course will be pricing decisions, market entry decisions, intellectual property protection, network effects, and vertical relations within the value chain.
Intended learning outcomes (ILOs)
<p>Students who have successfully participated in the module "Organizations and Innovation Strategy",</p> <ul style="list-style-type: none"> • explain key theoretical concepts of management, competition and strategy science. • combine and compare knowledge of theoretical concepts with the understanding of emerging trends. In so doing, students discuss resulting consequences for strategic decision-making in organizations, e.g., the strategic implications of network effects on the management of platform ecosystems. • perform analyses to quantify abstract decision-making scenarios through game theoretic and economic models (e.g., simultaneous and sequential decision-making games). • assess corporate strategies through analyzing competitive environments surrounding organizations. • develop adequate recommendations for organizations.
Teaching methods
<ul style="list-style-type: none"> • Interactive lecture • Discussion of contents • Discussion of questions and case studies linked to the organizational and innovation strategy of companies • Interactive surveys and classroom experiments
Required attendance
Examination (type of examination, scope)
Written exam at the end of the course (60 Minutes)
Overall grade relevance
Exam (100%)
Exam resit opportunities
Gem. der Prüfungs- und Studienordnung für den Masterstudiengang
Recommended reading
Additional notes
<ul style="list-style-type: none"> • This lecture replaces the lecture "Organizational and Competitive Strategy" (you cannot include both courses in your degree program) • Guest lectures, integration of videos, case studies • A weekly exercise class (#32825) will supplement the lecture by repeating and intensifying core concepts. • The module is applicable to the Certificate Program in Digital Technology and Entrepreneurship: Entrepreneurial Pathfinder.

Strategy for High-Tech Startups

Module number
Course name
Strategy for High-Tech Startups
Module coordinator
Prof. Dr. Carolin Häussler, Dr. Patrick Figge

Examination number	Credit points (ECTS)	Hours per week (SWS)
264509	5	2+2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture: 2 SWS (30 hrs. class instruction, 65 hrs. self-study) Exercise Class: 2 SWS (15 hrs. class instruction, 40 hrs. self-study)
Calculation based on: every hr. per semester week corresponds to 60 minutes. One semester presumably consists of 15 weeks, i.e., 14 course and 1 exam week.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Entrepreneurship
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
In accordance with § 3 of the study and examination regulation for the master degree program Business Administration.
Requirements
Language of instruction
English

Content
Founding one's own company requires not only a promising business idea but also a successful management of upcoming strategic and organizational challenges. Successfully performing these management tasks is a substantial part of being a successful entrepreneur.

<p>This course focuses on these management tasks concerning the founding of a company, especially with regard to high-technology startups. Inspired by the real founding process, the course starts with an introduction to venture opportunities, concepts, and strategies. Following this introduction, concepts on venture formation, organizational planning, as well as technology development strategy are discussed in the context of high-technology start-ups. The course closes with answers to the question how to finance and how to build the venture.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have successfully participated in the module "Strategy for High-Tech Startups",</p> <ul style="list-style-type: none"> • explain and apply the key concepts and theories in entrepreneurship. • outline core findings of most influential and recent scientific studies in the field of entrepreneurship. • transfer knowledge of entrepreneurship theories into in-class discussions so that they can interpret recent developments in entrepreneurship with a particular focus on the influences of digitalization, new technologies, and strategic implications for high-tech startups. • analyze different entrepreneurial strategies and assess their implications, e.g., for the economy. • develop adequate suggestions for entrepreneurial high-tech organizations.
<p>Teaching methods</p>
<ul style="list-style-type: none"> • Interactive lecture • Discussion of Contents • Discussion of case studies
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Written exam at the end of the course (60 Minutes)</p>
<p>Overall grade relevance</p>
<p>Exam (100%)</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<ul style="list-style-type: none"> • Byers, T.H./Dorf, R. /Nelson, A.J. (2010): Technology Ventures – From Idea to Enterprise, McGraw-Hill. • Selection of essays, articles, and case-studies
<p>Additional notes</p>
<ul style="list-style-type: none"> • Guest lectures, integration of videos, case studies. • A weekly exercise class (#32905) will supplement the lecture by repeating and intensifying core concepts. • The module is applicable to the Certificate Program in Digital Technology and Entrepreneurship: Entrepreneurial Pathfinder.

Strategy and Innovation in Healthcare
Module number
Module title
Strategy and Innovation in Healthcare
Module coordinator
Prof. Dr. Andreas König

Examination number	Credit points (ECTS)	Hours per week (SWS)
264522	5	2
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Workshop 2 SWS (30h presence time and 120h own working time)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Management and Strategy
BA Version 1 International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Business Administration Master's program.
Requirements
Language of instruction
English/German

Content
<p>This workshop is concerned with two focal questions:</p> <p>(1) What are the current strategic challenges in the healthcare system?</p> <p>(2) How can we develop innovative (digital) strategic solutions to tackle these challenges and communicate them in a way that important stakeholders appreciate, use, support, and/or fund them?</p> <p>In particular, we interactively develop an understanding for the academic healthcare system and some of its central strategic challenges through discussions, presentations, and meetings with experts. Once acquainted with the medical training concepts and the academic healthcare systems in Germany and beyond, the participants will develop innovative strategies to solve these challenges with the help of creativity techniques, i.e., the Lego Serious Play Method and present their individual and group solutions to the course.</p>

Intended learning outcomes (ILOs)
<p>After successful participation in this course, students</p> <ul style="list-style-type: none"> • Understand German medical training concepts and the healthcare system with its current strategic challenges. • Compare the German healthcare system to international healthcare systems. • Reflect on and critically assess real-life challenges in the academic healthcare system and the strategic goals. • Develop solutions creatively with the Lego Serious Play Method, and discuss and evaluate solution options.
Teaching methods
<ul style="list-style-type: none"> • Interactive teaching • Classroom discussions • Meetings with experts • Creative thinking methods • Digital presentation methods
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none"> • Presenting and research of the literature (30%) • Individual presentation of solutions (35%) • Group presentation of solutions (35%)
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
<ul style="list-style-type: none"> • The course is offered as a block course. • The course can be credited in the Entrepreneurial Pathfinder. • The course will be held in English and/or German. • Typically, the course will be blocked in two slots in the middle of the semester. • Please note that you have to apply for this workshop. You can find all information on Stud.IP

Practical Course: Governance

Module number
Course name
Practical Course: Governance
Module coordinator/ examiner(s)
Prof. Dr. Carola Jungwirth

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
4 SWS (hours per week) (= 60 hours attendance time and 90 hours own work time)
The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is counted as 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy
BA Version 1: International Management and Marketing – Vertiefung International Management and Marketing – Grundlagen
LPO I applicability
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree program in Business Administration.
Requirements
Language of instruction
English; however: course will be held in German if all participants are proficient in German and do not prefer an English-language format

Content
Corporate governance assigns decision-making authority and establishes decision-making rules at the management level of a company. The legal form, the articles of association and the management organization of a company are the essential elements of corporate governance (see Neus 2018, Einführung in die BWL, 10th ed.). The design of corporate constitutions is regulated by company law (e.g. GmbHG, AktG). The practical course "Governance" uses case studies to analyze how a corporate constitution should be designed in order to achieve corporate goals. It uses the methodology of Problem Based Learning (PBL) as a method for acquiring flexibly usable knowledge

and developing interdisciplinary skills and problem-solving abilities. The students work on the course content in teams, accompanied by the teacher.
Intended learning outcomes (ILOs)
<p>Students who have taken the “Practical Course Governance” module</p> <ul style="list-style-type: none"> • explain the hypotheses that justify the choice of a particular ownership structure • explain the alternatives for incentive-driven design of rules of procedure and list the advantages and disadvantages of each alternative • use the swarm intelligence of their working group to familiarize themselves with new topics in a short period of time • illustrate the solutions for the small cases (vignettes) with the help of well-structured presentations that include graphical and verbal elements • evaluate the business contexts described in the case and put them in the context of a sustainable solution strategy • develop clear criteria for the construction of a clear and fair corporate constitution that is conducive to an agile and growing company
Teaching methods
<p>It is a lecture with seminar character, designed for a small group size (approx. 20 participants).</p> <p>The course is based on “problem-based learning” (PBL) as a method for acquiring knowledge and developing interdisciplinary competences and problem-solving skills.</p> <p>The learning process is structured by the so-called PBL cycle:</p> <ol style="list-style-type: none"> 15. analyze problem scenario 16. identify facts 17. generate hypotheses 18. identify knowledge deficits 19. apply new knowledge 20. abstract 21. and the cycle begins again with the identification of further facts. <p>The teacher guides the students through the PBL cycle and imparts the necessary methodological knowledge (e.g. for hypothesizing).</p> <p>The students acquire knowledge about network management in start-up processes by means of 2-3 “vignettes” (= case studies). These practice-orientated case constellations, outlined on a few pages, illustrate the abstract topic of the course and require a practicable solution proposal, for which, however, a theoretical derivation is necessary. The groups therefore also develop the theoretical foundation for the topics of the course.</p> <p>The module (4 SWS) includes discussions, impulses from the teacher and presentations of the results in plenary sessions as well as teamwork in small groups (max. 7 people per group). The teacher supports the teamwork.</p> <p>All examinations are completed with the last week of the semester.</p>
Required attendance
We expect you to attend. In case of absence (due to illness, meeting conflict, ...) please inform us in time.
Examination (type of examination, scope)
<ul style="list-style-type: none"> • slides of presentation, group presentation (50% of the final grade) • individual solution proposal for one of the discussed case studies (vignettes) in the form of a written essay (17.000 characters, incl. spaces) (50% of the final grade)
Overall grade relevance
Exam resit opportunities
In the event of failure, all courses can be repeated in accordance with Section 6 of the Study and Examination Regulations.

Recommended reading

Basic literature:

- v. Werder, Axel (2015), Führungsorganisation: Grundlagen der Corporate Governance, Spitzen- und Leitungsorganisation, 3. Auflage. Gabler Verlag, Wiesbaden 2015, ISBN 978-3-8349-4447-4
- Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn? Educational Psychology Review, 2004, H. 16, S. 235-266
- Schulz von Thun, F. (1998): Miteinander reden 3 – Das 'innere Team' und situationsgerechte Kommunikation. Rowohlt, Reinbek 1998, ISBN: 3499605457
- Picot, A. et al. (2020), Organisation - Theorie und Praxis aus ökonomischer Sicht. Schäffer-Poeschel Verlag, 8. Auflage 2020, ISBN: 3791047086

Further references will be announced during the course.

Additional notes

The course takes place as a face-to-face event during the semester. Students who are unable to attend due to illness can participate virtually. It is requested that virtual participation be announced before the respective lesson.

The number of participants is limited to 20 students. Places will be allocated on a first come, first served basis.

Further information can be found on the chair's homepage: <https://www.wiwi.uni-passau.de/governance/studium/lehrkonzept>

Book of the Year

Module number
Course name
Book of the Year
Module coordinator/ examiner(s)
Prof. Dr. Carola Jungwirth

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
2 SWS (hours per week) (= 30 hours attendance time and 120 hours own work time) The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is counted as 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy BA Version 1: International Management and Marketing – Vertiefung International Management and Marketing – Grundlagen
LPO I applicability (only for Teacher Education Programmes)
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree program in Business Administration.
Requirements
Language of instruction
English; however: course will be held in German if all participants are proficient in German and do not prefer an English-language format

Content
The Master's course <i>Business Book of the Year</i> deals with economic concepts on the basis of reading and discussing a popular science book that changes from semester to semester and is widely discussed in the media . Students will independently research the literature on which the book is based and relate the source literature to the core statements of the 'book of the year'. Students are encouraged to critically analyze relevant book chapters independently.

<p>They learn to differentiate between the normative and descriptive aspects of a book and to separate them analytically. They discuss the socio-political categorization of the chosen literature.</p> <p>For the <u>summer term 2025</u> we have selected "<i>Supremacy: AI, ChatGPT, and the Race that Will Change the World</i>" by Parmy Olson as "<i>book of the year</i>". This book, honored as the FT 2024 Business Book of the Year, explores the development of Artificial General Intelligence (AGI) through the perspectives of Sam Altman of OpenAI and Demis Hassabis of DeepMind. It offers an analytical view into the influence that individual leaders in technology have over the trajectory of new innovations. By examining the internal dynamics at play within major tech companies, the book addresses broader themes of AI safety versus ethics, the impact of corporate power on technology development, and the strategic decisions that shape the future of AI. This detailed account will provide a foundation for our discussions on the interplay between technology and business strategy. It raises critical questions about the role of ethics in technology and the balance of power in the tech industry.</p>
<p>Intended learning outcomes (ILOs)</p> <p>Students who have taken part in the <i>Business Book of the Year</i> module</p> <ul style="list-style-type: none"> • explain their view of current economic policy events • explain how they relate the events presented in the Book of the Year to the theoretical repertoire of their Master's program • use self-selected examples from other courses to draw analogies to facts in the Business Book of the Year • illustrate the core statements of the book chapters with the help of analysis tools • evaluate the events described in the book from a business ethics perspective and develop guidelines for more sustainable business practices • develop clear criteria for constructive and appreciative teamwork as well as for informative and clear communication of their work and research results.
<p>Teaching methods</p> <p>This is a lecture with seminar character, designed for a small group size (approx. 20 participants).</p> <p>The module consists of the preparation and presentation of chapters of a popular science book by the course participants as well as the discussion of the book content in plenary. Depending on the size of the group, the presentation takes place as an individual or team effort.</p>
<p>Required attendance</p> <p>We expect you to attend. In case of absence (due to illness, meeting conflict, ...) please inform us in time.</p>
<p>Examination (type of examination, scope)</p> <ul style="list-style-type: none"> • set of presentation slides, presentation of set of book chapters, discussion contributions: 50% of the final grade • individual essay on a topic related to the book (12 000 characters, including spaces: 50% of the final grade)
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>In the event of failure, all courses can be repeated in accordance with Section 6 of the Study and Examination Regulations.</p>
<p>Recommended reading</p> <p>You will be informed at the beginning of the semester via Stud.IP.</p>
<p>Additional notes</p> <p>The course takes place as a face-to-face event during the semester. Students who are unable to attend due to illness can participate virtually. Students are requested to announce their virtual participation before the respective lesson.</p>

The number of participants is limited to 30 students. Places are allocated on a first come, first served basis.

Further information can be found on the chair's homepage: <https://www.wiwi.uni-passau.de/governance/studium/lehrkonzept>

Planspiel Scale Up

Modulnummer
Veranstaltungstitel
Planspiel Scale Up
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Carola Jungwirth

Prüfungsnummer	ECTS	SWS
	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Wintersemester	Blockseminar	Zweite Hälfte des Studiums

Workload
2 SWS Die Veranstaltung wird als Blockveranstaltung angeboten (Dauer: 2,5 Tage). In Vorbereitung zu den Präsenztagen ist ein Teilnehmerhandbuch zu lesen.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy
BA Version 1: International Management and Marketing – Grundlagen
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch; sollte die Mehrheit ein englischsprachiges Format bevorzugen, wäre dies möglich.

Inhalte
Das Planspiel bietet Gelegenheit, die theoretischen Grundlagen des strategischen Managements und der Unternehmensführung in einer realistischen, simulierten Umgebung anzuwenden. In diesem intensiven zweitägigen Blockseminar werden die Teilnehmer:innen vor die Herausforderung gestellt, zeitkritische und weitreichende Entscheidungen zu treffen, die für den Erfolg ihres fiktiven Unternehmens entscheidend sind.
In kleinen Gruppen, die miteinander um knappe Marktressourcen konkurrieren, entwickeln die Studierenden strategische Entscheidungen und passen ihre Strategien flexibel an zufällig generierte Ereignisse an. Diese realistischen Szenarien erfordern schnelle und kluge Reaktionen, wodurch die Teilnehmer:innen wertvolle Managementfähigkeiten erwerben.

<p>Durch die intensive Zusammenarbeit in den Teams wird nicht nur das theoretische Wissen vertieft, sondern es werden auch wichtige Soft Skills wie Problemlösung, Teamarbeit und analytische Fähigkeiten trainiert. Das Planspiel eignet sich besonders für Studierende, die sich für die strategische Unternehmensführung interessieren und bietet gleichzeitig eine Vorbereitung auf die Herausforderungen von Gründungsprozessen.</p>
<p>Lernergebnisse Lernziele</p>
<p>Nach Abschluss des Kurses sind die Studierenden in der Lage</p> <ul style="list-style-type: none"> • komplexe Herausforderungen im unternehmerischen Handeln zu identifizieren, zu analysieren und zu bewältigen • in einem Team erfolgreich und lösungsorientiert zusammenzuarbeiten • auf sich verändernde Situationen flexibel und zielgerichtet zu reagieren • Theorien der strategischen Unternehmensführung praktisch anzuwenden • Managementfähigkeiten auszubilden • Probleme bei einer Unternehmensgründung zu antizipieren
<p>Lehr- und Lernformen</p>
<p>Die Lehrveranstaltung findet als Planspiel statt. Es handelt sich hierbei um eine stark interaktive, praxisorientierte Lehrform mit einem hohen Eigenanteil der Studierenden.</p>
<p>Anwesenheitspflicht</p>
<p>Ja, durchgehende Anwesenheit verpflichtend.</p>
<p>Prüfungsleistung (Prüfungsform, Umfang)</p>
<ul style="list-style-type: none"> • Simulationsergebnis (50%) • Abschlusspräsentation (50%) <p>Die Anwesenheit während der gesamten Veranstaltungsdauer sind Voraussetzung für den Scheinerwerb.</p>
<p>Gesamtnotenrelevanz</p>
<p></p>
<p>Wiederholungsmöglichkeit</p>
<p></p>
<p>Literatur</p>
<ul style="list-style-type: none"> • TOPSIM Scale Up Teilnehmerhandbuch
<p>Weitere Hinweise</p>
<p>Die Simulation der Unternehmens- und Marktergebnisse erfolgt rechnergestützt anhand der Software TOP-SIM Scale Up.</p> <p>Am ersten Tag findet ein zweistündiges Briefing statt. Allen Teilnehmer:innen wird dringend empfohlen, das Teilnehmerhandbuch vor dem Briefing zu lesen. Die wichtigsten Spielregeln werden im Briefing wiederholt. Ohne eigenständige Vorbereitung und Teilnahme am Briefing ist eine Teilnahme am Planspiel nicht möglich.</p> <p>Die Gruppeneinteilung wird vom Lehrstuhl durchgeführt und am ersten Tag im Briefing kommuniziert.</p> <p>Weitere Informationen finden Sie auf der Homepage des Lehrstuhls: https://www.wiwi.uni-passau.de/governance/studium/lehrkonzept</p>

Wissenschaftliches Arbeiten

Module number
Course name
Colloquium: Scholarly Writing and Research
Module coordinator/ examiner(s)
Prof. Dr. Marina Fiedler

Examination number	Credit points (ECTS)	Hours per week (SWS)
	1	
Availability	Duration	Recommended semester
Every semester	1 semester	

Workload
Module applicability
BA Version 2025: Modulbereich B: Major Management and Strategy
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
LPO I applicability
Recommended prerequisites
Requirements
Language of instruction
English

Content
The course is aimed at students who wish to write a thesis at the Chair of Management, People and Information and who want to acquire in-depth knowledge of literature research and evaluation.
Intended learning outcomes (ILOs)
After participating in the module on scientific research, students are able to: research and evaluate scientific literature, characterize the central aspects of the examined topic
Teaching methods
Conducting a literature search independently, summarizing the results and giving a short presentation.
Required attendance

Examination (type of examination, scope)
Project work
Overall grade relevance
Exam resit opportunities
If you fail, you can repeat all courses in accordance with § 6 of the subject-specific study and examination regulations.
Recommended reading
Additional notes
To register, please contact a member of the chair's staff.

Master Thesis Colloquium

Module number
Course name
Master Thesis Colloquium
Module coordinator/ examiner(s)
Alternating, depending on the courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	1-3	0,5-1
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	4

Workload
30 h to 90 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulgruppe B: Major Accounting and Tax Modulgruppe B: Major Data Science Modulgruppe B: Major Entrepreneurship Modulgruppe B: Major Finance Modulgruppe B: Major Information Systems and Digital Business Modulgruppe B: Major Management and Strategy
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
The colloquium supports students in writing their scientific thesis with regard to the conception, presentation, further development and discussion of the goals, approach and results of the thesis.
Intended learning outcomes (ILOs)
After completing the module, students are able to independently present scientific issues at master level on the basis of scientific methods and analytical thinking. They can present and discuss their results conclusively and draw conclusions from them.
Teaching methods
Alternating, depending on the courses assigned to the module

Required attendance
Examination (type of examination, scope)
Alternating, depending on the courses assigned to the module
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Master Thesis Colloquium

Module number
Course name
Master Colloquium in Organization, Technology Management, and Entrepreneurship
Module coordinator/ examiner(s)
Prof. Dr. Carolin Häussler

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3	2
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	

Workload
<ul style="list-style-type: none"> • 2 SWS (30 hours of in-class time, 60 hours of independent study) • The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week), with each SWS accounting for 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy BA Version 1: International Management and Marketing – Vertiefung
LPO I applicability
Recommended prerequisites
<ul style="list-style-type: none"> • According to § 3 of the study and examination regulations for the Masters program in Business Administration and Economics. • Please observe the regulations for registering final theses at the chair.
Requirements
Admission to the final thesis is a prerequisite for participation in the colloquium.
Language of instruction
English

Content
The colloquium supports students in the process of writing their final thesis at the Chair of Organization, Technology Management, and Entrepreneurship.
Intended learning outcomes (ILOs)
Students who successfully complete the module " <i>Bachelor Colloquium in Organization, Technology Management, and Entrepreneurship</i> " will: <ul style="list-style-type: none"> • Structure the results produced by a scientific paper, present their interconnections, and deliver them in a plenary session. • Evaluate their own scientific work.

<ul style="list-style-type: none"> • Develop clear criteria for assessing scientific presentations and apply these to discussions of other scientific presentations. • Implement academic presentation skills in a slide-supported, free presentation of their own scientific thesis.
Teaching methods
<ul style="list-style-type: none"> • Lectures, discussions, and collaborative development of scientific methodology • Individual exposé coaching for students • Development, application, and discussion of empirical methods • Student presentations on specific topics
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none"> • Presentation of interim results of the student's own scientific work • Oral participation
Overall grade relevance
Exam resit opportunities
Recommended reading
Relevant literature will be provided in the accompanying sessions and during the first individual supervision meeting.
Additional notes
This module is mandatory for students writing their master's thesis at the chair. It must be completed alongside the preparation of the master's thesis.

Master Thesis Colloquium

Module number
39752
Module title
Masterkolloquium im Fach Internationales Management und Soziales Unternehmertum
Module coordinator
Prof. Dr. Suleika Bort

Examination number	Credit points (ECTS)	Hours per week (SWS)
264513	3	2
Availability	Duration	Recommended semester
Each semester	1 Semester	2

Workload
2 SWS (30 h attendance time, 60 h self-study). The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy
BA Version 1: International Management and Marketing – Vertiefung
reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's program in Business Administration.
Requirements
Please have a look at the application regulations for a final thesis at the Chair's webpage. Prerequisite for the participation in the colloquium is the admission to the final thesis. This course is mandatory for all students that want to write their final thesis at the Chair.
Language of instruction
English

Content
The colloquium enables students to prepare, present and discuss an independent scientific paper.
Intended learning outcomes (ILOs)
Students who have successfully participated in the Module „Masterkolloquium im Fach Internationales Management und Soziales Unternehmertum“ <ul style="list-style-type: none"> • outline the fundamental ideas of their final thesis and describe the motivation assumptions and mechanics of their scientific work.

<ul style="list-style-type: none"> • present their scientific approach in their final thesis to other students and structure the key points in an individual exposé. • design a specific, empirical research method and implement these research methods in a scientific way. • justify the own work progress and reflect on their own scientific work and the work of other students and reflect on central organization theories used in the field of International Management & Social Entrepreneurship. • evaluate their own scientific work and progress and combine related scientific methods with specific research questions. • develop suggestions on possible ways forward regarding the theoretical and practical implications of their scientific work.
Teaching methods
Interactive teaching sessions with presentations, discussion and joint development of the course Content.
Required attendance
Examination (type of examination, scope)
Portfolio
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
Students who cannot credit the colloquium according to the examination regulations, receive a confirmation ("Schein") from the Chair upon request.

Seminar in Management and Strategy

Module number
Course name
Module coordinator/ examiner(s)
Alternating, depending on the seminar courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	7	2
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	2-3

Workload
30 h presence and 180 h individual working hours
Module applicability
BA Version 2025: Modulgruppe B: Major Management and Strategy (Seminar in Management and Strategy)
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
<ul style="list-style-type: none"> • The Master's seminar is designed to promote independent scientific work in the field of management and strategy and to prepare students for their master's thesis. • As part of the Master's seminar, students should further develop their skills in dealing with scientific work in management and strategy. • Students are required to complete a scientific assignment such as a seminar paper or similar in a research field in management and strategy. • Students present their results and discuss them.
Intended learning outcomes (ILOs)
<p>Students who have successfully completed the module</p> <ul style="list-style-type: none"> • are prepared for their master's thesis in the Major Management and Strategy. • can create a scientifically sound assignment that is formally correct according to the rules of scientific work, but also creatively in terms of content. • can present their research results and communicate their research findings to scientific and non-scientific audiences at the appropriate level. • are able to both provide qualified criticism and implement critical comments in their work.

Teaching methods
Alternating, depending on the seminar courses assigned to the module
Required attendance
Alternating, depending on the seminar courses assigned to the module
Examination (type of examination, scope)
Portfolio, depending on the seminar courses assigned to the module (100%)
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Seminar in Management and Strategy (Prof. Dr. Fiedler)

Module number
Course name
Seminar in Management, People and Information
Module coordinator/ examiner(s)
Prof. Dr. Marina Fiedler

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Workload (to be calculated in hours of 60 minutes each over 15 semester weeks, i.e. 14 weeks of lectures + 1 week of exams)
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship (Seminar in Entrepreneurship) Modulbereich B: Major Management and Strategy (Seminar in Management and Strategy)
BA Version 1: International Management and Marketing – Vertiefung
LPO I applicability
Recommended prerequisites
According to § 3 of the study and examination regulations for the International Economics and Business Master's program.
Requirements
Language of instruction
English

Content
This seminar addresses topics from current research in the fields of management, people and information.
Intended learning outcomes (ILOs)
After successfully participating in the seminar, students are able to: <ul style="list-style-type: none"> • Explain, structure and assess topics currently being discussed in research in the fields of management, human resources and information. • Effectively conduct research on relevant scientific literature, structure and assess the literature and embed it in their own argumentation in a scientific paper in a reflective way.

<ul style="list-style-type: none"> • Reflect critically on the process of writing a scientific paper and critically evaluate other works. • Create an independent scientific paper that is formally correct according to the rules of good scientific work and structured and creative in terms of content. • Present the results of their scientific work effectively. • Put topics from research and practice in the context of their own work and participate in a well-founded professional exchange.
Teaching methods
Discussion and joint development of the teaching content and presentations of individual topics by the students
Required attendance
Examination (type of examination, scope)
Theoretical and empirical seminar paper and presentation of the results in the form of a presentation (approx. 30 minutes). Depending on the design of the course, this can be done as group work or as an individual assignment.
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
Students who have successfully completed the Master's seminar (grade 2.3 or better) are accepted to do their Master's theses at the chair. The seminar will be conducted in German. The submission of coursework can be arranged in either German or English. International students are welcome to participate and may contribute in German or English.

Seminar in Entrepreneurship (Prof. Dr. Häussler)

Module number
Course name
Masterseminar in Organization, Technology Management and Entrepreneurship
Module coordinator/ examiner(s)
Prof. Dr. Carolin Häussler

Examination number	Credit points (ECTS)	Hours per week (SWS)
264820	7	2
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
2 SWS (3h class instruction, 180h self-study)
Calculation based on: every hr. per semester week corresponds to 60 minutes. One semester presumably consists of 15 weeks, i.e., 14 course and 1 exam week.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship (Seminar in Entrepreneurship) Modulbereich B: Major Management and Strategy (Seminar in Management and Strategy)
BA Version 1: International Management and Marketing – Vertiefung
LPO I applicability
Recommended prerequisites
In accordance with § 3 of the examination and study regulations for the Master`s degree program in Business Administration and Economics and after successful application.
Requirements
Language of instruction
English

Content
The seminar aims to teach or improve scientific research skills in the fields of organization, technology management, and entrepreneurship, with a particular focus on preparing for the Master's thesis.
Intended learning outcomes (ILOs)
Students who successfully complete the module "Master Seminar in Organization, Technology Management, and Entrepreneurship" will: <ul style="list-style-type: none"> Identify and assess the topics currently discussed in the research within the fields of organization, technology management, and entrepreneurship.

<ul style="list-style-type: none"> • Conduct a systematic search for relevant academic literature effectively and independently. • Derive an interesting and relevant research question for the existing literature within the topic and independently develop a scientific paper based on the principles of good academic practice, adhering to formal standards. • Structure and integrate the identified literature critically into their own argumentation. They will transfer and combine insights from other disciplines or scientific discussions. • Relate research and practical topics to their own work and engage in well-founded, professional discussions. • Develop theoretical ideas (e.g., in the form of propositions) independently using the identified literature. • Reflect on their scientific work and implement critical feedback during the process of creating the academic paper. • Present the results of their scientific work convincingly and thoughtfully.
Teaching methods
<ul style="list-style-type: none"> • Discussion and collaborative development of seminar content • Student presentations on specific topics
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none"> • Scientific seminar paper (12 pages) • Presentation (15 minutes) • Short peer review presentation (5 minutes) • Active participation in discussions
Overall grade relevance
Scientific seminar paper (60%) Presentation (20%) Short peer review presentation (10%) Active participation in discussions (10%)
Exam resit opportunities
According to the examination and study regulations for the master's program.
Recommended reading
Additional notes
Relevant literature will be announced at the beginning of the seminar according to the seminar topic. The master's seminar is supplemented by a corresponding colloquium.

Seminar in Management and Strategy (Prof. Dr. Bort)

Module number
39761
Module title
Masterseminar: Advances in International Management and Social Entrepreneurship
Module coordinator
Prof. Dr. Suleika Bort

Examination number	Credit points (ECTS)	Hours per week (SWS)
264570	7	2
Availability	Duration	Recommended semester
Summer or winter semester	1 semester	

Workload
30 hours of class instruction and 180 hours of self-study. Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e., 14 course + 1 exam week.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship (Seminar in Entrepreneurship) Modulbereich B: Major Management and Strategy (Seminar in Management and Strategy)
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
Requirements
According to § 3 of the study and examination regulations for the Master's degree program in Business Administration.
Language of instruction
English

Content
<ul style="list-style-type: none"> • This module provides students with skills for academic writing, critical discussion and interpretation of results based on current topics in the field of international management and social entrepreneurship. • Specific research topics are addressed, systematized and reflected upon. • Empirical methods of management research are introduced, applied in practice and critically evaluated.
Intended learning outcomes (ILOs)
Students who have successfully completed the module "Master's Seminar: Advances in International Management and Social Entrepreneurship", <ul style="list-style-type: none"> • become familiar with the research process,

<ul style="list-style-type: none"> • are able to identify and explain the state of the literature on the seminar topic, • learn how to draft an academic paper, • learn how to structure and evaluate literature and embed it in their own argumentation, • become familiar with the common empirical methods applied in management research, • are able to present their results in an oral presentation, • learn how to reflect on critical comments in the process of writing a paper.
Teaching methods
<ul style="list-style-type: none"> • Preparation of a seminar paper • Presentation of scientific projects and joint discussion
Required attendance
Participation is mandatory
Examination (type of examination, scope)
<ul style="list-style-type: none"> • Seminar paper: 60% • Presentation: 40%
Overall grade relevance
Exam resit opportunities
None; Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Literature recommendations and mandatory readings will be announced at the beginning of the seminar.
Additional notes
To participate in the seminar an application is necessary. More information is available on our chair homepage (https://www.wiwi.uni-passau.de/en/international-management/teaching/seminars). The seminar is limited up to 10 students.

Seminar in Management and Strategy (Prof. Dr. Häussler)

Module number
Course name
Masterseminar in Organization, Technology Management and Entrepreneurship
Module coordinator/ examiner(s)
Prof. Dr. Carolin Häussler

Examination number	Credit points (ECTS)	Hours per week (SWS)
264820	7	2
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
2 SWS (3h class instruction, 180h self-study)
Calculation based on: every hr. per semester week corresponds to 60 minutes. One semester presumably consists of 15 weeks, i.e., 14 course and 1 exam week.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship (Seminar in Entrepreneurship) Modulbereich B: Major Management and Strategy (Seminar in Management and Strategy)
BA Version 1: International Management and Marketing – Vertiefung
LPO I applicability
Recommended prerequisites
In accordance with § 3 of the examination and study regulations for the Master`s degree program in Business Administration and Economics and after successful application.
Requirements
Language of instruction
English

Content
The seminar aims to teach or improve scientific research skills in the fields of organization, technology management, and entrepreneurship, with a particular focus on preparing for the Master's thesis.
Intended learning outcomes (ILOs)
Students who successfully complete the module "Master Seminar in Organization, Technology Management, and Entrepreneurship" will: <ul style="list-style-type: none"> Identify and assess the topics currently discussed in the research within the fields of organization, technology management, and entrepreneurship.

<ul style="list-style-type: none"> • Conduct a systematic search for relevant academic literature effectively and independently. • Derive an interesting and relevant research question for the existing literature within the topic and independently develop a scientific paper based on the principles of good academic practice, adhering to formal standards. • Structure and integrate the identified literature critically into their own argumentation. They will transfer and combine insights from other disciplines or scientific discussions. • Relate research and practical topics to their own work and engage in well-founded, professional discussions. • Develop theoretical ideas (e.g., in the form of propositions) independently using the identified literature. • Reflect on their scientific work and implement critical feedback during the process of creating the academic paper. • Present the results of their scientific work convincingly and thoughtfully.
Teaching methods
<ul style="list-style-type: none"> • Discussion and collaborative development of seminar content • Student presentations on specific topics
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none"> • Scientific seminar paper (12 pages) • Presentation (15 minutes) • Short peer review presentation (5 minutes) • Active participation in discussions
Overall grade relevance
Scientific seminar paper (60%) Presentation (20%) Short peer review presentation (10%) Active participation in discussions (10%)
Exam resit opportunities
According to the examination and study regulations for the master's program.
Recommended reading
Additional notes
Relevant literature will be announced at the beginning of the seminar according to the seminar topic. The master's seminar is supplemented by a corresponding colloquium.

Seminar in Management and Strategy (Prof. Dr. Jungwirth)

Modulnummer
39994
Modultitel
Masterseminar „Governance – Compliance“
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Carola Jungwirth

Prüfungsnummer	ECTS	SWS
	7	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Wintersemester	1 Semester	

Workload
Kurs 2 SWS (30 h Präsenzzeit und 180 h Eigenarbeitszeit)
Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Entrepreneurship (Seminar in Entrepreneurship) Modulbereich B: Major Management and Strategy (Seminar in Management and Strategy)
BA Version 1: International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
Eine vertiefende Behandlung von Themenschwerpunkten des Lehrstuhls erweitert die Befähigung zum wissenschaftlichen Arbeiten und dient als Vorbereitung auf die Masterarbeit. Die Studierenden führen eine wissenschaftliche Untersuchung durch und präsentieren die Ergebnisse. Sie führen eine Diskussion zu ihrem jeweiligen Themenschwerpunkt und setzen sich mit den Forschungsergebnissen ihrer Kommiliton*innen auseinander.
Das Masterseminar behandelt die Themenbereiche Governance und Compliance forschungsorientiert. Aus diesem Grund wird der Vertiefung methodischer Kenntnisse ein besonderer Stellenwert eingeräumt.

<p>Weitere Hinweise zur thematischen Ausrichtung des Seminars werden rechtzeitig auf der Homepage eingestellt (https://www.wiwi.uni-passau.de/governance/).</p>
<p>Lernergebnisse Lernziele</p>
<p>Studierende, die an dem Modul „Masterseminar: Governance – Compliance“ teilgenommen haben,</p> <ul style="list-style-type: none"> • erläutern ihre Vorgehensweise beim Verfassen einer Seminararbeit und • erklären den Aufbau ihrer Arbeit, die Wahl der theoretischen Grundlagen und die inhaltlichen Schwerpunkte • nutzen selbst gewählte Theorien aus dem ökonomischen Repertoire zur theoretischen Untermauerung ihrer Kernfragen. • veranschaulichen die Kernaussagen ihrer Arbeit qualitativ mit Hilfe von grafischen Analyseinstrumenten. • bewerten die Ergebnisse ihrer eigenen Arbeitsschritte und die ihrer Kommilitoninnen und Kommilitonen wertschätzend und konstruktiv. • entwickeln klare Kriterien für eine konstruktive und wertschätzende Teamarbeit sowie für eine informative und klare Kommunikation der eigenen Arbeitsergebnisse. • treffen angemessene Entscheidungen hinsichtlich der methodischen Herangehensweise an Forschungsfragen. • können zu Forschungsproblemen in den Bereichen Governance/Compliance begründet Stellung nehmen.
<p>Lehr- und Lernformen</p>
<ul style="list-style-type: none"> • Seminararbeit in Einzel- oder Gruppenarbeit • Präsentation von Lernfortschritt und Ergebnis • Praktische Übungen zum wissenschaftlichen Arbeiten
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang)</p>
<p>Seminararbeit und Präsentation der Ergebnisse in Form eines Referats.</p>
<p>Gesamtnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p>
<p>Literatur</p>
<p>Weitere Hinweise</p> <p>Der Kurs findet semesterbegleitend als Präsenzveranstaltung statt. Studierende, die aus Krankheitsgründen nicht anwesend sein können, können virtuell teilnehmen. Es wird darum gebeten, die virtuelle Teilnahme vor der jeweiligen Unterrichtsstunde anzukündigen.</p> <p>Die Teilnahmezahl ist auf 15 Studierende begrenzt.</p> <p>Weitere Informationen finden Sie auf der Homepage des Lehrstuhls: https://www.wiwi.uni-passau.de/governance/</p>

Seminar in Management and Strategy (Prof. Dr. König)

Module number
38571
Module title
Theory and Methods in Strategy, Leadership, and Innovation Research
Module coordinator
Prof. Dr. Andreas König

Examination number	Credit points (ECTS)	Hours per week (SWS)
261150	7	4
Availability	Duration	Recommended semester
Every semester	1 semester	

Workload
Seminar 4 SWS (60h presence time and 150h own working time)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship (Seminar in Entrepreneurship) Modulbereich B: Major Management and Strategy (Seminar in Management and Strategy)
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Business Administration Master's programme.
Requirements
Language of instruction
English

Content
Participants will acquire knowledge about the fundamentals of quantitative and qualitative empirical social research. Furthermore, they develop a critical basic attitude and their own approaches towards theories of management, leadership and innovation research (e.g. Behavioral and Attention-based View of the Firm, Cognitive Framing, Executive Rhethorics, Institutional Theory, Leader-Member Exchange Theory, Managerial Cognition Theory, Socioemotional Wealth, Theory of Cognitive Sensemaking, Theory of Discontinuous Technology, Upper Echelons Theory, Value-Process-Framework).
Intended learning outcomes (ILOs)

<p>After successful participation in this course, students</p> <ul style="list-style-type: none"> • Understand different methods of empirical social research and their application. • Can outline current research questions in the areas of strategy, leadership and innovation. • Develop a critical basic attitude and their own approaches towards theories of management, leadership and innovation research • Evaluate research based on international scientific standards, which are also important for the preparation of a Master's thesis at the chair.
<p>Teaching methods</p> <ul style="list-style-type: none"> • Interactive teaching • Interactive discussions • Presentation of scientific studies and exercises
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>Presentation, 40% Correspondence presentation, 20% Essay, 40%</p> <p>For the successful completion of the course all examinations must be passed.</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p> <ul style="list-style-type: none"> • Backhaus, K., Erichson, B., Plinke W., Weiber, R.: Multivariate Analysemethoden. Eine anwendungsorientierte Einführung, 11. Aufl., Berlin, 2006. • Diekmann, A.: Empirische Sozialforschung, 12. Aufl., Hamburg, 2004. • Schnell, R., Hill, P., Esser, E.: Methoden der empirischen Sozialforschung, 7.Aufl.,München, 2005. • Research articles (will be announced during the first course session)
<p>Additional notes</p> <p>This course will be held in English. Please note that you have to apply for this seminar within the designated application period (typically during July and January of the preceding semester).</p> <p>For more information, please visit Stud.IP or our homepage via the following link: https://www.wiwi.uni-passau.de/strategie-innovation/studium/seminare-und-workshops/</p>

Seminar in Management and Strategy (Prof. Dr. Schumann)

Module number
34520
Module title
Masterseminar im Schwerpunkt International Management and Marketing
Module coordinator
Prof. Dr. Jan Hendrik Schumann

Examination number	Credit points (ECTS)	Hours per week (SWS)
264590	7	2
Availability	Duration	Recommended semester
Every semester	1 semester	2 nd or 3 rd semester

Workload
2 SWS = 30 hours attendance time + 180 hours own work time
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship (Seminar in Entrepreneurship) Modulbereich B: Major Management and Strategy (Seminar in Management and Strategy)
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
In accordance with §3 of the study and examination regulations for the Master's degree program in Business Administration. Recommended prerequisite: Successful completion of two Master's lectures in Marketing, at least one of which must be offered by the Chair of Marketing and Innovation.
Requirements
Language of instruction
English

Content
The topic of the seminar is empirical research (using qualitative or quantitative methods). The seminar is conducted on current topics in the field of B2C marketing. Based on theories of consumer behavior, the aim is to independently conduct empirical research on a topic from specified areas as part of group work. Students gain experience in collecting and analysing data and presenting research findings.
Intended learning outcomes (ILOs)
Students who have successfully participated in the module "Master's Seminar Marketing & Innovation" ...

<ul style="list-style-type: none"> - ... recognize the principles of good scientific practice and methods of scientific writing. - ... outline the state of the literature on their specific topic. - ... present the main results of their work in an understandable way in a seminar paper and in two presentations. - ... practice qualified criticism and are able to implement critical comments in their work. - ... know and apply basic skills of scientific work.
Teaching methods
<ul style="list-style-type: none"> - Active participation in the seminar - Group work on a scientific question
Required attendance
Attendance is mandatory for all dates.
Examination (type of examination, scope)
<p>Group work on a scientific question</p> <p>Intermediate presentation 20%</p> <p>Final presentation 20%</p> <p>Seminar paper (approx. 15 pages) 60%</p> <p>Active participation in the seminar.</p> <p>The final grade is determined according to the portfolio principle.</p> <p>*We reserve the right to adapt the schedule and group assignments to the specific Content requirements of the seminar at a later date.</p>
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
The module is a specialization module in the field of "International Management and Marketing". It is suitable for all degree programs that would like to offer their students a course in this area.

Seminar in Management and Strategy (Prof. Dr. Totzek)

Modulnummer
33901
Modultitel
Masterseminar Marketing
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Dirk Totzek

Prüfungsnummer	ECTS	SWS
264910	7	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Winter- oder Sommersemester	1 Semester	Zweite Hälfte des Studiums

Workload
30 Std. Präsenz- und 180 Std. Eigenarbeitszeit. Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- und 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Entrepreneurship (Seminar in Entrepreneurship) Modulbereich B: Major Management and Strategy (Seminar in Management and Strategy)
BA Version 1: International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Erfolgreiche Teilnahme an mindestens zwei Marketing-Veranstaltungen im Masterstudium, davon mindestens eine am Lehrstuhl für Marketing und Services.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
<ul style="list-style-type: none"> • Das Masterseminar dient dem selbstständigen wissenschaftlichen Arbeiten im Fach Marketing und als Vorbereitung auf die Masterarbeit. • Im Rahmen des Masterseminars sollen die Studierenden ihre Kompetenzen im Umgang mit wissenschaftlichen Arbeiten im Marketing weiter vertiefen. • Die Studierenden fertigen in Einzelarbeit eine Seminararbeit zu aktuellen wissenschaftlichen Themen aus den Forschungsfeldern des Lehrstuhls an. • Die Studierenden präsentieren die zentralen Ergebnisse ihrer Arbeit und diskutieren diese.
Lernergebnisse Lernziele
Studierende, die erfolgreich an dem Modul "Masterseminar Marketing" teilgenommen haben, <ul style="list-style-type: none"> • wenden die Grundsätze guter wissenschaftlicher Praxis sowie Strategien des wissenschaftlichen Schreibens sicher an. • recherchieren selbständig aktuelle und anspruchsvolle Forschungsliteratur.

<ul style="list-style-type: none"> • beschreiben, strukturieren und analysieren den aktuellen Forschungsstand zu einem spezifischen Thema. • stellen die wesentlichen Ergebnisse ihrer Arbeit in einer Seminararbeit und einer Seminarpräsentation dar. • beurteilen kritisch den Stand der Forschung im Hinblick auf seine Implikationen für Forschung, Praxis und Gesellschaft. • entwickeln Ansatzpunkte für neue Forschungsfragen zu einem spezifischen Thema.
Lehr- und Lernformen
<ul style="list-style-type: none"> • Anfertigung der Seminararbeit in Einzelarbeit • Präsentation der Seminararbeit
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang)
Portfolio (Seminararbeit: 60%, Präsentation: 40%)
Gesamtnotenrelevanz
Wiederholungsmöglichkeit
Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.
Literatur
Weitere Hinweise
Für eine Masterarbeit werden die mit der erfolgreichen Teilnahme am Seminar erworbenen Kenntnisse der wissenschaftlichen Arbeitstechniken vorausgesetzt. Das Seminar findet in der Regel mindestens alle zwei Semester statt.

Data Science in Management and Strategy

Module number
Course name
Data Science in Management and Strategy
Module coordinator/ examiner(s)
Alternating, depending on the courses assigned to the module

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-5	2-4
Availability	Duration	Recommended semester
Every winter/ summer semester	1 semester	2-3

Workload
90 h to 150 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulbereich B: Major Management and Strategy
LPO I applicability
Recommended prerequisites
Requirements
According to the examination and study regulations for the Master's degree program.
Language of instruction
English

Content
<ul style="list-style-type: none"> This module provides in-depth specialist knowledge in the field of data science, including computer-aided, theoretical and applied methods of statistics, econometrics and operations research and closely related fields. All courses from the major in Data Science are eligible.
Intended learning outcomes (ILOs)
<ul style="list-style-type: none"> Alternating, depending on the courses assigned to the module
Teaching methods
Alternating, depending on the courses assigned to the module
Required attendance
Examination (type of examination, scope)
Exam (written or oral) or Portfolio, depending on the courses assigned to the module (100%)

Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Modulbereich B: Minor Artificial Intelligence

Advanced Data Analytics

Module number
Course name
35780 Advanced Data Analytics (Lecture) and 35781 Advanced Data Analytics (Tutorial)
Module coordinator
Prof. Dr. Harry Haupt, Dr. Markus Fritsch

Examination number	Credit points (ECTS)	Hours per week (SWS)
261004	5	2+2
Availability	Duration	Recommended semester
Usually every winter semester	1 semester	3.

Workload
Lecture 2 SWS (28 h Contact hours and 28 h Self-study) and Tutorial 2 SWS (28 h Contact hours, 28 h Self-study). We are calculating with 15 semester weeks (Lecture, Tutorial, and Exam). Each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Artificial Intelligence Modulbereich B: Minor Data Science
BA Version 1: Methoden
Reference to the LPO I
Recommended prerequisites
Basic understanding of calculus and matrix algebra, introductory statistics including inferential methods, regression analysis, and testing methods. Basic knowledge of statistical software <i>R</i> is an advantage.
Requirements
Language of instruction
English

Content
This module covers key state of the art techniques in statistical learning/machine learning. The emphasis of the course is on techniques from supervised learning in the context of regression modeling. The following content is covered: Fundamental concepts (bias-variance trade-off, curse of dimensionality, flexibility vs. interpretability, resampling techniques), key building blocks (parametric polynomials, spline-regression, tree-based modeling), and frequently employed algorithms (lasso,

backfitting, random forest, boosting). Prediction and inference are discussed. Selected applications are used to motivate the different algorithms.
Intended learning outcomes (ILOs)
Students who have successfully completed the module are able to: <ul style="list-style-type: none"> • explain and reflect the main principles and key assumptions of the covered techniques. • choose suitable and problem-adequate modeling approaches in the context of supervised learning. • implement the approaches in the statistical software R. • develop and evaluate predictive models for particular applications. • interpret and critically assess the modeling results. • discuss selected considerations regarding inference for predictive models and implement the approaches.
Teaching methods
Interactive frontal teaching and discussion of the course content. Teaching of theoretical principles and illustration by examples in lecture and tutorial. Weekly (accessible) lecture and exercise materials and required literature. Some of the tutorials are hands-on using the open-source statistical software R. Students are explicitly invited to play an active role in lectures and tutorials through questions and input for discussions. Readings are essential to prepare the class and the exam.
Required attendance
Examination (type of examination, scope)
Written exam or performance assessment at home (60 minutes) or oral (online) exam
Overall grade relevance
100%
Exam resit opportunities
Recommended reading
Hastie, T., R. Tibshirani, R., and J. Friedman (2017), The Elements of Statistical Learning, 2A, Springer. James, G., Witten, D., Hastie, T., and R. Tibshirani (2023), An Introduction to Statistical Learning, 2A, Springer. Kuhn, M. and K. Johnson (2013), Applied Predictive Modeling, Springer. Efron, B. and T. Hastie (2016), Computer Age Statistical Inference: Algorithms, Evidence, and Data Science, Cambridge University Press.
Additional notes

Artificial Intelligence and Optimization

Module number
Course name
Artificial Intelligence and Optimization
Module coordinator
Prof Dr Marc Goerigk

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture classes 2 SWS (30h presence, 45h unsupervised work) Tutorial classes 2 SWS (30h presence, 45h unsupervised work)
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Artificial Intelligence Modulbereich B: Minor Optimization
BA Version 1: Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
Basic knowledge of optimization and/or AI helpful
Requirements
Language of instruction
English

Content
<p>We study the relationship between problems and methods in artificial intelligence (in particular, machine learning) and optimization. Concepts that are discussed include:</p> <ul style="list-style-type: none"> • classification and regression trees • neural networks • nearest neighbors classification • support vector machines • clustering • robustness, interpretability, explainability <p>Each aspect is discussed from both the AI and optimization perspective, including issues of complexity. Methods are tested computationally.</p>

Intended learning outcomes (ILOs)
<p>Upon completion of the module, students are able to</p> <ul style="list-style-type: none"> • identify typical tasks in machine learning, • formulate them as optimization models, • distinguish between problems of different complexity classes, • identify and apply the most suitable optimization strategy, and • evaluate the quality of these methods
Teaching methods
<ul style="list-style-type: none"> • interactive lectures • group work in tutorial classes, including programming of AI and optimization methods
Required attendance
Examination (type of examination, scope)
<p>Oral exam (duration 45 minutes), OR written exam (90 minutes) The type of exam will be communicated within the first two weeks of teaching.</p>
Overall grade relevance
Exam resit opportunities
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
Recommended reading
<p>Related literature includes:</p> <ul style="list-style-type: none"> • D. Bertsimas, J. Dunn: "Machine Learning under a Modern Optimization Lens", Dynamic Ideas LLC, Belmont, Massachusetts, 2019 • M. Mohri, A. Rostamizadeh, A. Talwalkar: "Foundations of Machine Learning", second edition, MIT Press, Cambridge, Massachusetts, 2018 • W. Ertel: "Grundkurs Künstliche Intelligenz", fifth edition, Springer Vieweg, Wiesbaden, 2021
Additional notes

Computational Statistics – Statistical Learning in R

Module number
Course name
Computational Statistics – Statistical Learning in R
Module coordinator
Prof. Dr. Joachim Schnurbus

Examination number	Credit points (ECTS)	Hours per week (SWS)
261001	3	2
Availability	Duration	Recommended semester
Every summer semester, if possible every term.	1 semester (or block course)	

Workload
Computer lectures and exercises: 30 hrs. attendance and 60 hrs. self-study
The calculation is based on 15 semester weeks (14 lectures + 1 examination week) and each SWS is included in the calculation with 60 minutes.
Module applicability
<p>BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Artificial Intelligence Modulbereich B: Minor Data Science</p> <p>BA Version 1: Methoden Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung Wirtschaftsinformatik / Information Systems – Grundlagen Wirtschaftsinformatik / Information Systems – Vertiefung</p>
Reference to the LPO I
Recommended prerequisites
The course aims at students with a basic knowledge in statistics (especially regression methods) and basic knowledge of R (e.g. via 'Computational Statistics – Regression in R').
Requirements
Language of instruction
English

Content

<p>Statistical Learning sums up methods from computational statistics that are designed to deal with high dimensional, complex large-scale data sets. Various topics that facilitate modeling of and gaining a deeper insight into these data sets are introduced. Supervised (classification and regression) and unsupervised statistical learning techniques (like neural nets, boosting, clustering) are presented, discussed, and applied. Further topics comprise preprocessing (transformation of variables), resampling (cross-validation, bootstrapping), meta-parameter selection, model evaluation.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have successfully passed the module:</p> <ul style="list-style-type: none"> • are able to apply and interpret unsupervised and supervised learning methods in the statistical software R. • have the skill to select a problem-adequate statistical learning method, to configure and employ the corresponding R-functions, to critically judge the validity of the outcomes, and to interpret the results in order to provide decision support. • will be able to relate to recent literature on statistical learning.
<p>Teaching methods</p>
<p>Interactive frontal teaching and discussion of the R-Codes. Exercises that are worked on independently in R and then discussed together. Students are expected to deepen their knowledge by completing self-contained R-exercises. Accessible lecture and exercise materials and required literature.</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Exam or performance assessment at home (60 minutes) or portfolio. R-skills are certified via a certificate when the exam is passed.</p>
<p>Overall grade relevance</p>
<p>100%</p>
<p>Exam resit opportunities</p>
<p>Recommended reading</p>
<p>- Kuhn, M. & Johnson, K. (2013), Applied Predictive Modeling, Springer. - Hastie, T., Tibshirani, R. & Friedman, J. (2009), The Elements of Statistical Learning: Data Mining, Inference, and Prediction, 2Ed., Springer. - Efron, B., Hastie, T. (2016), Computer Age Statistical Inference, Cambridge University Press. - Torgo, L. (2017), Data Mining with R: Learning with Case Studies, 2Ed., CRC Press. - James, G., Witten, D., Hastie, T & Tibshirani, R. (2015), An Introduction to Statistical Learning: with Applications in R, Springer.</p>
<p>Additional notes</p>
<p></p>

Deep Learning and Text Analysis in Finance

Module number
Course name
Deep Learning and Text Analysis in Finance
Module coordinator
Prof. Dr. Ralf Kellner

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	4

Workload
150 h (60 h contact studies / 90 h self-studies)
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Artificial Intelligence
BA Version 1: Accounting, Finance and Taxation – Vertiefung Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
Fundamentals of mathematics and statistics.
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Text Preprocessing • Simple frequency-based text models • Quantitative basics for understanding advanced text models • Word2Vec, Doc2Vec • Text models with attention mechanisms: encoder and decoder models • Use of text models in the financial sector <ul style="list-style-type: none"> ○ Information processing of capital market participants ○ Quantification of capital market reactions ○ Identification of companies with risks in relation to climate change and the transformation to a CO2-neutral economy

Intended learning outcomes (ILOs)
Students who have successfully completed this course
<ul style="list-style-type: none"> • develop a deep understanding of how modern text models work • establish the connection between general machine learning methods and modern text modelling • assess which form of text analysis is suitable for different situations • use modern text models to analyse and evaluate important documents from the field of economics
Teaching methods
<ul style="list-style-type: none"> • Interactive lectures incl. digital documents • Interactive exercise units
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none"> • Written exam
Overall grade relevance
Exam resit opportunities
Recommended reading
<ul style="list-style-type: none"> • Machine Learning for Text (2018) – Aggarwal, C. C., Springer Verlag • When Is a Liability Not a Liability? Textual Analysis, Dictionaries, and 10-Ks (2011) – Loughran and McDonald, The Journal of Finance 66(1) • Disclosure Sentiment: Machine Learning vs. Dictionary Methods (2022) – Frankel et. al, Management Science 68(7)
Additional notes

Scientific Computing and Digital Reporting with Python

Module number
Course name
Scientific Computing and Digital Reporting with Python
Module coordinator
Prof. Dr. Ralf Kellner

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
150 h (60 h contact studies / 90 h self-studies)
Module applicability
<p>BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Artificial Intelligence</p> <p>BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung Wirtschaftsinformatik / Information Systems – Vertiefung</p>
Reference to the LPO I
Recommended prerequisites
Mathematics and statistics from the Bachelor's programme. At best, the course 'Fundamentals of Business Analytics' (39720) has already been taken beforehand.
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Introduction to programming with Python • Statistical models (sklearn, statsmodels, etc. and own implementation) • Optimization using gradient-based algorithms (Scipy, Tensorflow, Pytorch) • Matrix decompositions with application examples such as principal component analysis • Access to data using APIs and web scraping • Digital reporting with the help of a specially programmed web application

<ul style="list-style-type: none"> Final project: data reference, analysis using a model, reporting of the results using a customized web app
<p>Intended learning outcomes (ILOs)</p>
<p>After successfully completing the course, students will be able to carry out advanced data analyses using the Python programming language and inform external parties about the relevant results of the analyses in an appropriate manner. This includes all individual steps from collecting their own data, identifying and carrying out their own analyses to making the results accessible. In addition, course participants gain in-depth knowledge of the statistical modelling of financial market data. In addition to specific applications, the general competence of independent learning of new statistical models is trained.</p>
<p>Teaching methods</p>
<ul style="list-style-type: none"> Interactive lectures Interactive exercises Digital teaching materials on programming with Python and the methodological basics of the course
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<ul style="list-style-type: none"> Written exam Digital exam
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Recommended reading</p>
<ul style="list-style-type: none"> Deep Learning (2016) – Goodfellow, I., Bengio, Y., Courville, A.; MIT Press The Elements of Statistical Learning (2017) - Hastie, T., Tibshirani, R., Friedman, J.; Springer Hands-On Machine Learning with Scikit-Learn, Keras & Tensorflow (2017) – Geron, A.; Wiley Learn Python Programming (2018) – Romano, F., Packt Publishing Ltd. Web Scraping with Python (2018) - Ryan Mitchell, O'Reilly Media, Inc.
<p>Additional notes</p>

Topics in Applied Econometrics

Module number
Course name
Topics in Applied Econometrics
Module coordinator
Prof. Dr. Harry Haupt, Prof. Dr. Joachim Schnurbus

Examination number	Credit points (ECTS)	Hours per week (SWS)
271030	5	2+2
Availability	Duration	Recommended semester
Usually every summer term	1 semester	2/4

Workload
Lecture 2 SWS (28 h Contact hours and 28 h Self-study) and Tutorial 2 SWS (28 h Contact hours, 28 h Self-study). We are calculating with 15 semester weeks (Lecture, Tutorial and Exam). Each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Artificial Intelligence Modulbereich B: Minor Data Science
BA Version 1: Methoden Accounting, Finance and Taxation – Vertiefung International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
An understanding of introductory statistics including inferential methods and regression analysis and test methods on bachelor level. Basic knowledge of <i>R</i> statistical software is an advantage.
Requirements
Language of instruction
English

Content
This module covers a selection (usually divided in three to four blocks) of fundamental research methods and techniques in applied econometrics. Topics included are: Maximum-Likelihood estimation and inference (for specification tests and various fields of microeconomic applications), advanced applications of least squares and GMM (for modeling heterogeneity and endogeneity in empirical practice), smoothing methods such as kernel and spline regression, robust inferential methods such as quantile regression and their interpretation, machine

learning methods (and their applications in econometrics), and simulation-based methods (such as Bootstrap-, Monte Carlo-, and Bayesian techniques).
Intended learning outcomes (ILOs)
Students who have successfully completed the module: <ul style="list-style-type: none"> • develop a basic understanding of some of the core methods of applied econometrics. • are able to reflect the underlying elementary mathematical foundations and corresponding assumptions of estimation and inference for the covered techniques, while developing an awareness of potential pitfalls in empirical practice. • can implement the methods in the statistical software R, apply the methods to empirical datasets and are able to provide economic interpretations and critically reflect the modeling results.
Teaching methods
Interactive frontal teaching and discussion of the course content. Teaching of theoretical principles and illustration by examples in lecture and tutorial. Weekly (accessible) lecture and exercise materials and required literature. Some of the tutorials are hands-on using the open-source statistical software R. Students are explicitly invited to play an active role in lectures and tutorials through questions and input for discussions. Additionally, students are invited to indicate those parts of the course for which they need additional training. Readings are essential to prepare the class and the exam.
Required attendance
Examination (type of examination, scope)
Portfolio, consisting of two parts: <ul style="list-style-type: none"> • Part 1 (1/3): Short presentation of (a part of) a scientific paper or an application. • Part 2 (2/3): Oral (online) exam or performance assessment at home.
Overall grade relevance
One overall grade, 100%
Exam resit opportunities
Recommended reading
Among others and depending on the selection of topics: Angrist, J.D. & Pischke J.-S. (2009); Mostly Harmless Econometrics, Princeton. Cameron, C.A. & Trivedi, P.K. (2005), Microeconometrics: Methods & Applications, Cambridge. Franses, P.H., van Dijk, D. & A. Opschoor (2014), Time Series Models for Business and Economic Forecasting, Cambridge. Kleiber, C. & Zeileis, A. (2008), Applied Econometrics with R, Springer. Verbeek, M. (2017), A Guide to Modern Econometrics, 5e, Wiley
Additional notes

Advanced Artificial Intelligence

Module number
Course name
Advanced Artificial Intelligence
Module coordinator/ examiner(s)
Prof. Dr. Harry Haupt

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-7	2-5
Availability	Duration	Recommended semester
Winter or summer semester	1 semester	

Workload
90 h to 210 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulbereich B: Minor Artificial Intelligence
LPO I applicability
Recommended prerequisites
Requirements
Language of instruction
English

Content
This module provides in-depth specialist knowledge in the field of artificial intelligence. This includes, among other things, in-depth topics in machine learning, especially deep learning, supervised, unsupervised & reinforcement learning, decision trees, neural networks, random forests, natural language processing, predictive analytics and forecasting, as well as questions from related fields such as data science and optimisation.
Intended learning outcomes (ILOs)
Students who have successfully completed the module, <ul style="list-style-type: none"> • identify and name relevant problems in artificial intelligence and relate them to each other. • name and interpret business fundamentals in artificial intelligence and mobilise them to address in-depth issues. • name central and in-depth methods in artificial intelligence, analyse their results and classify them in the context of the literature. • establish links between the issues and topics covered and current cases in business practice.

<ul style="list-style-type: none">• Recognise the potential and limitations of objectives, approaches and instruments in artificial intelligence in the light of current research and reflect on them critically.
Teaching methods
Different teaching and learning formats are used depending on the course.
Required attendance
Examination (type of examination, scope)
Exam or portfolio
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Modulbereich B: Minor Business Taxation

Allgemeines Steuerrecht I+II

Modulnummer
21190
Veranstaltungstitel
Allgemeines Steuerrecht I + II
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Rainer Wernsmann (Jura)

Prüfungsnummer	ECTS	SWS
262680	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jährlich (Allg. Steuerrecht jedes Wintersemester) ein Semester	1 Semester	

Workload
Vorlesung 2 SWS Präsenzzeit 30 SWS; Eigenarbeitszeit 45 SWS Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
Modulbereich B: Minor Business Taxation
Bezug zur LPO I
Empfohlene Voraussetzungen
Bachelor-Abschluss in einem wirtschaftswissenschaftlichen oder einem den Wirtschaftswissenschaften nahen Studiengang. Steuerliche Grundkenntnisse sind empfehlenswert.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalt
Die Vorlesung führt in das System des geltenden deutschen und internationalen Steuerrechts ein. Sie behandelt die verfassungsrechtlichen Grundlagen der Besteuerung, Steuerbegriff, Steuerarten und Besteuerungsgrundsätze einschließlich ökonomischer Bezüge. Ferner wird der Aufbau des Steuertatbestands (Steuersubjekt, Steuerobjekt, Tarif) erläutert. Außerdem wird das Steuerschuldrecht und das Steuerverfahrensrecht (einschließlich außergerichtlichem

Rechtsbehelfsverfahren und Klageverfahren) nach der Abgabenordnung (AO) behandelt.
Lernergebnisse Lernziele
Die Studierenden erwerben die theoretischen Grundlagen des Steuerrechts, speziell das Steuerstraf- und -verfahrensrecht. Sie sind in der Lage, das theoretisch erlernte Wissen auf komplexe Sachverhalte anzuwenden.
Lehr- und Lernformen
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)
Klausur für Master-Studierende im Bereich Accounting, Finance and Taxation: Klausur über den Stoff der Vorlesung im WS. Die Klausur wird nur im WS angeboten, nicht im SS.
Gesamtnotenrelevanz
Wiederholungsmöglichkeit
Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.
Literatur
Tappe/Wernsmann, Öffentliches Finanzrecht, 3. Aufl. 2023; Birk/Desens/Tappe, Steuerrecht, 27. Aufl. 2024
Weitere Hinweise

Immobilien & Steuern

Modulnummer
Modultitel
Immobilien und Steuern
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Markus Diller

Prüfungsnummer	ECTS	SWS
262101	3	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Sommersemester, in Abhängigkeit von der Verfügbarkeit eines Praxispartners	1 Semester	

Workload
Vorlesung und integrierte Übung 2 SWS (30 St. Präsenzzeit und 45 St. Eigenarbeitszeit) Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Business Taxation BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration. Bachelor-Abschluss in einem wirtschaftswissenschaftlichen oder einem den Wirtschaftswissenschaften nahen Studiengang. Steuerliche Grundkenntnisse werden dringend empfohlen.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
Steuerrechtliche und steuerwirkungstheoretische Aspekte bei Erwerb, Nutzung und Veräußerung von Immobilien Grundlagen der Immobilienbewertung/ der Erbschaftsteuer
Lernergebnisse Lernziele

<p>Nach erfolgreicher Teilnahme am Modul</p> <ul style="list-style-type: none"> • benennen die Studierenden die steuerlichen Regelungen mit Bezug zu Immobilien sowie deren Wirkung, • schätzen komplexe Sachverhalte steuerrechtlich ein, • beschreiben die steuerlichen Implikationen auf Immobilien-(ver-)kauf sowie Immobilienbewertung sowie hinterfragen kritisch.
<p>Lehr- und Lernformen</p>
<ul style="list-style-type: none"> • Vorlesung mit Seminarcharakter und interaktiven Elementen wie Diskussionen und Gruppenarbeiten • Case studies
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang)</p>
<p>Klausur, 60 Min., 100 %</p>
<p>Gesamtnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p>
<p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
<p>Literatur</p>
<p>Die empfohlene Literatur wird vom jeweiligen Dozenten in der Veranstaltung bekannt gegeben.</p>
<p>Weitere Hinweise</p>
<p>Das Modul wird in Zusammenarbeit mit externen Dozenten gehalten und als Blockveranstaltung angeboten.</p> <p>Das Modul Immobilien und Steuern wird als eigenständiges Modul angeboten, da es als abgegrenztes und in sich geschlossenes Teilgebiet vermittelt wird. Aus organisatorischen Gründen gibt es mehrere geblockte Präsenzphasen; auch der Workload pro Teilnehmer liegt unter dem einer regulären Vorlesung, weshalb 3 ECTS-Punkte vergeben werden.</p>

International Taxation

Module number
Course name
International Taxation (ehemals: internationale Unternehmensbesteuerung)
Module coordinator/ examiner(s)
Prof. Dr. Markus Diller

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (30 hours of attendance and 45 hours of individual work) Exercise 2 SWS (30 hours of attendance and 45 hours of individual work). 15 semester weeks are counted (14 lecture weeks + 1 examination week) and each SWS is counted at 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Business Taxation BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree programme in Business Administration. Bachelor's degree in an economics or business-related degree programme. Basic tax knowledge in the area of income taxes (EStG, KStG) is recommended.
Requirements
Language of instruction
English

Content
This module deals with cross-border tax issues. Students are given a systematic overview of the tax problems of tax residents investing abroad (outbound) and tax non-residents investing in Germany (inbound). Emphasis is placed on regulations that are of great importance to international groups, such as double taxation treaties, the license barrier, the treatment of losses, the choice of international legal

form, transfer pricing, and global minimum taxation. All chapters are accompanied by tax impact analyses.
Intended learning outcomes (ILOs)
After successfully completing the module: <ul style="list-style-type: none"> • students explain the legal foundations of international tax law, • recognise the most important tax implications for internationally active companies, • assess their influence on entrepreneurial decision-making situations, • can transfer the theoretical knowledge they have acquired to complex situations.
Teaching methods
<ul style="list-style-type: none"> • Lecture with seminar character and interactive elements such as discussions and group work • Working on exercises and suitable case studies.
Required attendance
Examination (type of examination, scope)
Exam 60 min, 100%
Overall grade relevance
Exam resit opportunities
In the event of failure, all courses may be repeated in accordance with § 6 of the Study and Examination Regulations.
Recommended reading
The recommended literature will be announced by the respective lecturer in the course.
Additional notes
Guest lectures from practice on selected topics

Rechtsformwahl und M&A

Modulnummer
Veranstaltungstitel
Rechtsformwahl und M & A – Steuerliche Aspekte
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Markus Diller

Prüfungsnummer	ECTS	SWS
	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Sommersemester	1 Semester	

Workload
Vorlesung 2 SWS (30 St. Präsenzzeit und 45 St. Eigenarbeitszeit) Übung 2 SWS (30 St. Präsenzzeit und 45 St. Eigenarbeitszeit) Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Business Taxation BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration. Steuerliche Kenntnisse im Bereich der Ertragsteuern (EStG, KStG) werden dringend empfohlen.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
Das Modul befasst sich mit den komplexen steuerlichen Aspekten im Bereich von Merger & Acquisition sowie die Rechtsformwahl. Die Studierenden erhalten einen systematischen Überblick über steueroptimale Rechtsformen sowie Gestaltungen von Unternehmenstransaktionen und über die Grundlagen des Umwandlungssteuerrechts.
Lernergebnisse Lernziele
Nach erfolgreicher Teilnahme an dem Modul:

<ul style="list-style-type: none">• erklären die Studierenden die wichtigsten steuerlichen Implikationen bei Unternehmenstransaktionen und Rechtsformwahl,• nehmen steueroptimale Entscheidungen vor,• nutzen dieses Vorgehen für praxisorientierte Beispiele,• quantifizieren Steuerwirkungen.
Lehr- und Lernformen
<ul style="list-style-type: none">• Vorlesung mit Seminarcharakter und interaktiven Elementen wie Diskussionen und Gruppenarbeiten• Bearbeitung von Übungsaufgaben und geeigneten Fallbeispielen.
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang)
Klausur, 60 Min., 100 %
Gesamnotenrelevanz
Wiederholungsmöglichkeit
Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.
Literatur
Die empfohlene Literatur wird vom jeweiligen Dozenten in der Veranstaltung bekannt gegeben.
Weitere Hinweise
Gastvorträge aus der Praxis zu ausgewählten Themenkomplexen

Tax Effects

Module number
30000
Course name
Tax effect (ehemals: Steuerplanung und Steuerwirkung)
Module coordinator/ examiner(s)
Prof. Dr. Markus Diller

Examination number	Credit points (ECTS)	Hours per week (SWS)
262600	5	2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture 2 SWS (30 hours of attendance and 45 hours of individual work) Exercise 2 SWS (30 hours of attendance and 45 hours of individual work). 15 semester weeks are counted (14 lecture weeks + 1 examination week) and each SWS is counted at 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Business Taxation BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Bachelor's degree in economics or business-related studies. Basic tax knowledge in the area of income taxes (EStG, KStG) is recommended.
Requirements
Language of instruction
English

Content
The module deals with the impact of taxes on business decisions. In particular, the module discusses the impact of taxation on after-tax net present value in different scenarios and, based on this, investment-neutral tax systems (cash flow tax, economic profit) and their interrelationship with forward-looking effective tax rates.

Intended learning outcomes (ILOs)
<p>After successfully completing the module:</p> <ul style="list-style-type: none"> • Students explain multi-period tax effects using the after-tax NPV and quantify complex, investment-theoretic tax effects. • understand the concept of tax neutrality and its relationship to forward-looking effective tax rates.
Teaching methods
<ul style="list-style-type: none"> • Lecture with seminar character and interactive elements such as discussions and group work • Working on exercises and suitable case studies.
Required attendance
Examination (type of examination, scope)
Exam 60 min, 100%
Overall grade relevance
Exam resit opportunities
In the event of failure, all courses may be repeated in accordance with § 6 of the Study and Examination Regulations.
Recommended reading
The recommended literature will be announced by the respective lecturer in the course.
Additional notes

Transfer Pricing

Module number
Course name
Transfer Pricing
Module coordinator/ examiner(s)
Prof. Dr. Markus Diller, Prof. Dr. Robert Obermaier, external lecturers

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
2 SWS (30 hours of present time, 120 self-responsible working hours): Lecture/Exercise: 20 hours present time, 80 hours own working time Case Study: 10 hours present time, 40 hours own working time The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is counted as 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Business Taxation BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Basic knowledge of accounting, capital budgeting and corporate taxation is recommended.
Requirements
Language of instruction
English

Content
The lecture “Transfer Pricing” deals with the highly relevant and complex problem of determining the prices at which services are exchanged between the divisions of a company. Considering transfer pricing in the area of tension between management control and corporate taxation, the formation of transfer prices is particularly related to the following problems:

<ul style="list-style-type: none"> • The determination of profit in decentralized companies requires an allocation of the costs incurred in the provision of services. Transfer prices are used to establish a market mechanism in the company as part of the alignment of decentralized decisions or activities with the overriding objectives of the company's management. • Transfer prices of cross-border transactions influence the tax burden of internationally active companies, whereby the optimal transfer prices for internal purposes are regularly changed (one set of books). Furthermore, due to the profit shifting possibilities that arise through transfer pricing, there are detailed tax regulations for their determination, which are also the subject of the course. Finally, the limits of tax profit allocation by means of transfer pricing, in particular with regard to digital companies, will be explained and current reform options will be presented. • The combination of management control and taxation aspects is achieved through the preparation and presentation of a practical case study in cooperation with external experts in the field of transfer pricing.
<p>Intended learning outcomes (ILOs)</p>
<p>After successful participation in the course "Transfer Pricing", students</p> <ul style="list-style-type: none"> • understand both the management control implications and the complex tax considerations associated with transfer pricing, recognizing and navigating potential conflicts between these dimensions. • analyze and assess transfer prices in terms of their impact on cost allocation, managerial incentives and tax outcomes. • apply and critically evaluate different methods for the determination of transfer prices. • synthesize and apply their knowledge by working on and presenting a practical case study.
<p>Teaching methods</p>
<p>Interactive lecture Completion of exercises and case studies</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Both the written exam and participation in the case study are compulsory components of the examination.</p> <p>Weighting of the components: 2/3 written exam (chairs) 60 minutes 1/3 group work / presentation (case study)</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>In the event of failure (grade worse than 4.0), all courses can be repeated in accordance with § 9 of AStuPO.</p>
<p>Recommended reading</p>
<p>Additional notes</p>

Advanced Business Taxation

Module number
Course name
Advanced Business Taxation
Module coordinator/ examiner(s)
Prof. Dr. Markus Diller

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-7	2-5
Availability	Duration	Recommended semester
Winter or summer semester	1 semester	

Workload
90 h to 210 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulbereich B: Minor Business Taxation
LPO I applicability
Recommended prerequisites
Requirements
Language of instruction
English

Content
This module provides in-depth specialist knowledge in taxation. This includes, among other things, in-depth topics in business taxation, national and international tax law, and links to external and internal accounting, as well as the implementation and effects of digitalisation in the field of taxation. The courses offered within this module establish the link to current topics and issues in business practice, regulation and research.
Intended learning outcomes (ILOs)
Students who have successfully completed the module, <ul style="list-style-type: none"> • identify and name relevant problems in taxation and relate them to each other. • name and interpret legal and business fundamentals in taxation and mobilise them to address in-depth issues. • name central and in-depth methods in taxation research, analyse their results and classify them in the context of the literature. • establish links between the issues and topics covered and current cases in business practice and current regulatory discussions.

<ul style="list-style-type: none">• Recognise the potential and limitations of objectives, approaches and instruments in taxation in the light of current research and reflect on them critically.
Teaching methods
Different teaching and learning formats are used depending on the course.
Required attendance
Examination (type of examination, scope)
Exam or portfolio
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Modulbereich B: Minor Data Science

Advanced Data Analytics

Module number
Course name
35780 Advanced Data Analytics (Lecture) and 35781 Advanced Data Analytics (Tutorial)
Module coordinator
Prof. Dr. Harry Haupt, Dr. Markus Fritsch

Examination number	Credit points (ECTS)	Hours per week (SWS)
261004	5	2+2
Availability	Duration	Recommended semester
Usually every winter semester	1 semester	3.

Workload
Lecture 2 SWS (28 h Contact hours and 28 h Self-study) and Tutorial 2 SWS (28 h Contact hours, 28 h Self-study). We are calculating with 15 semester weeks (Lecture, Tutorial, and Exam). Each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Artificial Intelligence Modulbereich B: Minor Data Science
BA Version 1: Methoden
Reference to the LPO I
Recommended prerequisites
Basic understanding of calculus and matrix algebra, introductory statistics including inferential methods, regression analysis, and testing methods. Basic knowledge of statistical software <i>R</i> is an advantage.
Requirements
Language of instruction
English

Content
This module covers key state of the art techniques in statistical learning/machine learning. The emphasis of the course is on techniques from supervised learning in the context of regression modeling. The following content is covered: Fundamental concepts (bias-variance trade-off, curse of dimensionality, flexibility vs. interpretability, resampling techniques), key building blocks (parametric polynomials, spline-regression, tree-based modeling), and frequently employed algorithms (lasso,

backfitting, random forest, boosting). Prediction and inference are discussed. Selected applications are used to motivate the different algorithms.
Intended learning outcomes (ILOs)
Students who have successfully completed the module are able to: <ul style="list-style-type: none"> • explain and reflect the main principles and key assumptions of the covered techniques. • choose suitable and problem-adequate modeling approaches in the context of supervised learning. • implement the approaches in the statistical software R. • develop and evaluate predictive models for particular applications. • interpret and critically assess the modeling results. • discuss selected considerations regarding inference for predictive models and implement the approaches.
Teaching methods
Interactive frontal teaching and discussion of the course content. Teaching of theoretical principles and illustration by examples in lecture and tutorial. Weekly (accessible) lecture and exercise materials and required literature. Some of the tutorials are hands-on using the open-source statistical software R. Students are explicitly invited to play an active role in lectures and tutorials through questions and input for discussions. Readings are essential to prepare the class and the exam.
Required attendance
Examination (type of examination, scope)
Written exam or performance assessment at home (60 minutes) or oral (online) exam
Overall grade relevance
100%
Exam resit opportunities
Recommended reading
Hastie, T., R. Tibshirani, R., and J. Friedman (2017), The Elements of Statistical Learning, 2A, Springer. James, G., Witten, D., Hastie, T., and R. Tibshirani (2023), An Introduction to Statistical Learning, 2A, Springer. Kuhn, M. and K. Johnson (2013), Applied Predictive Modeling, Springer. Efron, B. and T. Hastie (2016), Computer Age Statistical Inference: Algorithms, Evidence, and Data Science, Cambridge University Press.
Additional notes

Combinatorial Optimization

Module number
Course name
Combinatorial Optimization
Module coordinator
Prof Dr Marc Goerigk

Examination number	Credit points (ECTS)	Hours per week (SWS)
271036	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	any

Workload
Lecture classes 2 SWS (30h presence, 45h unsupervised work) Tutorial classes 2 SWS (30h presence, 45h unsupervised work)
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Data Science Modulbereich B: Minor Optimization
BA Version 1: Methoden
Reference to the LPO I
Recommended prerequisites
Mathematical maturity and previous work with optimization problems
Requirements
Language of instruction
English

Content
We study fundamentals of combinatorial decision making problems. These include <ul style="list-style-type: none"> - graph theory - complexity classes - approximation methods - spanning tree problems - path problems - matching problems - knapsack problems - traveling salesperson problems

Intended learning outcomes (ILOs)
<p>Upon completion of the module, students are able to</p> <ul style="list-style-type: none"> - identify fundamental problems of combinatorial optimization, also in the context of more complex decision-making situations - choose appropriate heuristic and exact solution methods and apply them to solve such problems - classify problems by their complexity, and demonstrate hardness using different proof techniques, including polynomial reductions
Teaching methods
<ul style="list-style-type: none"> - lecture with seminar character - interactive lectures - group work in tutorial classes - online forums and discussions - take-home mock exam and its discussion - blended learning
Required attendance
Examination (type of examination, scope)
<p>Oral exam (duration 45 minutes), OR written exam (90 minutes) The type of exam will be communicated within the first two weeks of teaching.</p>
Overall grade relevance
Exam resit opportunities
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
Recommended reading
<p>Related literature: Korte, B. H., Vygen, J. (2011). <i>Combinatorial optimization</i>. Berlin: Springer.</p>
Additional notes

Computational Statistics – Regression in R

Module number
Course name
Computational Statistics – Regression in R
Module coordinator
Prof. Dr. Joachim Schnurbus

Examination number	Credit points (ECTS)	Hours per week (SWS)
261070	3	2
Availability	Duration	Recommended semester
Every winter semester; if possible every semester	1 semester (or block course)	

Workload
Computer lectures and exercises: 30 hrs. attendance and 60 hrs. self-study
The calculation is based on 15 semester weeks (14 lectures + 1 examination week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Data Science
BA Version 1: Methoden Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung Wirtschaftsinformatik / Information Systems – Grundlagen Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
The course aims at students with a basic knowledge in statistics and complements some of the topics treated in 'Methods in Econometrics'.
Requirements
Language of instruction
English

Content
The course focuses on estimating and evaluating regression models with the statistical software R. Model evaluation procedures discussed in class range from graphical methods, classic validation

<p>techniques and tests to simulation-based approaches. The course includes model selection (i.e., finding the best model from a large number of possible models), model validation (i.e., checking whether the presumed best specification satisfies the model assumptions), and model interpretation (for linearly and/or nonlinearly transformed variables). Additionally, different data structures such as cross-sections, time series, and panel data are shortly discussed.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have successfully passed the module:</p> <ul style="list-style-type: none"> • are able to perform and interpret a regression analysis in the statistical software R. • have the skill to select an appropriate statistical model, critically judge the validity of a model and in detail interpret the estimation results in order to provide decision support. • are able to create Monte Carlo-simulations in order to perform a simulation-based assessment of statistical methods or models. • understand statistical tests and can select, apply, and interpret the appropriate tests in regression context.
<p>Teaching methods</p>
<p>Interactive frontal teaching and discussion of the R-Codes. Exercises that are worked on independently in R and then discussed together. Students are expected to deepen their knowledge by completing self-contained R-exercises. Accessible lecture and exercise materials and required literature.</p>
<p>Required attendance</p>
<p> </p>
<p>Examination (type of examination, scope)</p>
<p>Exam or performance assessment at home (60 minutes) or portfolio. R-skills are certified via a certificate when the exam is passed.</p>
<p>Overall grade relevance</p>
<p>100%</p>
<p>Exam resit opportunities</p>
<p> </p>
<p>Recommended reading</p>
<p>- Kleiber, C. & A. Zeileis (2008), Applied Econometrics with R, Springer. - Field, A. & Miles, J. & Field, Z. (2012), Discovering Statistics using R, SAGE. - Wooldridge, J. (2013), Introductory Econometrics, 5Ed., South Western. - Greene, W.H. (2012), Econometric Analysis, Pearson. - Ligges, U. (2008), Programmieren mit R, Springer.</p>
<p>Additional notes</p>
<p> </p>

Computational Statistics – Statistical Learning in R

Module number
Course name
Computational Statistics – Statistical Learning in R
Module coordinator
Prof. Dr. Joachim Schnurbus

Examination number	Credit points (ECTS)	Hours per week (SWS)
261001	3	2
Availability	Duration	Recommended semester
Every summer semester, if possible every term.	1 semester (or block course)	

Workload
Computer lectures and exercises: 30 hrs. attendance and 60 hrs. self-study
The calculation is based on 15 semester weeks (14 lectures + 1 examination week) and each SWS is included in the calculation with 60 minutes.
Module applicability
<p>BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Artificial Intelligence Modulbereich B: Minor Data Science</p> <p>BA Version 1: Methoden Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung Wirtschaftsinformatik / Information Systems – Grundlagen Wirtschaftsinformatik / Information Systems – Vertiefung</p>
Reference to the LPO I
Recommended prerequisites
The course aims at students with a basic knowledge in statistics (especially regression methods) and basic knowledge of R (e.g. via 'Computational Statistics – Regression in R').
Requirements
Language of instruction
English

Content

<p>Statistical Learning sums up methods from computational statistics that are designed to deal with high dimensional, complex large-scale data sets. Various topics that facilitate modeling of and gaining a deeper insight into these data sets are introduced. Supervised (classification and regression) and unsupervised statistical learning techniques (like neural nets, boosting, clustering) are presented, discussed, and applied. Further topics comprise preprocessing (transformation of variables), resampling (cross-validation, bootstrapping), meta-parameter selection, model evaluation.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have successfully passed the module:</p> <ul style="list-style-type: none"> • are able to apply and interpret unsupervised and supervised learning methods in the statistical software R. • have the skill to select a problem-adequate statistical learning method, to configure and employ the corresponding R-functions, to critically judge the validity of the outcomes, and to interpret the results in order to provide decision support. • will be able to relate to recent literature on statistical learning.
<p>Teaching methods</p>
<p>Interactive frontal teaching and discussion of the R-Codes. Exercises that are worked on independently in R and then discussed together. Students are expected to deepen their knowledge by completing self-contained R-exercises. Accessible lecture and exercise materials and required literature.</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Exam or performance assessment at home (60 minutes) or portfolio. R-skills are certified via a certificate when the exam is passed.</p>
<p>Overall grade relevance</p>
<p>100%</p>
<p>Exam resit opportunities</p>
<p>Recommended reading</p>
<p>- Kuhn, M. & Johnson, K. (2013), Applied Predictive Modeling, Springer. - Hastie, T., Tibshirani, R. & Friedman, J. (2009), The Elements of Statistical Learning: Data Mining, Inference, and Prediction, 2Ed., Springer. - Efron, B., Hastie, T. (2016), Computer Age Statistical Inference, Cambridge University Press. - Torgo, L. (2017), Data Mining with R: Learning with Case Studies, 2Ed., CRC Press. - James, G., Witten, D., Hastie, T & Tibshirani, R. (2015), An Introduction to Statistical Learning: with Applications in R, Springer.</p>
<p>Additional notes</p>
<p></p>

Decision Making Under Uncertainty

Module number
Course name
Decision Making Under Uncertainty
Module coordinator
Prof Dr Marc Goerigk

Examination number	Credit points (ECTS)	Hours per week (SWS)
271034	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	any

Workload
Lecture classes 2 SWS (30h presence, 45h unsupervised work) Tutorial classes 2 SWS (30h presence, 45h unsupervised work)
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Data Science Modulbereich B: Minor Optimization
BA Version 1: Methoden
Reference to the LPO I
Recommended prerequisites
Mathematical maturity and previous work with optimization problems
Requirements
Module "Fundamentals of Management Science"
Language of instruction
English

Content
We study decision-making problems under uncertainty using optimization tools, including <ul style="list-style-type: none"> - robust optimization, in particular - min-max, min-max regret, and ordered weighted averaging - one- and two-stage problems - different types of uncertainty sets (discrete, polyhedral, budgeted, ellipsoidal) - complexity, approximation and solution methods - the application to combinatorial problems - stochastic optimization - other approaches, such as fuzzy sets

Intended learning outcomes (ILOs)
<p>Upon completion of the module, students are able to</p> <ul style="list-style-type: none"> - recognize and model uncertain data, taking into account resulting complexity consequences - apply suitable techniques to model and solve uncertainty in decision-making - differentiate between hard and easy uncertain problems
Teaching methods
<ul style="list-style-type: none"> - lecture with seminar character - interactive lectures - group work in tutorial classes - online forums and discussions - take-home mock exam and its discussion - blended learning
Required attendance
Examination (type of examination, scope)
<p>Oral exam (duration 45 minutes), OR written exam (90 minutes) The type of exam will be communicated within the first two weeks of teaching.</p>
Overall grade relevance
Exam resit opportunities
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
Recommended reading
Additional notes

Econometric Methods

Module number
Course name
Econometric Methods
Module coordinator
Prof. Dr. Harry Haupt

Examination number	Credit points (ECTS)	Hours per week (SWS)
261120	5	3+2
Availability	Duration	Recommended semester
Every winter semester	1 semester	1.

Workload
Lecture 3 SWS (42 h Contact hours and 28 h Self-study) and Tutorial 2 SWS (28 h Contact hours, 42 h Self-study). We are calculating with 15 semester weeks (Lecture, Tutorial and Exam). Each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Data Science
BA Version 1: Methoden
Reference to the LPO I
Recommended prerequisites
Bachelor's level understanding of calculus and matrix algebra, introductory statistics including inferential methods, regression analysis, and testing methods. Basic knowledge of R statistical software is an advantage.
Requirements
None
Language of instruction
English

Content
This module provides an introduction into the core methods of modern econometrics at international standard master's level. The following content is covered: Regression analysis and estimation principles, econometric models, hypothesis testing in regression, exact and asymptotic inference, endogeneity, and heteroscedasticity.
Intended learning outcomes (ILOs)
Students who have successfully completed the module are able: <ul style="list-style-type: none"> • to give a systematic overview of the core principles of modern econometrics. • to understand regression estimation and inference methods and their basic interpretations

<ul style="list-style-type: none"> • to apply the acquired methods and principles to data-based problems. • to perform econometric analyses and will know the underlying mathematical assumptions and the corresponding statistical properties of important regression-based testing and estimation procedures. • to critically assess empirical results, identify potential pitfalls, falsify statements while quantifying the underlying uncertainty, and develop and interpret sound simple models.
Teaching methods
Interactive frontal teaching and discussion of the course content. Teaching of theoretical principles and illustration by examples in lecture and tutorial. Weekly (accessible) lecture and exercise materials and required literature. Some of the tutorials are hands-on using the open-source statistical software R.
Required attendance
Examination (type of examination, scope)
Written exam or home performance assessment (60 minutes) or oral (online) exam
Overall grade relevance
100%
Exam resit opportunities
Recommended reading
<ul style="list-style-type: none"> - Hansen, B. (2021), Econometrics. http://www.ssc.wisc.edu/~bhansen/econometrics/ - Davidson, R. & J.G. MacKinnon (2009), Econometric Theory and Methods, Oxford Univ. Press. - Stock J.H. & M.M.Watson (2019) Introduction to Econometrics. 4e. Pearson. - Angrist J.D. & J.S. Pischke (2009) Mostly Harmless Econometrics. Princeton Univ. Press.
Additional notes

Paneldatenanalyse

Modulnummer
Veranstaltungstitel
Paneldatenanalyse
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Harry Haupt, Dr. Markus Fritsch

Prüfungsnummer	ECTS	SWS
261080	5	2+2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Sommersemester	1 Semester	2

Workload
Vorlesung 2 SWS (30 St. Präsenzzeit und 45 St. Eigenarbeitszeit) und Übung 2 SWS (30 St. Präsenzzeit und 45 St. Eigenarbeitszeit). Es wird mit 15 Semesterwochen gerechnet (Vorlesung, Übung und Prüfung) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
<p>BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Data Science Modulbereich B: Minor Optimization</p> <p>BA Version 1: Accounting, Finance and Taxation – Grundlagen International Management and Marketing – Grundlagen Methoden</p>
Bezug zur LPO I
Empfohlene Voraussetzungen
Kenntnis der Inhalte von „Econometric Methods“. Dies umfasst eine detaillierte Kenntnis des multiplen linearen Regressionsmodells für Querschnittsdaten (OLS-Schätzung, Tests sowie entsprechende zugrundeliegende Annahmen, Projektionsmatrizen) sowie solide Kenntnisse im Umgang mit der Statistiksoftware R. Kenntnisse von Modellen für Zeitreihendaten sind hilfreich, werden jedoch nicht vorausgesetzt.
Verpflichtende Voraussetzungen
Keine
Unterrichtssprache
Deutsch

Inhalte
Zentraler Gegenstand des Moduls ist die Schätzung von Regressionsmodellen für Paneldaten. Hierbei werden neben grundlegenden Schätzverfahren und Fehlerkomponentenmodellen unter anderem die Fixed-Effects- und Random-Effects-Schätzung behandelt. Weitere Kursinhalte sind dynamische Paneldatenmodelle sowie Test- und Prognoseverfahren für Paneldaten (Stichwort: Best

linear unbiased prediction). Die Vermittlung der Kursinhalte erfolgt in Form von Modelltheorie und Anwendung sowie mittels Besprechung und Diskussion ausgewählter Literatur. Die Inhalte werden auch anhand von Beispielen in der Statistiksoftware R veranschaulicht.
Lernergebnisse Lernziele
Nach erfolgreicher Teilnahme am Modul sind die Studierenden in der Lage: <ul style="list-style-type: none"> • Fragestellungen, Anwendungsfelder und Potenziale von Panelmodellschätzungen zu erkennen. • die zentralen Annahmen für statische und dynamische Panelmodellschätzer erläutern und kritisch reflektieren. • geeignete Schätzverfahren für Paneldaten auf Basis der zugrundeliegenden Modelltheorie auszuwählen. • statische und dynamische Panelmodellschätzungen in der Statistiksoftware R implementieren und die Schätzergebnisse interpretieren zu können. • Hypothesen- und Modellspezifikationstests für Panelmodellschätzer anzuwenden und deren Ergebnisse einzuordnen und kritisch zu reflektieren. • aktuelle Literatur zu lesen, zu verstehen und zu diskutieren.
Lehr- und Lernformen
Interaktiver Frontalunterricht und Diskussion von Lehrinhalten. Vermittlung der theoretischen Grundlagen und Illustration anhand von Beispielen in der Vorlesung und Übung. Die Theorie wird auch durch Beispiele in der Statistiksoftware R veranschaulicht. Wöchentliche Vorlesungs- und Übungsmaterialien sowie Pflichtliteratur.
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang)
Schriftliche Prüfung oder häusliche Leistungsfeststellung (60 Minuten) oder mündliche (Online-)Prüfung
Gesamtnotenrelevanz
100%
Wiederholungsmöglichkeit
Literatur
Basisliteratur (andere Auflagen dieser Bücher sind ebenfalls verwendbar): - Wooldridge, J.M. (2019), Introductory Econometrics, 7A, Thomson South-Western. - Stock, J.H. und M.W. Watson (2019), Introduction to Econometrics, 4A, Pearson. - Greene, W.H. (2019), Econometric Analysis, 8A., Pearson. Weiterführende Literatur: - Baltagi, B.H. (2021), Econometric Analysis of Panel Data, 6A., Wiley. - Wooldridge, J. (2010), Econometric Analysis of Cross Section and Panel Data, 2A, MIT Press. - Arellano, M. (2004), Panel Data Econometrics, Oxford University Press. - Angrist, J.D. und J.-S. Pischke (2009), Mostly Harmless Econometrics, Princeton University Press.
Weitere Hinweise
Die Theorie wird auch anhand von Beispielen in der Statistiksoftware R illustriert.

Topics in Applied Econometrics

Module number
Course name
Topics in Applied Econometrics
Module coordinator
Prof. Dr. Harry Haupt, Prof. Dr. Joachim Schnurbus

Examination number	Credit points (ECTS)	Hours per week (SWS)
271030	5	2+2
Availability	Duration	Recommended semester
Usually every summer term	1 semester	2/4

Workload
Lecture 2 SWS (28 h Contact hours and 28 h Self-study) and Tutorial 2 SWS (28 h Contact hours, 28 h Self-study). We are calculating with 15 semester weeks (Lecture, Tutorial and Exam). Each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Artificial Intelligence Modulbereich B: Minor Data Science
BA Version 1: Methoden Accounting, Finance and Taxation – Vertiefung International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
An understanding of introductory statistics including inferential methods and regression analysis and test methods on bachelor level. Basic knowledge of <i>R</i> statistical software is an advantage.
Requirements
Language of instruction
English

Content
This module covers a selection (usually divided in three to four blocks) of fundamental research methods and techniques in applied econometrics. Topics included are: Maximum-Likelihood estimation and inference (for specification tests and various fields of microeconomic applications), advanced applications of least squares and GMM (for modeling heterogeneity and endogeneity in empirical practice), smoothing methods such as kernel and spline regression, robust inferential methods such as quantile regression and their interpretation, machine

learning methods (and their applications in econometrics), and simulation-based methods (such as Bootstrap-, Monte Carlo-, and Bayesian techniques).
Intended learning outcomes (ILOs)
<p>Students who have successfully completed the module:</p> <ul style="list-style-type: none"> • develop a basic understanding of some of the core methods of applied econometrics. • are able to reflect the underlying elementary mathematical foundations and corresponding assumptions of estimation and inference for the covered techniques, while developing an awareness of potential pitfalls in empirical practice. • can implement the methods in the statistical software R, apply the methods to empirical datasets and are able to provide economic interpretations and critically reflect the modeling results.
Teaching methods
<p>Interactive frontal teaching and discussion of the course content. Teaching of theoretical principles and illustration by examples in lecture and tutorial. Weekly (accessible) lecture and exercise materials and required literature. Some of the tutorials are hands-on using the open-source statistical software R.</p> <p>Students are explicitly invited to play an active role in lectures and tutorials through questions and input for discussions. Additionally, students are invited to indicate those parts of the course for which they need additional training.</p> <p>Readings are essential to prepare the class and the exam.</p>
Required attendance
Examination (type of examination, scope)
<p>Portfolio, consisting of two parts:</p> <ul style="list-style-type: none"> • Part 1 (1/3): Short presentation of (a part of) a scientific paper or an application. • Part 2 (2/3): Oral (online) exam or performance assessment at home.
Overall grade relevance
One overall grade, 100%
Exam resit opportunities
Recommended reading
<p>Among others and depending on the selection of topics:</p> <p>Angrist, J.D. & Pischke J.-S. (2009); Mostly Harmless Econometrics, Princeton.</p> <p>Cameron, C.A. & Trivedi, P.K. (2005), Microeconometrics: Methods & Applications, Cambridge.</p> <p>Franses, P.H., van Dijk, D. & A. Opschoor (2014), Time Series Models for Business and Economic Forecasting, Cambridge.</p> <p>Kleiber, C. & Zeileis, A. (2008), Applied Econometrics with R, Springer.</p> <p>Verbeek, M. (2017), A Guide to Modern Econometrics, 5e, Wiley</p>
Additional notes

Advanced Data Science

Module number
Course name
Advanced Data Science
Module coordinator/ examiner(s)
Prof. Dr. Harry Haupt

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-7	2-5
Availability	Duration	Recommended semester
Winter or summer semester	1 semester	

Workload
90 h to 210 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulbereich B: Minor Data Science
LPO I applicability
Recommended prerequisites
Requirements
Language of instruction
English

Content
This module provides in-depth specialist knowledge in the field of data science, including computer-aided, theoretical and applied methods of statistics, econometrics and optimisation and closely related fields.
Intended learning outcomes (ILOs)
Students who have successfully completed the module, <ul style="list-style-type: none"> • identify and name relevant problems in data science and relate them to each other. • name and interpret business fundamentals in data science and mobilise them to address in-depth issues. • name central and in-depth methods in data science, analyse their results and classify them in the context of the literature. • establish links between the issues and topics covered and current cases in business practice. • Recognise the potential and limitations of objectives, approaches and instruments in data science in the light of current research and reflect on them critically.

Teaching methods
Different teaching and learning formats are used depending on the course.
Required attendance
Examination (type of examination, scope)
Exam or portfolio
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Modulbereich B: Minor Digital Management and Strategy

Advanced Strategic Sensitivity and Digitalization

Module number
Course name
Advanced Strategic Sensitivity and Digitalization
Module coordinator
Prof. Dr. Andreas König

Examination number	Credit points (ECTS)	Hours per week (SWS)
264507	5	4
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Workshop 4 SWS (60h presence time and 90h own working time)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Business Administration Master's programme.
Requirements
Language of instruction
English

Content
This workshop is concerned with two focal questions: (1) How can we identify digital trends? (2) How can we develop innovative digital business models and communicate them in a way that important stakeholders appreciate, remember, use, and/or fund them? In this quest, we teach approaches and methods from management, innovation and entrepreneurship research, communication research, and leadership studies. The central, unifying concept participants learn to apply and leverage is that

<p>of strategic sensitivity, i.e., deliberate and research-driven search for anomalies to taken-for-granted business assumptions and the purposefully entrepreneurial implementation of innovative ideas. Once acquainted with these theories and methods, the participants will work in teams to develop recommendations and communicate concepts for a current real world managerial problem. This semester, an international manufacturer of passive electronic components will present a digital challenge to the students.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>After successful participation in this course, students can:</p> <ul style="list-style-type: none"> • Explain the concept of strategic sensitivity and are familiar with recent developments in digitalization. • Apply a set of empirical methodologies to induce and test hypotheses that underlie and feed their strategic thinking. • Solve digital challenges strategically and develop own digital business models. • Develop their presentation skills by pitching their own innovations to an expert panel and communicate them successfully.
<p>Teaching methods</p>
<ul style="list-style-type: none"> • Interactive teaching • Classroom discussions and case study in group work • Digital presentation methods
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<ul style="list-style-type: none"> • Portfolio
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Chevallier, A. and Enders, A., 2022. <i>Solveable</i>. Pearson UK.</p>
<p>Additional notes</p>
<ul style="list-style-type: none"> • The course is offered as a block course. • The course can be credited in the DTE Pathfinder • The course will be held in English. • Typically, the course will be blocked within the first two weeks of the semester. • There will be a mid-term presentation and a final presentation. • Please note that you have to apply for this workshop. <p>For further information, please visit Stud.IP or our homepage via https://www.wiwi.uni-passau.de/strategie-innovation/studium/seminare-und-workshops/</p>

Entwicklung von Managementfähigkeiten

Module number
Course name
Developing Management Skills
Module coordinator/ examiner(s)
Prof. Dr. Marina Fiedler

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2+2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Workload (to be calculated in hours of 60 minutes over 15 semester weeks, i.e. 14 lecture weeks + 1 exam week)
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
LPO I applicability (only for Teacher Education Programmes)
Recommended prerequisites
Requirements
Language of instruction
English

Content
The aim of the module is to emphasize the importance and significance of management skills, to learn basic management skills, to explain a learning model for developing management skills and to critically reflect on the lecture content. The following aspects will be covered: <ul style="list-style-type: none"> • Personal skills • Happiness, well-being and work • Developing self-awareness • Stress management • Analytical and creative problem solving

<ul style="list-style-type: none"> • Power and influence • Motivation and engagement • Management of positive change <p>Further information about the course will be available in Stud.IP at the start of the course.</p>
<p>Intended learning outcomes (ILOs)</p> <p>After successfully completing the module, students are able to:</p> <ul style="list-style-type: none"> • explain the importance and development of various management skills. • assess their own management skills in terms of strengths and weaknesses. • analyze the management skills necessary for companies. • develop a management skills development program that is aligned with organizational goals, values and strategies. • use social skills to work effectively in a team. • argue and present their own ideas and concepts in a targeted and concise manner.
<p>Teaching methods</p> <ul style="list-style-type: none"> • The lecture will be conducted in German and audio-recorded. An AI-generated English audio translation will be available after each session. International participants are welcome to attend and contribute in either German or English. • Guest lectures by experts in the field • Group project • The exam can be taken in either German or English
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>This course is a portfolio course. The overall grade is composed of two parts:</p> <ul style="list-style-type: none"> • Part 1: group work, 25 points • Part 2: 60-minute written exam, 60 points • Overall grade: A maximum of 85 points can be achieved in total (part 1 and written exam), which is used to calculate the overall grade.
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>If you fail, you can repeat all courses in accordance with § 6 of the subject-specific study and examination regulations.</p>
<p>Recommended reading</p>
<p>Additional notes</p> <p>Strong management skills are essential for professional success—both in leadership positions and teamwork. This course provides a research-oriented yet practical approach to developing these competencies and preparing for real-world challenges. The focus is on theory development and knowledge generation, enabling not only the application of existing concepts but also their critical evaluation and further development.</p> <p>The course covers key management skills, including self-awareness (e.g., emotional intelligence, attribution style, strengths and virtues, resilience), stress and time management, analytical and creative problem-solving, and the impact of artificial intelligence on learning and management. In addition to theoretical foundations, the course emphasizes methodological competencies such as critical thinking, academic research, and data-driven decision-making.</p>

Through interactive lectures and a semester-long group project, students will develop a comprehensive understanding of what management skills are and how to enhance them effectively. The course is not just about theoretical concepts but also their practical application. Teamwork, communication skills, and intercultural competence are as much in focus as the independent development of innovative approaches to improving management skills.

As part of the group project, generative AI will be used in a targeted manner—whether to support creative processes or optimize problem-solving strategies. At the same time, the course encourages critical reflection on the limitations of AI and how it can be effectively and value-adding in practice. In addition to developing management skills, students will also engage with digital literacy and the reflective use of AI-driven methods.

The final grade consists of a group project (30%) and a written exam (70%). The exam can be taken in German or English.

International students are welcome! The lecture is conducted in German, but AI-generated English audio translations will be available. Contributions in both German and English are explicitly encouraged. Please note the current information provided in the course and in Stud.IP.

Fundamentals of Digitalization and Digital Trends

Module number
Course name
Interdisciplinary Lecture Series for Master Students: Fundamentals of Digitalization and Digital Trends
Module coordinator
Prof. Dr. Andreas König

Examination number	Credit points (ECTS)	Hours per week (SWS)
266700	5	2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture 2 SWS (30h presence time and 120h working time)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Entrepreneurship
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Business Administration Master's programme
Requirements
Language of instruction
English

Content
This interdisciplinary lecture series addresses digital trends and how they can be utilized within society. Each year, the lecture focuses on a different topic within the field, such as digital health, human-computer interaction, brain-computer interfaces, wearable computing, anthro-pomorphic hardware, visual analytics, cyber security, data and health, legal tech, blockchain, fin tech, 4DPrinting, and so forth. In the lectures, scholars from the university, distinguished guest scholars, and practitioners introduce a variety of technological developments and their impact on businesses,

the economy, and society. Students will gain a deeper insight into the topic through scientific reading assignments.
Intended learning outcomes (ILOs)
After successful participation in this course, students <ul style="list-style-type: none"> • Formulate the core tools and concepts of current digital trends • Explain the central theories of research in the context of digital trends and the research environment and the theoretical issues discussed in current innovation and entrepreneurial research • Reflect real-life digital trends using the discussed instruments and develop strategies based on them • Identify and utilize digital trends to create own new business models • Understand and utilize modern strategic decision making tools
Teaching methods
<ul style="list-style-type: none"> • Interactive teaching • Lectures by professors and practitioners • Self-study of assigned research papers
Required attendance
Examination (type of examination, scope)
Written exam, 60 minutes + 5 min reading time, 100% of the final grade No ERASMUS special exams
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
For more information regarding the next semester's topics and lecturers, please visit Stud.IP.

Organizational Behavior und Unternehmensführung

Module number
Course name
Organizational Behavior
Module coordinator/ examiner(s)
Prof. Dr. Marina Fiedler

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2 + 2
Availability	Duration	Recommended semester
Every summer semester	1 semester	1. - 4. semester

Workload
Workload (to be calculated in hours of 60 minutes each over 15 semester weeks, i.e. 14 weeks of lectures + 1 week of exams)
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
LPO I applicability (only for Teacher Education Programmes)
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's program in Business Administration. Bachelor's degree in economics or a related field.
Requirements
None
Language of instruction
English

Content
Numerous studies show that employee behavior has an impact on key business metrics such as employee turnover, profit and sales, and can thus create sustainable competitive advantages for the company. The aim of the course is to highlight the significance and importance of corporate governance and behavior in organizations with particular reference to change in organizations. The following aspects will be covered: <ul style="list-style-type: none"> • leadership styles • communication and feedback

<ul style="list-style-type: none"> • negotiation management • conflict management • teamwork and diversity • Further information on the module can be found in Stud.IP at the start of the course.
<p>Intended learning outcomes (ILOs)</p> <p>After successfully completing the module, students are able to:</p> <ul style="list-style-type: none"> • determine factors influencing the behavior of managers • understand the context and importance of leadership behavior in organizations • assess behavioral dynamics in organizations based on current trends
<p>Teaching methods</p> <ul style="list-style-type: none"> • The lecture will be conducted in German and audio-recorded. An AI-generated English audio translation will be available after each session. International participants are welcome to attend and contribute in either German or English. • Guest lectures by experts in the field • Group project • The exam can be taken in either German or English
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>This course is a portfolio course. The final grade is made up of two components: Part 1: Creation of a group project, 25 points Part 2: 60-minute written exam, 60 points Overall grade: A maximum of 85 points can be achieved in total (part 1 and part 2), from which the overall grade is calculated. Please note the current information in the course and in Stud.IP.</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>If you fail, you can repeat all courses in accordance with § 6 of the subject-specific study and examination regulations.</p>
<p>Recommended reading</p>
<p>Additional notes</p> <p>Strong leadership competencies and a deep understanding of organizational behavior are essential for professional success—both in leadership positions and teamwork. This course takes a research-oriented approach to analyzing the importance and implications of corporate leadership and organizational behavior, particularly in the context of digital transformation.</p> <p>The course develops subject-specific competencies in the field of organizational behavior and corporate leadership. This includes leadership style models, communication theories and models, feedback mechanisms, negotiation management, and conflict resolution techniques. Students gain a solid understanding of these concepts and learn to apply them evidence-based to real-world business situations.</p> <p>In addition to acquiring foundational knowledge, the course emphasizes methodological competencies. These include critical reflection, analytical problem-solving, and data-driven decision-making, which help students systematically assess management challenges and develop</p>

well-founded strategies. Furthermore, the course enhances **scientific analysis skills and the ability to apply empirical research findings to practical business issues**.

Through **interactive lectures and exercises**, students not only gain a **comprehensive understanding of corporate leadership and organizational behavior**, but also strengthen their **social competencies**. Students enhance their **communication skills, teamwork, and intercultural awareness** by discussing theories and methods in groups and applying them to practical case studies.

As part of the **group project, generative AI is strategically implemented**—whether to **support communication strategies, optimize negotiation processes, or analyze conflict resolution approaches**. At the same time, the course encourages **critical reflection on the limitations and potential of AI** in these areas. This fosters not only **digital literacy** but also **innovation capability and responsible engagement with AI-powered technologies**.

Special emphasis is placed on **critical reflection and independent thinking**. Students are encouraged to **make well-founded decisions independently, navigate uncertainties in leadership practice, and engage with ethical considerations**.

The final grade consists of a **group project (30%) and a written exam (70%)**. The exam can be taken in **German or English**.

International students are welcome! The lecture is conducted in **German**, but **AI-generated English audio translations** will be available. Contributions in both **German and English** are explicitly encouraged. Please note the current information in the course and in Stud.IP.

Organizations and Innovation Strategy

Module number
Course name
Organizations and Innovation Strategy
Module coordinator
Prof. Dr. Carolin Häussler, Dr. Patrick Figge

Examination number	Credit points (ECTS)	Hours per week (SWS)
264190	5	4
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Lecture: 2 SWS (30 hrs. class instruction, 65 hrs. self-study) Exercise Class: 2 SWS (15 hrs. class instruction, 40 hrs. self-study)
Calculation is based on: every hr. per semester week corresponds to 60 minutes. One semester presumably consists of 15 weeks, i.e., 14 course and 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Entrepreneurship
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
Requirements
Language of instruction
English

Content
This course focuses on the organizational and strategic challenges companies face in order to obtain a sustainable competitive advantage. It engages in an application-oriented analysis of intercompany interaction along the value chain. The course discusses how companies organize to innovate and decide for strategic moves in order to attain competitive advantage. Amongst others, topics covered

by this course will be pricing decisions, market entry decisions, intellectual property protection, network effects, and vertical relations within the value chain.
Intended learning outcomes (ILOs)
<p>Students who have successfully participated in the module "Organizations and Innovation Strategy",</p> <ul style="list-style-type: none"> • explain key theoretical concepts of management, competition and strategy science. • combine and compare knowledge of theoretical concepts with the understanding of emerging trends. In so doing, students discuss resulting consequences for strategic decision-making in organizations, e.g., the strategic implications of network effects on the management of platform ecosystems. • perform analyses to quantify abstract decision-making scenarios through game theoretic and economic models (e.g., simultaneous and sequential decision-making games). • assess corporate strategies through analyzing competitive environments surrounding organizations. • develop adequate recommendations for organizations.
Teaching methods
<ul style="list-style-type: none"> • Interactive lecture • Discussion of contents • Discussion of questions and case studies linked to the organizational and innovation strategy of companies • Interactive surveys and classroom experiments
Required attendance
Examination (type of examination, scope)
Written exam at the end of the course (60 Minutes)
Overall grade relevance
Exam (100%)
Exam resit opportunities
Gem. der Prüfungs- und Studienordnung für den Masterstudiengang
Recommended reading
Additional notes
<ul style="list-style-type: none"> • This lecture replaces the lecture "Organizational and Competitive Strategy" (you cannot include both courses in your degree program) • Guest lectures, integration of videos, case studies • A weekly exercise class (#32825) will supplement the lecture by repeating and intensifying core concepts. • The module is applicable to the Certificate Program in Digital Technology and Entrepreneurship: Entrepreneurial Pathfinder.

Reporting of Digital Business Models

Module number
Course name
Reporting of Digital Business Models
Module coordinator/ examiner(s)
Prof. Dr. Christoph Pelger

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	3
Availability	Duration	Recommended semester
Every summer semester, but not in the summer term 2025	1 semester	

Workload
Lecture 3 SWS (45 hours class interaction; 105 hours self-study). The calculation is based on 15 semester weeks (14 lecture weeks + 1 exam week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Reporting and Controlling
BA Version 1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Basic knowledge of financial accounting (not necessarily IFRS)
Requirements
Language of instruction
English

Content
Digital business models are ever more pervasive in business practice. The traditional financial reporting approaches, however, are limited in depicting the key value drivers of digital business models in a transparent and useful manner. This raises the following questions: <ul style="list-style-type: none"> • How informative are financial reports of (listed) companies with digital business models about their key value drivers? • How could financial reporting be transformed to reflect the increasing importance of digital business models?

<p>This course first introduces relevant International Financial Reporting Standards (IFRS) that focus on the recognition and measurement of intangible assets. Cases of listed companies with digital business models are used to reflect on the abilities and limitations of current accounting standards to provide decision-useful information. Current research is then mobilized to shed light on more general Major Accounting and Tax, Minor Reporting and Controlling, Minor Digital Management and Strategy issues with the accounting for intangible assets under IFRS. Finally, current standard-setting and other regulatory developments in the area of intangible assets accounting are discussed.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>After successful participation in this course, students</p> <ul style="list-style-type: none"> • Summarize relevant financial reporting standards on intangible assets and apply them to examples and practical cases. • Assess academic research on the reporting of intangible assets. • Outline key aspects of digital business models and assess the limits of depicting them in financial statements. • Analyze the financial statements of listed companies with digital business models. • Develop suggestions of how the financial reporting standards could be improved to provide more decision-useful information about companies with digital business models. • Present their insights into practical cases and research studies effectively in oral presentations and short essays.
<p>Teaching methods</p>
<p>Lecture with seminar character (Interactive lecture with cases, student presentations and discussions; exercises in the tutorial).</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Individual essay(s), individual and group presentations, active participation in the sessions.</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Recommended reading</p>
<p>Additional notes</p> <p>The course is taught in English.</p> <p>The number of participants is limited. Prior application for this course is necessary. Information on the application process are provided on the website of the Chair of Accounting and Auditing and in Stud.IP.</p>

Strategy for High-Tech Startups

Module number
Course name
Strategy for High-Tech Startups
Module coordinator
Prof. Dr. Carolin Häussler, Dr. Patrick Figge

Examination number	Credit points (ECTS)	Hours per week (SWS)
264509	5	2+2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture: 2 SWS (30 hrs. class instruction, 65 hrs. self-study) Exercise Class: 2 SWS (15 hrs. class instruction, 40 hrs. self-study)
Calculation based on: every hr. per semester week corresponds to 60 minutes. One semester presumably consists of 15 weeks, i.e., 14 course and 1 exam week.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Entrepreneurship
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
In accordance with § 3 of the study and examination regulation for the master degree program Business Administration.
Requirements
Language of instruction
English

Content
Founding one's own company requires not only a promising business idea but also a successful management of upcoming strategic and organizational challenges. Successfully performing these management tasks is a substantial part of being a successful entrepreneur.

<p>This course focuses on these management tasks concerning the founding of a company, especially with regard to high-technology startups. Inspired by the real founding process, the course starts with an introduction to venture opportunities, concepts, and strategies. Following this introduction, concepts on venture formation, organizational planning, as well as technology development strategy are discussed in the context of high-technology start-ups. The course closes with answers to the question how to finance and how to build the venture.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have successfully participated in the module "Strategy for High-Tech Startups",</p> <ul style="list-style-type: none"> • explain and apply the key concepts and theories in entrepreneurship. • outline core findings of most influential and recent scientific studies in the field of entrepreneurship. • transfer knowledge of entrepreneurship theories into in-class discussions so that they can interpret recent developments in entrepreneurship with a particular focus on the influences of digitalization, new technologies, and strategic implications for high-tech startups. • analyze different entrepreneurial strategies and assess their implications, e.g., for the economy. • develop adequate suggestions for entrepreneurial high-tech organizations.
<p>Teaching methods</p>
<ul style="list-style-type: none"> • Interactive lecture • Discussion of Contents • Discussion of case studies
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Written exam at the end of the course (60 Minutes)</p>
<p>Overall grade relevance</p>
<p>Exam (100%)</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<ul style="list-style-type: none"> • Byers, T.H./Dorf, R. /Nelson, A.J. (2010): Technology Ventures – From Idea to Enterprise, McGraw-Hill. • Selection of essays, articles, and case-studies
<p>Additional notes</p>
<ul style="list-style-type: none"> • Guest lectures, integration of videos, case studies. • A weekly exercise class (#32905) will supplement the lecture by repeating and intensifying core concepts. • The module is applicable to the Certificate Program in Digital Technology and Entrepreneurship: Entrepreneurial Pathfinder.

Sustainability by Digitalization

Module number
33154
Course name
Sustainability by Digitalization
Module coordinator
Prof. Dr. Marina Fiedler

Additional notes	Credit points (ECTS)	Hours per week (SWS)
XXXXXX	5	2
Availability	Duration	Recommended semester
Every semester	1 semester	

Workload
Distributed Workload (to calculate as 60 minutes per SWS for 15 semester weeks; 14 lectures + 1 examination week).
Module applicability
BA Version 2025: Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Sustainability
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
reference to the LPO I
Recommended prerequisites
According to the Studien- und Prüfungsordnung of the respective degree.
Requirements
Language of instruction
English

Content
In the course, the students learn how digitalization can contribute to the realization of ecological, social and governance sustainability goals. The following topics are covered as part of the course: <ul style="list-style-type: none"> • Social Sustainability by Digitalization • Ecological Sustainability by Digitalization • Sustainable Governance by Digitalization • Sustainability and Digital Interventions • Discussion points, commonalities and conflicts on ecological, social and sustainable governance • Further information will be provided at the start of the course (in Stud.IP) and the course will be hosted in Ilias.

Intended learning outcomes (ILOs)
<p>After successful participation in the course, students can</p> <ul style="list-style-type: none"> • explain the role that digitalization plays in the attainment of ecological sustainability (e.g., circular economy, internal IS systems that foster ecological sustainability, real time feedback and energy conservation, and in practical environments such as an airport) • explain the role that digitalization plays in the attainment of social sustainability (e.g., the touchpoints of digitalization and social sustainability in general, and in practical environments such as the workplace) • explain the role that digital technologies play for governance aspects of sustainability (e.g., in the creation, management and use of key performance indicators) • assess the institutional logics that may support or hinder sustainability and digitalization efforts • illustrate how goals can contribute to individual and organizational motivation to attain higher levels of sustainability • reflect on the conflicts and commonalities of the various aspects of sustainability
Teaching methods
<ul style="list-style-type: none"> • Hybrid lecture with asynchronous and synchronous elements provided in Zoom and Ilias • Self-learning elements like quizzes to assess understanding of presented topics • Guest lectures of experts on the synergies of sustainability and digitalization
Required attendance
Examination (type of examination, scope)
100% final exam (60 minutes)
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
The lecture is in English; exam questions can be answered in German and English

Advanced Digital Management

Module number
Course name
Advanced Digital Management
Module coordinator/ examiner(s)
Prof. Dr. Andreas König

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-7	2-5
Availability	Duration	Recommended semester
Winter or summer semester	1 semester	

Workload
90 h to 210 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulbereich B: Minor Digital Management and Strategy
LPO I applicability
Recommended prerequisites
Requirements
Language of instruction
English

Content
This module provides in-depth specialist knowledge in the field of digital management. This includes, among other things, in-depth topics in individual areas of strategic and operational management, corporate governance, human resource management, and the specifics of management and corporate governance in specific contexts, particularly digitalisation, as well as current trends and developments in management.
Intended learning outcomes (ILOs)
Students who have successfully completed the module, <ul style="list-style-type: none"> • identify and name relevant problems in digital management and relate them to each other. • name and interpret business fundamentals in digital management and mobilise them to address in-depth issues. • name central and in-depth methods in digital management, analyse their results and classify them in the context of the literature. • establish links between the issues and topics covered and current cases in business practice.

<ul style="list-style-type: none">• Recognise the potential and limitations of objectives, approaches and instruments in digital management in the light of current research and reflect on them critically.
Teaching methods
Different teaching and learning formats are used depending on the course.
Required attendance
Examination (type of examination, scope)
Exam or portfolio
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Modulbereich B: Minor Economics

Advanced International Economics

Module number
37070
Course name
Advanced International Economics
Module coordinator
Prof. Dr. Sebastian Krautheim

Examination number	Credit points (ECTS)	Hours per week (SWS)
272031	7	2
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Seminar: 2 SWS (30 hours of attendance and 180 hours of independent study time) Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Minor Economics BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
Reference to the LPO I
Recommended prerequisites
This seminar is targeted to students who have completed the courses "Fundamentals of International Trade" (FIT) as well as "Advanced International Trade" (AIT) / "Empirics of International Trade" (EIT). Most of the topics directly relate to papers touched upon in the AIT/EIT course. In individual cases also topics unrelated to the two courses are offered.
Requirements
Language of instruction
English

Content
This seminar covers different topics in the fields of international trade, international macroeconomics, international organization of production, trade policy, identity politics and globalization backlash.

This seminar has a clear research orientation and enables students to subsequently engage in their own independent research at the frontier.
Intended learning outcomes (ILOs)
<p>Students who have successfully participated in the module “Advanced International Economics”</p> <ul style="list-style-type: none"> • describe the principles of good scientific practice as well as strategies for academic writing. • outline the state of the literature that relates to their specific topic. • present the main results of their work in a term paper and an oral presentation including the relation to findings in the literature. • perform, where appropriate, an analysis along the lines of a specific paper (depending on the topic this may be on an intuitive level or a graphical, algebraic or empirical analysis). • justify the exact focus and structure chosen for the term paper and the presentation. • assess pros and cons of different approaches in the literature and how they contribute to a better understanding of the topic and, where appropriate, to academic or policy debates. • develop and explore starting points for the introduction of novel issues and research questions into the literature at the frontier.
Teaching methods
Seminar meetings and discussions. Advice and feedback on the term paper and the final presentation.
Required attendance
Examination (type of examination, scope)
<p>Students write a term paper on a topic that is assigned at the beginning of the seminar. The term paper should have 8–12 pages (13000–15600 characters). Besides, students present their work in the seminar and engage in discussions.</p> <p>Portfolio: The final grade consists of</p> <ul style="list-style-type: none"> • 50% term paper • 50% final presentation
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
<ul style="list-style-type: none"> • Antràs, P. and E. Helpman (2004). “Global Sourcing”. In: <i>Journal of Political Economy</i> 112 (3), pp. 552–580. • Arkolakis, C. (2010). “Market Penetration Costs and the New Consumers Margin in International Trade”. In: <i>Journal of Political Economy</i> 118 (6), pp. 1151–1199. • Bernard, A. B., S. J. Redding, and P. K. Schott (2007). “Comparative Advantage and Heterogeneous Firms”. In: <i>The Review of Economic Studies</i> 74.1, pp. 31–66. • Bernard, A. B., S. J. Redding, and P. K. Schott (2011). “Multiproduct Firms and Trade Liberalization”. In: <i>The Quarterly Journal of Economics</i> 126.3, pp. 1271–1318. • Chaney, T. (2008). “Distorted Gravity: The Intensive and Extensive Margins of International Trade”. In: <i>American Economic Review</i> 98 (4), pp. 1707–1721. • Eaton, J. and S. Kortum (2002). “Technology, Geography, and Trade.” In: <i>Econometrica</i> 70, pp. 1741–1779. • Eaton, J., S. Kortum, and F. Kramarz (2011). “An Anatomy of International Trade: Evidence From French Firms”. In: <i>Econometrica</i> 79.5, pp. 1453–1498. • Eckel, C. and J. P. Neary (2010). “Multi-Product Firms and Flexible Manufacturing in the Global Economy”. In: <i>Review of Economic Studies</i> 77 (1), pp. 188–217.

- Egger, H. and U. Kreickemeier (2012). "Fairness, Trade, and Inequality". In: *Journal of International Economics* 86.2, pp. 184–196.
- Helpman, E., O. Itskhoki, and S. Redding (2010). "Inequality and Unemployment in a Global Economy". In: *Eco* 78 (4), pp. 1239–1283.
- Helpman, E., M. J. Melitz, and Y. Rubinstein (2008). "Estimating Trade Flows: Trading Partners and Trading Volumes". In: *The Quarterly Journal of Economics* 123 (2), pp. 441–487.

Additional notes

Advanced International Trade

Module number
37030
Course name
Advanced International Trade
Module coordinator
Prof. Dr. Sebastian Krautheim

Examination number	Credit points (ECTS)	Hours per week (SWS)
272180	5	2
Availability	Duration	Recommended semester
every summer semester	1 semester	

Workload
Lecture: 2 SWS (30 hours of attendance and 45 hours of independent study time) Exercise class: 2 SWS (30 hours of attendance and 45 hours of independent study time) Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 week courses + 1 week exam.
Module applicability
BA Version 2025: Modulbereich B: Minor Economics BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
Reference to the LPO I
Recommended prerequisites
Having completed the course "Fundamentals of International Trade" is highly recommended. Otherwise a good knowledge of the two-countries-two-goods Ricardian model as well as the Krugman (1980) model is needed to follow the course.
Requirements
Language of instruction
English

Content
Over the last two decades, academic research on international trade, foreign direct investment (FDI), outsourcing and trade policy has been booming. This literature is at the core of this module. Possible topics may include among others: <ol style="list-style-type: none"> 1. International trade and firm heterogeneity (Melitz 2003, Chaney 2008) 2. The international organization of production (Antràs 2003) 3. International Trade, Global Sourcing and International NGO activity

<p>4. Foundations for quantitative trade analysis: Eaton and Kortum (2002)</p> <p>5. Into the machine room of our models – the CES price index</p> <p>6. Trade Policy and Identity Politics: how to make sense of political support for Trump’s trade policy (Grossman and Helpman 2021)</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have successfully participated in the module “Advanced International Trade “</p> <ul style="list-style-type: none"> • explain assumptions, mechanics and key innovations of the seminal contributions providing the basis for state-of-the-art research in International Trade. • describe relationships between these models and their academic “ancestors” and the recent empirical findings these models can accommodate. • perform, where appropriate, a complete analytical (algebraic) analysis (under autarky and trade) of the models’ general equilibrium. • illustrate how the models can be used to make predictions on the effects of trade liberalizations as well as the introduction of impediments to trade like tariffs or non-tariff trade barriers. • assess pros and cons of different modelling assumptions as well as the appropriateness of different estimation approaches for the empirical analysis of international trade flows. • develop starting points for the introduction of novel issues and research questions into the literature at the frontier.
<p>Teaching methods</p>
<p>Lectures and exercise classes taught in English.</p>
<p>Required attendance</p>
<p></p>
<p>Examination (type of examination, scope)</p>
<p>Written exam, 90 min., 100%</p>
<p>Overall grade relevance</p>
<p></p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p></p>
<p>Additional notes</p>
<p></p>

Advanced Macroeconomics

Module number
36311
Course name
Advanced Macroeconomics
Module coordinator
Prof. Dr. Johann Graf Lambsdorff

Examination number	Credit points (ECTS)	Hours per week (SWS)
271101	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture: 2 SWS, attendance time (in hours) = 30, working time (in hours) = 45. Tutorial: 2 SWS, attendance time (in hours) = 30, working time (in hours) = 45.
Module applicability
BA Version 2025: Modulbereich B: Minor Economics
BA Version 1: Accounting, Finance and Taxation – Vertiefung
Reference to the LPO I
Recommended prerequisites
Basic knowledge in microeconomics and macroeconomics recommended.
Requirements
Language of instruction
English

Content
The lecture presents state-of-the-art macroeconomic models based on micro-founded methods of dynamic optimization and pricing, related to Calvo pricing, the Phillips-curve, lifecycle consumption, the Taylor rule, the zero-lower bound and the term structure of the interest rate. It employs experimental games in class to detect behaviorally founded limitations to these models (higher-order beliefs, myopia ...). Students learn to analyze macroeconomies and related policies and to recommend policies for governments as well as financial investment decisions for the private sector.
Table of Contents:
<ul style="list-style-type: none"> • The Business Cycle • Monetary Policy

<ul style="list-style-type: none"> • Fiscal Policy • Inflation and the Phillips Curve • The Term Structure of Interest Rates • Policy Failures and the Liquidity Trap
<p>Intended learning outcomes (ILOs)</p> <p>Students who have participated in the module "Advanced Macroeconomics",</p> <ul style="list-style-type: none"> • describe macroeconomic relationships between output, output gap, consumption, savings, investment, employment, inflation and interest rates at an advanced level, • use real-world data on these variables and interpret them in a macroeconomic context, • combine aggregates and interpret them within the framework of advanced formal mathematical models • evaluate the adequacy of current macroeconomic policy measures • theorize about the effects of shocks and economic policy measures at the frontier of current research, • produce recommendations for economic policy measures.
<p>Teaching methods</p> <p>Lecture + Tutorial</p> <p>Classroom lecture with interactive elements. Students write 4 out of 5 (300-word) policy briefs during the semester, in which they apply the Content of each chapter to a current topic in politics and finance.</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>60 % final exam (60 minutes), 40% short policy briefs</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Additional notes</p>

Advanced Microeconomics (Game Theory)

module number
Course name
Advanced Microeconomics
module coordinator
Prof. Dr. Stefan Bauernschuster / Dr. Benedikt Janzen

examination number	credit points (ECTS)	hours per week (SWS)
	5	2+2
availability	Duration	recommended semester
Winter semester	1 semester	1

Workload
Lecture 2 SWS (30 hours class instruction; 45 hours self-study) Uebung 2 SWS (30 hours class instruction; 45 hours self-study)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
module applicability
BA Version 2025: Modulbereich B: Minor Economics
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
reference to the LPO I
recommended requirements
Solid knowledge in (undergraduate) microeconomics
obligatory requirements
language
English

Content
This course provides students with the core elements of microeconomic theory. We start by studying consumer theory including welfare evaluation. In this part of the module, we assume that choices result in perfectly certain outcomes. We relax this assumption in the second part of the course, when we analyze choice under uncertainty. We finally focus on game theory, where we apply what we learn in choice under uncertainty to the study of simultaneous- and dynamic-games. Although the focus of the course is theoretical, empirical applications of the models will also be discussed.
Table of contents: Chapter 1: Preferences, utility and choices

<p>Chapter 2: Consumer preferences and utility Chapter 3: Consumer choice Chapter 4: Duality Chapter 5: Substitution and wealth effects Chapter 6: Welfare evaluation Chapter 7: Choice under uncertainty Chapter 8: Non-cooperative game theory: Basic elements Chapter 9: Simultaneous-move games Chapter 10: Dynamic games of complete information Chapter 11: Repeated games</p>
<p>intended learning outcomes (ILOs)</p>
<p>Students who have successfully participated in this module are be able to</p> <ul style="list-style-type: none"> • demonstrate a comprehensive understanding of the key elements of microeconomic theory including the concepts, assumptions and mechanics of consumer theory, choice under uncertainty and game theory • comment critically on the limitations of these theories • assess how they can be applied to real-world situations
<p>teaching methods</p>
<p>Classroom lecture with interactive elements (Vorlesung mit Seminarcharakter) Übung with tutorials and student presentations</p>
<p>required attendance</p>
<p>examination (type of examination, scope)</p>
<p>Final exam (90 minutes)</p>
<p>overall grade relevance</p>
<p>100% final exam</p>
<p>possibility of retake exam</p>
<p>reading list</p>
<ul style="list-style-type: none"> • Mas-Colell, A., Whinston, M. D. and Green, J. R. (1995), Microeconomic Theory, Oxford University Press. • Muñoz-Garcia, F. (2017) Advanced Microeconomic Theory. An Intuitive Approach with Examples, MIT-Press. • Espinola-Arredondo, A., & Muñoz-Garcia, F. (2023). Game Theory: An Introduction with Step-by-step Examples, Springer
<p>additional notes</p>
<p>Exam question must be answered in English</p>

Behavioral Game Theory

Module number
Klicken oder tippen Sie hier, um Text einzugeben.
Course name
Behavioral Game Theory
Module coordinator
Dr. Kevin Grubiak

Examination number	Credit points (ECTS)	Hours per week (SWS)
Klicken oder tippen Sie hier, um Text einzugeben.	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture: 4 SWS, attendance time (in hours) = 60, self-work time (in hours) = 90.
Module applicability
Modulbereich B: Minor Economics
Reference to the LPO I
Recommended prerequisites
Knowledge in (advanced) microeconomics and/or game theory recommended.
Requirements
Language of instruction
English

Content
The module analyses the influence of non-standard preferences (fairness, inequality and reciprocity) on human behavior by help of ultimatum and trust games. It introduces to non-standard decision-making and non-standard expectations in order to understand systematic errors in a variety of games, ranging from zero-sum games with mixed strategy equilibria, bargaining games, dominance-solvable games such as the beauty contest and dirty faces game, coordination games and the role of communication. The lecture will be given in English.
Intended learning outcomes (ILOs)
Students who have participated in the module " Behavioral Game Theory", <ul style="list-style-type: none"> • recognize standard concepts in game theory such as roles, stages, strategies, Nash equilibria, deletion of iteratively dominated strategies and mixed strategy equilibria • interpret non-standard types of preferences such as altruism, inequality aversion or reciprocity and non-standard types of expectations (such as level-k) or decision-making (such as present bias), • implement an experiment to be run in class, based on the relevant literature

<ul style="list-style-type: none">• test the outcomes from their experiments against pure game theoretic predictions and related findings from experiments,• relate variations in designs to an identification of behavioural drivers,• produce their own presentation on their findings.
Teaching methods
Lecture with practical part. Students have to implement and present their own experiments.
Required attendance
Examination (type of examination, scope)
Portfolio examination: Written final examination of 60 minutes (50 points). Presentation of 2 experiments in interactive form of about 30 minutes (50 points in total).
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes

Behavioral Public Economics

Module number
35850
Course name
Behavioral Public Economics
Module coordinator
Prof. Dr. Stefan Bauernschuster

Examination number	Credit points (ECTS)	Hours per week (SWS)
274160	5	2+2
Availability	Duration	Recommended semester
Every winter semester	1 semester	3

Workload
Lecture 2 SWS (30 hours class instruction; 45 hours self-study) Uebung 2 SWS (30 hours class instruction; 45 hours self-study)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Minor Economics
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
Reference to the LPO I
Recommended prerequisites
Solid knowledge in (undergraduate) microeconomics and statistics/econometrics Solid knowledge in (undergraduate) public economics
Requirements
Language of instruction
English

Content
The model figure of homo economicus, a rational perfectly informed and self-interested individual who maximizes her utility, is a simple yet powerful tool in theoretical economic models. However, sometimes it fails to provide an adequate picture of individual decision-making processes. In this lecture, we complement the standard approach with insights from behavioral economics to analyze which (new) implications can be drawn from this perspective for the field of public economics. Amongst the topics covered in the lecture are time-inconsistent behavior (hyperbolic discounting) and its implications for the taxation of sin goods such as alcohol or unhealthy food, mental accounting and its implications for labelling social transfers, the salience of information and its

<p>implications for attitudes and behavior, reference points and loss aversion and its implications for labor supply, and the role of default options for retirement and health insurance.</p> <p>Table of Contents: Chapter 1: Neoclassical vs. behavioral economics? Chapter 2: Hyperbolic discounting and sin taxes Chapter 3: Reference points and loss aversion Chapter 4: Mental accounting and narrow bracketing Chapter 5: Limited attention and lack of information Chapter 6: Status quo bias and default options Chapter 7: Debating soft paternalism</p>
<p>Intended learning outcomes (ILOs)</p> <p>Students who have successfully participated in the module “Behavioral Public Economics” are able to</p> <ul style="list-style-type: none"> • demonstrate a clear understanding of the main features and assumptions of neoclassical public economics • identify situations in which individuals’ behavior deviates from the predictions of neoclassical theory and explain these deviations with the help of behavioral economic concepts • develop suggestions in which way insights from behavioral economics might improve policy decisions, • use this knowledge to assess applied research papers, interpret the findings and critically discuss the policy conclusions with their peers
<p>Teaching methods</p> <p>Classroom lecture with interactive elements (Vorlesung mit Seminarcharakter) Uebung with tutorials and student presentations</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>final exam (90 minutes) or portfolio (final exam (90 minutes) and oral presentation)</p>
<p>Overall grade relevance</p> <p>100% final exam or 80% final exam and 20% oral presentation</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p> <ul style="list-style-type: none"> • Abadie, A., Gay, S. (2006), The Impact of Presumed Consent Legislation on Cadaveric Organ Donation: A Cross-Country Study, <i>Journal of Health Economics</i>, 25, 599-620. • Abeler, J., Marklein, F. (2017), Fungibility, Labels, and Consumption, <i>Journal of the European Economic Association</i>, 15(1), 99–127. • Allcot, H. (2011), Social Norms and Energy Conservation, <i>Journal of Public Economics</i>, 95, 1082-1095. • Allcot, H., Lockwood, B., Taubinsky, D. (2019), Should We Tax Sugar-Sweetened Beverages? An Overview of Theory and Evidence, <i>Journal of Economic Perspectives</i>, 33(3), 202-227. • Angner, E. (2012), <i>A Course in Behavioral Economics</i>, New York: Palgrave McMillan. • Angrist, J., Azoulay, P., Ellison, G., Hill, R., Feng Lu, S. (2017), Economic Research Evolves: Fields and Styles, <i>American Economic Review: Papers&Proceedings</i>, 107(5), 293–297. • Bauernschuster, S., Rekers, R. (2022), Speed Limit Enforcement and Road Safety, <i>Journal of Public Economics</i>, 210, 104663.

- Benhassine, N., Devoto, F., Duflo, E., Dupas, P., Pouliquen, V. (2015), Turning a Shove into a Nudge? A Labeled Cash Transfer for Education, *American Economic Journal: Economic Policy*, 7(3), 86-125.
- Bernheim, D., Rangel, A. (2005), Behavioral Public Economics: Welfare and Policy Analysis with Non-Standard Decision-Makers, NBER Working Paper 11518.
- Blumenstock, J., Callen, M., Ghani, T. (2018), Why Do Defaults Affect Behavior? Experimental Evidence from Afghanistan, *American Economic Review*, 108(10), 2868-2901.
- Brownback, A., Sadoff, S., (2020), Improving College Instruction through Incentives, *Journal of Political Economy*, 128(8), 2925-2972.
- Carroll, G., Choi, J., Laibson, D., Madrian, B., Metrick, A. (2009), Optimal Defaults and Active Decisions, *The Quarterly Journal of Economics*, 124(4), 1639-1674.
- Chetty, R. (2015), Behavioral Economics and Public Policy: A Pragmatic Perspective, *American Economics Review: Papers & Proceedings*, 105(5), 1-33.
- Chetty, R., Looney, A., Kroft, K. (2009), Salience and Taxation: Theory and Evidence, *American Economic Review*, 99(4), 1145-1177.
- Choi, J., Laibson, D., Madrian, B., Metrick, A. (2004), For Better or for Worse: Default Effects and 401(k) Savings Behavior, in: Wise, D. (ed.), *Perspectives on the Economics of Aging*, Chicago: University of Chicago Press.
- Congdon, W., Kling, J., Mullainathan, S. (2011), *Policy and Choice – Public Finance through the Lens of Behavioral Economics*, Washington D.C.: Brookings Institution Press
- DellaVigna, S. (2009), Psychology and Economics: Evidence from the Field, *Journal of Economic Literature*, 47(2), 315-372.
- DellaVigna, S., Malmendier, U. (2006), Paying Not to Go to the Gym, *American Economic Review*, 96(3), 694-719
- Dhami, S. (2016), *The Foundations of Behavioral Economic Analysis*, Oxford: Oxford University Press
- Dolls, M., Doerrenberg, P., Peichl, A., Stichnoth, H. (2018), Do Retirement Savings Increase in Response to Information about Retirement and Expected Pensions?, *Journal of Public Economics*, 158, 168-179.
- Fryer, R., Levitt, S., List, J., Sadoff, S. (2022), Enhancing the Efficacy of Teacher Incentives through Framing: A Field Experiment, *American Economic Journal: Economic Policy*, 14(4), 269-299.
- Gabaix, X. (2019), Behavioral Inattention, in: *Handbook of Behavioral Economics*, edited by Bernheim, D., DellaVigna, S., Laibson, D., vol. 2, Elsevier, pp. 261-343.
- Gruber, J., Mullainathan, S. (2005), Do Cigarette Taxes Make Smokers Happier, *Advances in Economic Analysis & Policy* 5(1), Article 4.
- Kooreman, P. (2000), The Labeling Effect of a Child Benefit System, *American Economic Review*, 90(3), 571-583.
- Laibson, D. (1997), Golden Eggs and Hyperbolic Discounting, *Quarterly Journal of Economics*, 112(2), 443-477.
- O'Donoghue, T., Rabin, M. (2003), Studying Optimal Paternalism, Illustrated by a Model of Sin Taxes, *American Economic Review, Papers & Proceedings*, 93(2), 186-191.
- Seiler, S., Tuchmann, A., Yao, S. (2021), The Impact of Soda Taxes: Pass-through, Tax Avoidance, and Nutritional Effects, *Journal of Marketing Research*, forthcoming.
- Sunstein, C. (2013), *The Storrs Lectures: Behavioral Economics and Paternalism*, Yale Law Journal.
- Thaler, R., Benartzi, S. (2004), Save More Tomorrow: Using Behavioral Economics to Increase Employee Saving, *Journal of Political Economy*, 112(1), S164-S187.
- Thaler, R., Sunstein, C. (2003), Libertarian Paternalism, *American Economic Review: Papers & Proceedings*, 93(2), 175-179.
- Thaler, R., Sunstein, C. (2009), *Nudge – Improving Decisions About Health, Wealth and Happiness*, London: Penguin.

Additional notes

Exam question can be answered in English or German

Economics of Corruption

Module number
36309
Course name
Seminar: The Economics of Corruption
Module coordinator
Prof. Dr. Johann Graf Lambsdorff, Dr. Katharina Werner

Examination number	Credit points (ECTS)	Hours per week (SWS)
201301	7	4
Availability	Duration	Recommended semester
Irregular	1 semester (2 Wochen geblockt)	

Workload
Online-Videos: Required total time = 30 hrs., Self-work time 60 hrs. for preparing introductory exam and final exam. Face-to-face event: 60 hours, Writing of report 60 hrs. Calculation is based on the Workload for 7 ECTS (210 hrs.).
Module applicability
BA Version 2025: Modulbereich B: Minor Economics
Reference to the LPO I
Recommended prerequisites
Knowledge in microeconomics and institutional economics is strongly recommended. Interest in experimental economics and game theory is helpful.
Requirements
Language of instruction
English

Content
The course introduces into the economic analysis of corruption, defined as the misuse of public power for private benefit. A focus is put on institutional, behavioral and experimental economics, seeking to address how citizens behave and how officials react to corrupt incentives and sanctions. Approaches to reform, particularly based on the United Nations Convention Against Corruption (UNCAC), are critically discussed and confronted with behavioral insights. Topics covered embrace the 4-eyes principle, Abuse of Office, Corruption Perceptions Index, Debarment, Diffusion of Responsibility, Limiting Discretion, Illicit Enrichment, Intermediaries, Intrinsic Motivation, Job Rotation, Leniency, Nullity of the Basic Contract, Procurement, Separation of Functions and the Tone at the Top.

Intended learning outcomes (ILOs)
<p>Students who have participated in the module "The Economics of Corruption",</p> <ul style="list-style-type: none"> - identify situations of corruption and recall methods for measuring levels of corruption including red flags as well as institutional and behavioural approaches to understanding corruption and reform, - interpret human behaviour as a conflict between selfish interests and honesty and integrity, - implement their own experiment in groups of students, - characterize the results of their experiment through the lens of behavioural models, shedding light on frames, incentives, nudges or similar influences, - produce their own experimental design as a joint work with other students, based on their self-developed research question; combine a statistical analysis of their findings with a discussion of the relevant literature.
Teaching methods
<p>Students must work through 3-hours of lectures that are supplied as pre-recorded videos, to be found in the "video"-section. The slides can be found in the "Dateien"-section on StudIP. Students must prove their understanding of this material in an introductory online-exam in the form of a single-choice test. The test takes place on Sep 29. The exam must be passed for being accepted to the subsequent workshop, which is conducted as a face-to-face event.</p> <p>Guest presentations, case studies, games and simulations are core ingredients of the face-to-face part of the course. These motivate and guide participants in developing their own experiment. This development and subsequent implementation is deepened by help of group-work. Groups jointly develop, design and run an experiment related to corruption and present the findings briefly in the plenary. Each individual participant then submits a final report on the findings. The deadline for the reports will be announced during the workshop.</p>
Required attendance
Examination (type of examination, scope)
<p>For 7 ECTS Portfolio exam (Master IEB, DS and other programs): 15 points introductory online-exam (20 minutes), 25 points (40 minutes) for a final test and 60 points short report (5,000 characters) on the research findings from the group work, where the own contribution to the group work is explained.</p> <p>For 10 ECTS Portfolio exam (Master Governance only!): 15 points introductory online-exam (20 minutes), 20 points (40 minutes) for a final test and 55 points short report (5,000 characters) on the research findings from the group work, where the own contribution is explained, 10 points home assignment (8,000 characters) on a topic about anti-corruption.</p>
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes

Economics of Education

module number
Course name
Economics of Education
module coordinator
Prof. Dr. Stefan Bauernschuster

examination number	credit points (ECTS)	hours per week (SWS)
	5	2+2
Availability	duration	recommended semester
Every summer semester	1 semester	2

Workload
Lecture 2 SWS (30 hours class instruction; 45 hours self-study) Uebung 2 SWS (30 hours class instruction; 45 hours self-study)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
module applicability
BA Version 2025: Modulbereich B: Minor Economics
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
reference to the LPO I
recommended requirements
Solid knowledge in (undergraduate) microeconomics Solid knowledge in microeconometrics, in particular quasi-experimental methods
obligatory requirements
language
English

Content
Human capital is a key factor for growth and prosperity of nations. Due to the crucial role of education, Germany's bad performance in recent international school achievement tests has induced heated debates on problems of the current school system and necessary reforms. The first part of this lecture deals with the role of education for the economic development of countries and the effects of schooling on wages and the risk of getting unemployed. Apart from these labor market related impacts, we also look at the effects of schooling on health, crime, and social engagement. It becomes apparent that education is not only about cognitive but also about non-cognitive skills. The second part of the lecture evolves around the question how educational systems should be designed in order to provide the best possible results for children and youths. In addition to the investigating

<p>effects of early childhood education, we focus on the effects of class size, (early) educational tracking, school autonomy as well as the role of teachers. This analysis is based on an in-depth inspection of seminal empirical research papers.</p> <p>Table of contents:</p> <ol style="list-style-type: none"> 1) Human capital and growth 2) Human capital theory 3) Signalling theory 4) Cognitive and non-cognitive skills 5) Education and health 6) Education, citizenship, and crime 7) Early childhood education 8) Class size effects 9) Effects of (early) tracking 10) The role of teachers
<p>intended learning outcomes (ILOs)</p> <p>Students who have successfully participated in the module are able to</p> <ul style="list-style-type: none"> • illustrate the most important theoretical models in the field of economics of education, such as the human capital theory, signaling theory, or the technology of skill formation • describe and critically discuss the determinants and effects of education • interpret empirical evidence on the topics discussed, and assess the merits and limitations of empirical studies • demonstrate a clear understanding of methods used in empirical research, such as RDD, Difference-in-Differences, and IV • develop informed policy conclusions and contribute to debates on the economics of education • communicate research findings effectively in oral and written formats
<p>teaching methods</p> <p>Classroom lecture with interactive elements (Vorlesung mit Seminarcharakter) Uebung with tutorials and student presentations</p>
<p>required attendance</p>
<p>examination (type of examination, scope)</p> <p>Final exam (90 minutes) or portfolio (final exam (90 minutes) and oral presentation)</p>
<p>overall grade relevance</p> <p>100% final exam or 80% final exam and 20% oral presentation</p>
<p>possibility of retake exam</p>
<p>reading list</p> <ul style="list-style-type: none"> • Angrist, J., Krueger A.B. (1991), Does Compulsory School Attendance Affect Schooling and Earnings? Quarterly Journal of Economics, 106(4), 979-1014. • Becker, G. (1974), A Theory of Social Interactions, Journal of Political Economy, 82(6), 1063–1093. • Becker, G., Murphy, K. (1988), The Family and the State, Journal of Law and Economics, 31, 1-18. • Becker, S., Grosfeld, I., Grosjean, P., Voigtländer, N., Zhuravskaya, E. (2020), Forced Migration and Human Capital: Evidence from Post-WWII Population Transfers, American Economic Review, 110(5), 1430-1463. • Borjas, G. (2013), Labor Economics, New York: McGraw-Hill.

- Buckles, K., Hagemann, A., Malamud, O., Morrill, M., Wozniak, A. (2016), The Effect of College Education on Mortality, *Journal of Health Economics*, 50, 99-114.
- Case, A., Deaton, A. (2021), The Great Divide: Education, Despair, and Death, NBER Working Paper 129241.
- Case, A., Deaton, A. (2023), Accounting for the Widening Mortality Gap Between Adult Americans With and Without a BA, NBER Working Paper 31236.
- Chetty, R., Friedman, J., Rockoff, J. (2014), Measuring the Impacts of Teachers II: Teacher Value-Added and Student Outcomes in Adulthood, *American Economic Review* 104(9), 2633-2679.
- Clark, D., Royer, H. (2013), The Effect of Education on Adult Mortality and Health: Evidence from Britain, *American Economic Review*, 103(6), 2087-2120.
- Clark, D., Martorell, P. (2014), The Signaling Value of a High School Diploma, *Journal of Political Economy*, 122(2), 282-318.
- Cunha, F., Heckman, J. (2007), The Technology of Skill Formation, *American Economic Review*, 97(2), 31-47.
- Datta Gupta, N., Simonsen, M. (2010), Non-cognitive Child Outcomes and Universal High Quality Child Care, *Journal of Public Economics*, 94, 30-43.
- Dustmann, C., Puhani, P., Schönberg, U. (2016), The Long-Term Effects of Early Track Choice, *Economic Journal*, 127, 1348-1380.
- Edin, P.-A., Fredriksson, P., Nybom, M., Öckert, B. (2022), The Rising Return to Noncognitive Skill, *American Economic Journal: Applied Economics*, 14(2), 78-100.
- Ermisch, J. (2003), *An Economic Analysis of the Family*, Princeton: Princeton University Press.
- Goldin, C. (2003), The Human Capital Century, *Education Next*, 3(1), 73-78.
- Groot, W., Oosterbeek, H. (1994), Earnings Effects of Different Components of Schooling: Human Capital Versus Screening, *The Review of Economics and Statistics*, 76(2), 317-321.
- Grossman, M. (2006), Education and Nonmarket Outcomes, in: Hanushek, Eric, Welch, Finis (ed.), *Handbook of the Economics of Education*, Vol.1, 577-634.
- Gust, S., Hanushek, E., Woessmann, L. (2024), Global Universal Basic Skills: Current Deficits and Implications for World Development, *Journal of Development Economics*, 166, 103205.
- Hanushek, E., Rivkin, S. (2010), Generalizations about Using Value-Added Measures of Teacher Quality, *American Economic Review P&P*, 100, 267-271.
- Hanushek, E., Woessmann, L. (2006), Does Educational Tracking Affect Performance and Inequality? Difference-in-Differences Evidence Across Countries, *Economic Journal*, 116, D63-D76.
- Hanushek, E., Woessmann, L. (2008), The Role of Cognitive Skills in Economic Development, *Journal of Economic Literature*, 46(3), 607- 668.
- Havnes, T., Mogstad, M. (2011), No Child Left Behind: Subsidized Child Care and Children's Long-run Outcomes , *American Economic Journal: Economic Policy*, 3(2), 97-129.
- Heckman, J., Pinto, R., Savelyev, P. (2013), Understanding the Mechanisms Through Which an Influential Early Childhood Program Boosted Adult Outcomes, *American Economic Review*, 103(6), 2052- 2086.
- Jackson, C.K. (2018), What Do Test Scores Miss? The Importance of Teacher Effects on Non-Test Score Outcomes, *Journal of Political Economy*, 126(5), 2072-2107.
- Lochner, L., Moretti, E. (2004), The Effect of Education on Crime: Evidence from Prison Inmates, Arrests, and Self-Reports, *American Economic Review*, 94(1), 155-189.
- Meara, E., Richards, S., Cutler, D. (2008), The Gap Gets Bigger: Changes in Mortality and Life Expectancy by Education, 1981-2000, *Health Affairs*, 27(2), 350-360.
- Milligan, K., Moretti, E., Oreopoulos, P. (2004), Does Education Improve Citizenship? Evidence from the US and the UK, *Journal of Public Economics*, 88 (9-10), 1667-1695.
- Oreopoulos, P. (2006), Estimating Average and Local Average Treatment Effects of Education when Compulsory Schooling Laws Really Matter, *American Economic Review*, 96(1), 152-175.
- Spence, M. (1973), Job Market Signaling, *Quarterly Journal of Economics*, 87(3), 355-374.

- | |
|---|
| <ul style="list-style-type: none">• Taylor, L. (1999), Government's Role in Primary and Secondary Education, Federal Reserve Bank of Dallas: Economic Review (1), 15-24• Vandebussche, J., Aghion, P., Meghir, C. (2006), Growth, Distance to Frontier and Composition of Human Capital, Journal of Economic Growth, 11, 97–127. |
|---|

additional notes

Exam questions can be answered in English or German

Fundamentals of International Trade

Module number
37010
Course name
Fundamentals of International Trade
Module coordinator
Prof. Dr. Sebastian Krautheim

Examination number	Credit points (ECTS)	Hours per week (SWS)
272160	5	2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture: 2 SWS (30 hours of attendance and 45 hours of independent study time) Exercise class: 2 SWS (30 hours of attendance and 45 hours of independent study time)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Minor Economics
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
Reference to the LPO I
Recommended prerequisites
Solid knowledge of undergraduate (Bachelor-level) Microeconomics is recommended.
Requirements
Language of instruction
English

Content
Both theoretical and empirical research on international trade has surged in the last two decades. All these recent developments are deeply rooted in two fundamental and analytically very tractable models of international trade like, for example, the basic two-country-two-goods Ricardian model and the model by Krugman (1980). One of the main objectives of this module will be to put students in a position to solve such models analytically and to deepen their understanding of economic modeling in general. More recent state of the art models are covered on an intuitive basis. Standard empirical tools like, for example, gravity estimation are introduced in this module. Moreover, criteria for a critical evaluation of models in economics are developed.

Intended learning outcomes (ILOs)
<p>Students who have successfully participated in the module “Fundamentals of International Trade“</p> <ul style="list-style-type: none"> • explain the key quantitative patterns of international trade flows; assumptions and mechanics of some major fundamental theories of International Trade as well as the main features of theoretical and empirical gravity analysis. • interpret recent developments in international trade flows in the light of these theories and how recent state-of-the-art models can better account for them. • perform, where appropriate, a complete analytical (algebraic) analysis (under autarky and trade) of the models’ general equilibrium. • illustrate how the models can be used to make predictions on the effects of trade liberalizations as well as the introduction of impediments to trade like tariffs or non-tariff trade barriers. • assess pros and cons of different modeling assumptions as well as the appropriateness of different estimation approaches for the empirical analysis of international trade flows. • develop suggestions for the modification of the existing models to accommodate relevant issues as well as criteria for a critical evaluation of the models covered against the background of current debates.
Teaching methods
Lecture and exercise classes taught in English.
Required attendance
Examination (type of examination, scope)
Written exam, 90 min., 100%
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
This course provides the basis for further courses related to International Trade and Globalization like “The Empirics of International Trade” and “Advanced International Trade”.

Growth, Inequality and Poverty

Module number
Course name
Growth, Inequality and Poverty
Module coordinator/ examiner(s)
Prof. Dr. Michael Grimm

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2+2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (28 h Contact hours and 48 h Self study) Tutorial 2 SWS (24 h Contact hours and 24 h Self study) Exam Preparation (2 h Contact hours and 24 h Self study) We are calculating with 15 semester weeks (14 lecture + 1 examination week). Each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Minor Economics BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
LPO I applicability
Recommended prerequisites
An understanding of intermediate micro and macro-economics and basic econometrics is required. Prior knowledge in development economics is an advantage. Students without any prior knowledge in development economics may read the books by either Perkins (2012), Ray (1998) or Todaro and Smith (2006) (see course book for details).
Requirements
Language of instruction
English

Content
The first part of this course, which is delivered by Michael Grimm, discusses the statistical tools and concepts to investigate these dynamics along with many case studies, including an analysis of the driving forces of pro-poor growth in Indonesia, of slow structural change and conflict in Burkina Faso, of impacts of conditional cash transfer programs in Latin America, of the rise of inequality and

<p>reduced intergenerational mobility in China, and of the growth and poverty effects of land reform in India.</p> <p>The second part of the course, which is delivered by Johannes Jütting, focusses on how development policies and development co-operation can contribute to inclusive growth, help fighting poverty and addressing inequality. It starts with an introduction to official development assistance, what it entails and how to measure it, followed by a short recap of the main development strategies from the 1950s to today with a discussion on the Sustainable Development Goals and the Agenda 2030. The course will then turn to the question how digitalization and AI can provide new opportunities for sustainable growth and improving well-being of the population. This part of the course ends with a reflection on the contours of a new narrative for development co-operation in an emerging multi-polar world, shifting wealth from west to east and rising populism in donor countries questioning the effectiveness of multilateral approaches.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have successfully participated in the Module “Growth, Inequality and Poverty”</p> <ul style="list-style-type: none"> • understand the theoretical foundations of commonly used welfare measures. • reflect on alternative welfare measures and approaches. • apply the techniques necessary to analyse statistically growth, poverty and inequality dynamics. • explain recent theories linking economic growth and inequality. • discuss changing paradigms in countries’ development strategies as well as international development cooperation. • illustrate potential determinants of successful development cooperation and enable critical assessments of the link between development cooperation, poverty and inequality.
<p>Teaching methods</p>
<p>This lecture is organized in a set of lectures and tutorials (Übungen).</p> <p>Students are explicitly invited to actively participate in the lecture through questions and input for discussion. In the tutorial students solve set problems in relation to the lecture. In addition, students are invited to indicate those parts of the course for which they need additional training. This may refer to a particular concept, an empirical method or a certain debate in development politics. Readings are essential to prepare the class and the exam.</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Written exam 90 min</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>General background readings:</p> <ul style="list-style-type: none"> • De Janvry, A. and E. Sadoulet (2016), Development Economics. Theory and Practice. Routledge, London. • Grimm M., A. McKay and S. Klasen (2007), Determinants of Pro-Poor Growth: Analytical Issues and Findings from Country Cases. London: Palgrave-Macmillan. • Houghton, J. and S. R. Khandker (2009), Handbook on Poverty and Inequality. World Bank, Washington D.C. • Perkins, D.H., S. Radelet, D.L. Lindauer and S.A. Block (2012), Economics of Development, Norton & Company. • Ray D. (1998), Development Economics. Princeton University Press: Princeton.

- Shorrocks, A.F. and R. van der Hoeven (2004), Growth, Inequality and Poverty. Prospects for Pro-Poor Economic Development, Oxford: Oxford University Press.
- Szirmai, A. (2015), Socio-Economic Development. 2nd edition, Cambridge University Press.
- Todaro, M.P. and S.C. Smith (2006), Economic Development. 9th edition (or newer), Pearson: Essex.
- World Bank (2006), World Development Report: Equity and Development. World Bank, Washington D.C.

"Economic Development" by Michael P. Todaro and Stephen C. Smith is available as an e-book in our university library. You can also use this direct link:

<https://elibrary.pearson.de/book/99.150005/9781292291208>

Additional notes

Health, Development and Public Policy

Module number
32250
Course name
Health, Development and Public Policy
Module coordinator
Prof. Dr. Michael Grimm

Examination number	Credit points (ECTS)	Hours per week (SWS)
274130	5	2+2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture 2 SWS (28 h Contact hours and 48 h Self study) Tutorial 2 SWS (24 h Contact hours and 24 h Self study) Exam Preparation (2 h Contact hours and 24 h Self study)
We are calculating with 15 semester weeks (14 lecture + 1 examination week). Each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Minor Economics
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
Reference to the LPO I
Recommended prerequisites
An understanding of intermediate micro and macro-economics and basic quantitative analysis is required. Prior knowledge in development economics is an advantage, but not necessary.
Requirements
Language of instruction
English

Content
Health and nutrition are important inputs to individual well-being and economic development. Individual and population health in turn are driven by individual income and public resources allocated to the health sector. This two-way relationship renders the link between health and economic development complex and the evaluation of the economic impacts of health interventions a challenging endeavour. The course is designed to illustrate these challenges and deals with three broad issues

<p>(i) the linkages between health and economic growth, in particular, in the context of developing countries,</p> <p>(ii) the evaluation of specific policy interventions in the health sector, and</p> <p>(iii) an examination of the rationale for public provision of health care, factors driving resource allocation and the effectiveness of public health spending including public health insurance.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have successfully participated in the Module “Health, Development and Public Policy”:</p> <ul style="list-style-type: none"> • define the concept of health in health economics. • understand possible transmission channels between health and development. • assess models explaining health related behavior and health investment. • illustrate specific health problems and develop possible solutions. • reflect on the economic, political and social rationale for the public provision of health expenditure. • interpret the results from impact evaluations of health interventions and policy reforms.
<p>Teaching methods</p>
<p>Lecture, class room discussions, tutorials (Übungen).</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Written exam 90 min</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<ul style="list-style-type: none"> • A course book with detailed information about the course. • Lecture notes in form of power points (downloadable). • Readings (for details, see course book)
<p>Additional notes</p>

International Monetary Economics

Module number
36304
Course name
International Monetary Economics (Monetäre Außenwirtschaft)
Module coordinator
Prof. Dr. Johann Graf Lambsdorff

Examination number	Credit points (ECTS)	Hours per week (SWS)
201310	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture: 2 SWS, presence time (in hours) = 30, own working time (in hours) = 45. Exercise: 2 SWS, presence time (in hrs.) = 30, own working time (in hrs.) = 45.
Module applicability
BA Version 2025: Modulbereich B: Minor Economics
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
Reference to the LPO I
Recommended prerequisites
During the first six weeks, the lecture will cover material that is relevant for the seminar "Advanced Macroeconomics". This enables participants to participate in the seminar during the same semester.
Requirements
Kenntnisse in Mikro- und Makroökonomik aus einem ersten Hochschulabschluss oder vergleichbaren Abschluss.
Language of instruction
English

Content
Starting with the balance of payments and models of purchasing power parity, interest rate parity, foreign exchange market and a Keynesian consensus model of an open economy, the effects of economic policy measures and disturbances are examined under constant and variable inflation. Various exchange rate regimes are addressed, overshooting, original sin, credit risk, and international financial architecture issues. The possible failure of the interest rate parity is explained using various approaches. The models are enriched by case studies, interactive classroom games using classEx and empirical methods..
Intended learning outcomes (ILOs)

<p>Students who have participated in the module "International Monetary Economics",</p> <ul style="list-style-type: none"> - reproduce macroeconomic relationships between current account, purchasing power, exchange rates, interest rates, output gap, inflation and interest rates at an advanced level, - interpret international transactions in the area of monetary economics, - perform state-of-the-art experiments to understand models on exchange rates and interest rates, - evaluate the role of international institutions and their impact on international flows of money and goods, - combine models on the closed economy with international influences on interest rates, exchange rates and inflation to obtain an integrated model-based understanding at the frontier of current research, - produce a critical viewpoint on international institutions such as the IMF
<p>Teaching methods</p> <p>Lecture with tutorial. The tutorial embraces assignments and case studies. With the help of classEx interactive teaching forms are integrated.</p> <p>Lecture with a seminar character "Vorlesung mit Seminarcharakter"</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>100% written exam (90 minutes)</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Additional notes</p>

Natural and Field Experiments

Module number
35854
Course name
Natural and Field Experiments
Module coordinator
Prof. Dr. Stefan Bauernschuster

Examination number	Credit points (ECTS)	Hours per week (SWS)
271100	5	2+2
Availability	Duration	Recommended semester
Every winter semester	1 semester	3

Workload
Lecture 2 SWS (30 hours class instruction; 45 hours self-study) Uebung 2 SWS (30 hours class instruction; 45 hours self-study)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Minor Economics
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
Reference to the LPO I
Recommended prerequisites
Solid knowledge in (undergraduate) statistics/econometrics
Requirements
Language of instruction
English

Content
This course provides an introduction to applied microeconomic program evaluation and thereby creates a valuable basis for understanding a wide range of empirical work not only in economics but also in management, sociology, or political science. Understanding how specific policies/historical events/institutions affect human beings is at the very heart of empirical research in social sciences. Although these questions appear universally, the answers are complicated by the fact that the clean identification of cause and effect goes far beyond the demonstration of naive correlations. This course introduces empirical methods that explicitly aim at distinguishing naive correlation from actual causation. Among the methods discussed are fixed effects strategies, difference-in-differences approaches, instrumental variable techniques, regression discontinuity designs, and field

<p>experiments with random assignment to treatment. After a theoretical introduction to the respective methods, seminal empirical research papers applying these methods are discussed in detail. These research papers improve our understanding of how we can apply microeconomic techniques to answer policy relevant questions in a causal way.</p> <p>Table of Contents: Chapter 1: The experimental ideal Chapter 2: Regression, correlation, and causality Chapter 3: Fixed effects Chapter 4: Difference-in-differences Chapter 5: Instrumental variables Chapter 6: Regression Discontinuity Designs Chapter 7: Field experiments</p>
<p>Intended learning outcomes (ILOs)</p> <p>Students who have successfully participated in “Natural and Field Experiments” are able to</p> <ul style="list-style-type: none"> • distinguish between naïve correlations and causal effects • recognize the importance of the clean identification of cause and effect for policy advice • understand microeconomic techniques tailored for estimating causal effects and explain their main features and key identifying assumptions • use this knowledge to critically evaluate the validity of the methods in a variety of applied empirical research papers and discuss them with their peers • apply quasi-experimental methods to sample data sets and perform microeconomic analyses using Stata
<p>Teaching methods</p> <p>Classroom lecture with interactive elements (Vorlesung mit Seminarcharakter) Übung with tutorials and student presentations</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>Final exam (90 minutes) or portfolio (final exam (90 minutes) and oral presentation)</p>
<p>Overall grade relevance</p> <p>100% final exam or 80% final exam and 20% oral presentation</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p> <ul style="list-style-type: none"> • Angrist, J. (1998), Estimating the Labor Market Impact of Voluntary Military Service Using Social Security Data on Military Applicants, <i>Econometrica</i>, 66(2), 249-288. • Angrist, J. (1990), Lifetime Earnings and the Vietnam Era Draft Lottery: Evidence from Social Security Administrative Records, <i>American Economic Review</i>, 80(3), 313-336. • Angrist, J. & Krueger A. (1991), Does Compulsory School Attendance Affect Schooling and Earnings? <i>Quarterly Journal of Economics</i>, 106(4), 979-1014. • Angrist, J., Pischke, J.-S. (2009), <i>Mostly Harmless Econometrics</i>, Princeton & Oxford: Princeton University Press. • Angrist, J., Pischke, J.-S. (2015), <i>Mastering Metrics</i>, Princeton & Oxford: Princeton University Press. • Ashenfelter, O. & Krueger, A. (1994), Estimates of the Economic Returns to Schooling from a New Sample of Twins, <i>American Economic Review</i>, 84(5), 1157-1173. • Bauernschuster, S., Hener, T., Rainer, H. (2017), When Labor Disputes Bring Cities to a Standstill: The Impact of Public Transit Strikes on Traffic, Accidents, Air Pollution and Health, <i>American Economic Journal: Economic Policy</i>, 9 (1), 1-37.

- Becker, S. & Wößmann, L. (2009), Was Weber Wrong? A Human Capital Theory of Protestant Economic History, *Quarterly Journal of Economics*, 124(2), 531-596.
- Bound, J. & Solon, G. (1999), Double Trouble: On the Value of Twins Based Estimation of the Return to Schooling, *Economics of Education Review*, 18, 169-182.
- Card, D. & Krueger, A.B. (1994), Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania, *American Economic Review*, 84(4), 772-793.
- Card, D. & Krueger, A.B. (2000), Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania: Reply, *American Economic Review*, 90(5), 1397-1420.
- Cunningham, S. (2021), *Causal Inference: The Mixtape*, New Haven: Yale University Press.
- Fairlie, R., London, R. (2012), The Effects of Home Computers on Educational Outcomes: Evidence from a Field Experiment with Community College Students, *Economic Journal*, 122(561), 727-753.
- Goodman-Bacon, A. (2021), Difference-in-Differences with Variation in Treatment Timing, *Journal of Econometrics*, 225(2), 254-277.
- Harrison, G., List, J. (2004), Field Experiments, *Journal of Economic Literature*, 42(4), 1009-1055.
- Havnes, T., Mogstad, M. (2011), Money for Nothing? Universal Child Care and Maternal Employment, *Journal of Public Economics*, 95(11-12), 1455– 1465.
- Imbens, G., Lemieux, T. (2008), Regression Discontinuity Designs: A Guide to Practice, *Journal of Econometrics*, 142- 615-635.
- Lalive, R. (2008), How do Extended Benefits Affect Unemployment Duration? A Regression Discontinuity Approach, *Journal of Econometrics*, 142, 785-806.
- Lalive, R., Zweimüller, J. (2009), Does Parental Leave Affect Fertility and Return-to-Work? Evidence from Two Natural Experiments, *Quarterly Journal of Economics*, 24(3), 1363-1402.
- LaLonde, R. (1986), Evaluating the Econometric Evaluation of Training Programs with Experimental Data, *American Economic Review*, 76(4), 604- 620
- Lemieux, T., Milligan, K. (2008), Incentive Effects of Social Assistance: A Regression Discontinuity Approach, *Journal of Econometrics*, 142, 807- 828.
- Levitt, S., List, J. (2009), Field Experiments in Economics: The Past, the Present, and the Future, *European Economic Review*, 53(1), 1-18.
- List, J. (2006), Field Experiments: A Bridge between Lab and Naturally Occurring Data, *Advances in Economic Analysis & Policy*, 6(2), Art.8.
- List, J. (2011), Why Economists Should Conduct Field Experiments and 14 Tips for Pulling One Off, *Journal of Economic Perspectives*, 25(3), 3-16.
- Miguel, E., Kremer, M. (2004), Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities, *Econometrica*, 72(1), 159-217.
- Nakagawa, A., Grunebaum, M., Ellis, S., Oquendo, M., Kashima, H., Gibbons, R., Mann, J. (2007), Association of Suicide and Antidepressant Prescription Rates in Japan, 1999–2003, *Journal of Clinical Psychiatry*, 68(6), 908-916.
- Sun, L. & Abraham, S. (2021), Estimating Dynamic Treatment Effects in Event Studies with Heterogeneous Treatment Effects, *Journal of Econometrics*, 225(2), 175-199.
- Yeh, R., Valsdottir, L., Yeh, M., Shen, C., Kramer, D., Strom, J., Secemsky, E., Healy, J. Domeier, R., Kazi, D., Nallamotheu, B. (2018), Parachute Use to Prevent Death and Major Trauma when Jumping from Aircraft: Randomized Controlled Trial, *British Medical Journal*, 363:k5094.

Additional notes

Exam question can be answered in English or German

Neue Standorttheorien – Regional- und Stadtökonomik in Theorie und Praxis

Modulnummer
Klicken oder tippen Sie hier, um Text einzugeben.
Modultitel
Standorttheorien - Regional- und Stadtökonomik in Theorie und Praxis
Modulverantwortliche*r / Prüfer*innen
Oliver Farhauer

Prüfungsnummer	ECTS	SWS
Klicken oder tippen Sie hier, um Text einzugeben.	5	2
Modulangebot	Zeitdauer des Moduls	SWS
jedes Wintersemester	1 Semester	1. oder 3. Semester

Workload
60 h Kontaktstudium, 90 h Selbststudium
Verwendbarkeit
BA Version 2025: Modulbereich B: Minor Economics
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
Bezug zur LPO I
Empfohlene Voraussetzungen
Gute mikroökonomische Grundkenntnisse
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalt
In der Veranstaltung werden sowohl traditionelle als auch neuere und neueste Theorien zur Standortwahl vorgestellt. Die traditionellen Standorttheorien umfassen die klassische Standortlehre, die Agglomerationsökonomik sowie die Untersuchung der Effekte unterschiedlicher Branchenstrukturen auf eine Stadt oder Region. Daneben werden neuere Ansätze wie die Cluster- und Netzwerktheorie von Michael Porter und neueste Erklärungsmodelle wie die Neue Ökonomische Geographie und die Theorie der Kreativen Klasse präsentiert. Sie alle machen Gründe für die räumliche Ballung wirtschaftlicher Aktivität anschaulich. Von Interesse ist aber auch die Entwicklung von Regionen und Ballungsgebieten. Deshalb werden ebenfalls Theorien zu regionaler Entwicklung und regionalem Wachstum ausführlich thematisiert. Damit die Studierenden regional- und stadtökonomische Untersuchungen (z.B. im Rahmen von Seminar- und Abschlussarbeiten, Kurzanalysen etc.) selbst durchführen können, wird auch Wissen über die empirische Methodik vermittelt. So werden verschiedenste Maße der räumlichen Konzentration und regionalen Spezialisierung vorgestellt sowie die Durchführung einer Shift-Share- und Input-Output-Analyse demonstriert.

Lernergebnisse Lernziele
<p>Studierende, die an dem Modul "Standorttheorien" teilgenommen haben,</p> <ul style="list-style-type: none"> • erläutern sowohl traditionelle als auch neuere und neueste Theorien zur Standortwahl anhand von komplexeren Modellen. • können Zusammenhänge zwischen modelltheoretischen Ansätzen der Standortlehre darstellen. • nutzen diese Modelle, um fundierte Aussagen zu Effekten der Regionalpolitik zu treffen. • illustrieren qualitativ mit Hilfe grafischer Analysemethoden die Wirkungen von Produktivitätsschocks auf regionaler Ebene. • entwickeln Kenntnisse über die Aussagekraft von unterschiedlichen empirischen Kennziffern, durch die der Grad der Branchenkonzentration und der regionalen Spezialisierung bestimmt werden kann. • entwickeln klare Kriterien für die Qualität und Angemessenheit von Modellen für die ökonomische Analyse und reflektieren deren Prämissen kritisch. • beurteilen, wie zielführend verschiedene kommunale Politiken in Abhängigkeit der Branchenstruktur der Kommune sind und welche kommunalpolitischen Eingriffe die regionale Wettbewerbsfähigkeit verbessern können.
Lehr- und Lernformen
<p>Interaktiver Frontalunterricht, gemeinsame Anwendungen der Kompetenzen, damit es nicht um die Vermittlung von Fach- und Faktenwissen geht, sondern vielmehr anwendbares Wissen vermittelt wird, das befähigt, das Gelernte eigenständig zu reproduzieren und anzuwenden.</p>
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)
<p>Klausur, 90 Minuten, 100 %</p>
Gesamtnotenrelevanz
Wiederholungsmöglichkeit
<p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
Literatur
Weitere Hinweise

Population Economics

module number
Course name
Population Economics
module coordinator
Prof. Dr. Stefan Bauernschuster

examination number	credit points (ECTS)	hours per week (SWS)
	5	2+2
Availability	duration	recommended semester
Summer semester	1 semester	2

workload
Lecture 2 SWS (30 hours class instruction; 45 hours self-study) Uebung 2 SWS (30 hours class instruction; 45 hours self-study)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
module applicability
BA Version 2025: Modulbereich B: Minor Economics
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
reference to the LPO I
recommended requirements
Solid knowledge in (undergraduate) microeconomics Solid knowledge in microeconometrics, in particular quasi-experimental methods
obligatory requirements
language
English

content
We start the lecture with a look into the period from 1300 to 1800 and investigate the Malthusian theory of population and the question to which degree the Great Plague affected mortality, fertility and income per person. Then, we move to the end of the 19th and the beginning of the 20th century, when Western countries experienced a massive decline in fertility and mortality rates, and analyze the driving forces behind this great demographic transition. In the second half of the 20th century, we observe a further decline in fertility, which is often ascribed to the emergence of the birth control pill. At the same time, education and female labor supply substantially rose, and the age at which people married increased. We analyze these developments using Becker's theory of fertility (quantity-quality trade-off), Katz and Goldin's economic theory of the pill as well as theories of the division of labor

<p>within families and (female) labor supply and a rich set of empirical studies on these issues. In recent decades, family policies have been adapted to enhance the reconciliation of work and family life and thus support females' position in the labor market. Apart from analyzing the impact of these policies, we aim at understanding to which degree discrimination still weakens women's position in labor markets. Finally, we put the focus on international migration which plays an important role in population dynamics and changing labor markets. Here, we first use Roy's model for the selection of migrants to understand who migrates and then analyze the impact of migration on destination countries' labor markets using both theory and empirics.</p>
<p>Table of contents: Chapter 1: Introduction Chapter 2: Malthusian theory of population Chapter 3: Mortality transition Chapter 4: Fertility transition Chapter 5: Economic effects of the „pill“ Chapter 6: Gender differences in labor supply and wages Chapter 7: Discrimination in the labor market Chapter 8: Evaluation of family policies Chapter 9: Migration</p>
<p>intended learning outcomes (ILOs)</p>
<p>Students who have successfully participated in the module are able to</p> <ul style="list-style-type: none"> • describe the major areas of population economics and place them in historical context • outline and critically discuss the main theoretical models in the field of population economics • analyze and interpret the empirical evidence on the topics discussed, distinguish correlation from causality, and evaluate empirical studies with respect to their merits and problems • draw policy relevant conclusions and participate in well-informed debates in the area of the population economics • communicate research findings effectively in oral and written formats
<p>teaching methods</p>
<p>Classroom lecture with interactive elements (Vorlesung mit Seminarcharakter) Übung with tutorials and student presentations</p>
<p>required attendance</p>
<p>examination (type of examination, scope)</p>
<p>Final exam (90 minutes) or portfolio (final exam (90 minutes) and oral presentation)</p>
<p>overall grade relevance</p>
<p>100% final exam or 80% final exam and 20% oral presentation</p>
<p>possibility of retake exam</p>
<p>reading list</p>
<ul style="list-style-type: none"> • Ager, P., Herz, B., Brueckner, M. (2020), Structural Change and the Fertility Transition, Review of Economics and Statistics, 102(4), 806-822 • Alsan, M., Goldin, C. (2019), Watersheds in Infant Mortality: The Role of Effective Water and Sewerage Infrastructure, 1880 to 1920, Journal of Political Economy, 127(2), 586-638. • Bailey, M. (2006), More Power to the Pill: The Impact of Contraceptive Freedom on Women's Life Cycle Labor Supply, The Quarterly Journal of Economics, 121(1), 289-320. • Bailey, M. (2010), "Momma's Got the Pill": How Anthony Comstock and Griswold v. Connecticut Shaped US Childbearing, American Economic Review, 100(1), 98-129. • Bailey, M., Hershbein, B., Miller, A. (2012), The Opt-In Revolution? Contraception and the Gender Gap in Wages, American Economic Journal: Applied Economics, 4(3), 225-254.

- Bauernschuster, S., Driva, A., Hornung, E. (2020), Bismarck's Health Insurance and the Mortality Decline, *Journal of the European Economic Association*, 18(5), 2561-2607.
- Bauernschuster, S., Hener, T., Rainer, H. (2016), Children of a (Policy) Revolution: The Introduction of Universal Child Care and its Effect on Fertility, *Journal of the European Economic Association*, 14 (4), 975-1005.
- Bauernschuster, S., Schlotter, M. (2015), Public Child Care and Mothers' Labor Supply - Evidence from Two Quasi Experiments, *Journal of Public Economics*, 123, 1-16
- Bertrand, M., Goldin, C., Katz, L., (2010), Dynamics of the Gender Gap for Young Professionals in the Financial and Corporate Sectors, *American Economic Journal: Applied Economics*, 2(3), 228-55.
- Black, S., Devereux, P., Salvanes, K. (2005), The More the Marrier? The Effect of Family Size and Birth Order on Children's Education, *Quarterly Journal of Economics*, 120(2), 669-700.
- Boeri, T., van Ours, J. (2008), *The Economics of Imperfect Labor Markets*, Princeton: Princeton University Press.
- Borjas, G. (2013), *Labor Economics*, New York: McGraw-Hill.
- Cavalcanti, T., Tavares, J. (2008), Assessing the „Engines of Liberation“: Home Appliances and Female Labor Force Participation“, *Review of Economics and Statistics*, 90 (1), 81-88.
- Clark, G. (2007), *A Farewell to Alms: A Brief Economic History of the World*, Princeton: Princeton University Press.
- Cutler, D., Deaton, A., Lleras-Muney, A. (2006), The Determinants of Mortality, *Journal of Economic Perspectives*, 20(3), 97- 120.
- Doepke, M., Hannusch, A., Kindermann, F., Tertilt, M. (2022), *The Economics of Fertility: A New Era*, NBER Working Paper 29948.
- Dorn, D., Zweimüller, J. (2021), Migration and Labor Market Integration in Europe, *Journal of Economic Perspectives*, 35(2), 49-76.
- Dustmann, C., Schönberg, U., Stuhler, J. (2017), Labor Supply Shocks, Native Wages, and the Adjustment of Local Employment, *Quarterly Journal of Economics*, 132(1), 435-483.
- Ehrenberg, R.G., Smith, R.S. (2013), *Modern Labor Economics*, Boston: Prentice Hall.
- Ermisch, J. (2003), *An Economic Analysis of the Family*, Princeton: Princeton University Press.
- Galor, O. (2005), From Stagnation to Growth: Unified Growth Theory, in: Aghion, Philippe, Durlauf, Steven, *Handbook of Economic Growth*, Vol.1A, 171-293.
- Goldin, C. (1984), The Historical Evolution of Female Earnings Functions and Occupations, *Explorations in Economic History*, 21, 1-27.
- Goldin, C., Katz, L. (2002), The Power of the Pill: Oral Contraceptives and Women's Career and Marriage Decisions, *Journal of Political Economy*, 110(4), 730-770
- Goldin, C., Rouse, C. (2000), Orchestrating Impartiality: The Impact of „Blind“ Auditions on Female Musicians, *American Economic Review*, 90(4), 715-741.
- Kleven, H., Landais, C., Posch, J., Steinhauer, A., Zweimüller, J. (2019) c, *American Economic Review Papers & Proceedings*, 109, 122-126
- Malthus, T. R. (1826), *Essay on the Principle of Population*, London: John Murray.
- Olivetti, C., Petrongolo, B. (2008), Unequal Pay or Unequal Employment? A Cross-Country Analysis of the Gender Gaps, *Journal of Labor Economics*, 26(4), 621-654.
- Pary, M., Ruhose, J., Waldinger, F., Netz, N. (2017), The Selection of High-Skilled Emigrants, *The Review of Economics and Statistics*, 99(5), 776-792.
- Voigtländer, N., Voth, H.-J. (2009), Malthusian Dynamism and the Rise of Europe: Make War, Not Love, *American Economic Review: Papers and Proceedings*, 99(2), 248-254.

additional notes

Exam questions can be answered in English or German

Recent Topics in International Trade

Module number
Course name
Recent Topics in International Trade
Module coordinator
Prof. Dr. Sebastian Krautheim

Examination number	Credit points (ECTS)	Hours per week (SWS)
	7	2
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Seminar: 2 SWS (30 hours of attendance and 180 hours of independent study time)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Minor Economics
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
Reference to the LPO I
Recommended prerequisites
Solid knowledge of undergraduate (Bachelor-level) Microeconomics and Macroeconomics is recommended. Besides, students should have basic knowledge of International Economics, for example from the course "Fundamentals of International Trade". Knowledge from "Advanced International Trade" is an advantage, but not required.
Requirements
Language of instruction
English

Content
This seminar covers different topics in the fields of international trade, international macroeconomics, international organization of production, trade policy, identity politics and globalization backlash.
Intended learning outcomes (ILOs)
Students who have successfully participated in the module "Recent Topics in International Trade"
<ul style="list-style-type: none"> describe the principles of good scientific practice as well as strategies for academic writing.

<ul style="list-style-type: none"> • outline the state of the literature that relates to their specific topic. • present the main results of their work in a term paper and an oral presentation including the relation to findings in the literature. • perform, where appropriate, an analysis along the lines of a specific paper (depending on the topic this may be on an intuitive level or a graphical, algebraic or empirical analysis). • justify the exact focus and structure chosen for the term paper and the presentation. • assess pros and cons of different approaches in the literature and how they contribute to a better understanding of the topic and, where appropriate, to academic or policy debates. • develop and explore starting points for the introduction of novel issues and research questions into the literature at the frontier.
Teaching methods
<ul style="list-style-type: none"> • Seminar meetings and discussions. • Advice and feedback on the term paper and the final presentation. • The seminar will be held in English (term paper, presentation, discussion, literature).
Required attendance
Examination (type of examination, scope)
<p>Students write a term paper on a topic that is assigned at the beginning of the seminar. The term paper should have 8–12 pages (13000–15600 characters). Besides, students present their work in the seminar and engage in discussions.</p> <p>Portfolio: The final grade consists of</p> <ul style="list-style-type: none"> • 50% term paper • 50% final presentation
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes

Seminar in Development Economics

Module number
32400
Course name
Seminar in Development Economics
Module coordinator
Prof. Dr. Michael Grimm

Examination number	Credit points (ECTS)	Hours per week (SWS)
272110	7	2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
30 h Contact hours and 180 h Self-study
We are calculating with 15 semester weeks (14 lecture + 1 examination week). Each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Minor Economics
Reference to the LPO I
Recommended prerequisites
Basic knowledge in econometrics as well as micro- and macroeconomics is required. While a strong mathematical or statistical background is not necessary to follow the course, students will be expected to engage with several papers using regression analysis and data science. Prior knowledge in development economics and/or political economy is an advantage but not necessary..
Requirements
Language of instruction
English

Content
The seminar focuses on fundamental problems of socio-economic development at an advanced level. It offers an integrated mix of theories, empirical testing, policy evaluations and political debate. The topics change from year to year.
Intended learning outcomes (ILOs)
Students who have successfully participated in the Module "Seminar: Development Economics":
<ul style="list-style-type: none"> • developed a basic understanding in a certain field of development economics. • identified, reviewed and synthesized relevant scientific literature. • explain the basics of the theoretical and theoretical approaches used in the literature.

<ul style="list-style-type: none"> • wrote and presented a scientific research paper based on the reviewed literature. • assess own empirical material to complement their literature review. • identified research gaps in the literature. • engaged in scientific debates with other students. • critically reflect on the seminar papers by other students.
<p>Teaching methods</p>
<p>The seminar can be organized as a block seminar during the lecture period or as a series of introductory lectures and discussions, followed by students' presentations of one of the research articles from the course and a prepared referee report on this article.</p> <p>Please see syllabus and course book.</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Students are expected to choose one of the research articles from the list, write a three-to-five page referee report or research proposal based on the paper chosen, and present both the summary of the research paper and referee report/research proposal in the class.</p> <p>The grade will consist of a Presentation (30%) + Referee report (50%) + Discussion and participation in class (20%).</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Materials from the course (i.e. academic papers, published in international journals and referee reports)</p>
<p>Additional notes</p>

Seminar in Public Economics

module number
Course name
Seminar in Public Economics - Replicating Empirical Research
module coordinator
Prof. Dr. Stefan Bauernschuster

examination number	credit points (ECTS)	hours per week (SWS)
	7	2
availability	duration	recommended semester
Winter semester	1 semester	3

workload
Seminar 2 SWS (30 hours class instruction; 180 hours self-study)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
module applicability
BA Version 2025: Modulbereich B: Minor Economics
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
reference to the LPO I
recommended requirements
Basic knowledge in STATA or R
obligatory requirements
In-depth microeconomic knowledge (in particular on quasi-experimental methods) acquired for example in the courses “Natural and Field Experiments” or “Evaluation of Development Policies”
language
English

content
This course introduces students to the replication of empirical research papers. It is divided into two parts. In the first part, students work in groups of two to replicate the main results of a published empirical research paper. The results of this exercise (including the code developed by the students themselves) are then presented to the rest of the class. In the second part, students individually prepare a short seminar paper in which they extend the replication of the paper by conducting further analyses. The research papers assigned will be in the broad area of public economics and the software used can either be Stata or R.

intended learning outcomes (ILOs)
<p>Students who have successfully participated in the module are able to</p> <ul style="list-style-type: none"> • analyze and interpret research papers in the area of applied microeconometrics, and evaluate their identifying strategy • assess the importance of replication in applied research • develop and strengthen their data literacy skills by working with different types of data sets • apply econometric methods in Stata or R to replicate research papers • identify relevant research ideas and implement them by independently extending the analyses conducted in the research paper • effectively communicate the main results of the empirical exercise in oral and written form, and critically discuss problems encountered
teaching methods
<p>Introductory sessions with interactive elements Seminar as a blocked course with student presentations and discussions</p>
required attendance
examination (type of examination, scope)
Portfolio (presentation and seminar thesis (6 pages))
overall grade relevance
50% presentation and 50% seminar thesis
possibility of retake exam
reading list
The research papers for replication will be presented in the introductory session.
additional notes
<p>The first part of the seminar mainly consists of the reproduction of a research paper's original findings; we will provide the students with the underlying data set. The students are supposed to explore whether the results replicate and present their replication exercise in the presentation session. While the first part consists of the reproduction of the original study results, the goal of the second part of the course, i.e. the seminar paper, is to shortly summarize the original study and then review and extend the paper's methods and findings. Therefore, each student should independently analyze the robustness of the results and summarize the findings in a short seminar paper.</p>

Advanced Economics

Module number
Course name
Advanced Economics
Module coordinator/ examiner(s)
Prof. Dr. Sebastian Krautheim

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-7	2-5
Availability	Duration	Recommended semester
Winter or summer semester	1 semester	

Workload
90 h to 210 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulbereich B: Minor Economics
LPO I applicability
Recommended prerequisites
Requirements
Language of instruction
English

Content
This module provides in-depth specialist knowledge in the fields of micro- and macroeconomics and international economics. This includes, among other things, in-depth topics in game theory, industrial economics, institutional economics, labour economics, health economics, environmental economics, behavioural economics, monetary policy, fiscal policy and regulation. It also covers the topics of international macroeconomics, foreign trade, globalisation, direct investment, migration and development economics. The courses offered within this module establish the link to current topics and issues in business and economic practice, regulation and research.
Intended learning outcomes (ILOs)
Students who have successfully completed the module, <ul style="list-style-type: none"> • identify and name relevant problems in taxation and relate them to each other. • name and interpret legal business fundamentals in taxation and mobilise them to address in-depth issues. • name central and in-depth methods in taxation research, analyse their results and classify them in the context of the literature.

<ul style="list-style-type: none">• establish links between the issues and topics covered and current cases in business practice and current regulatory discussions.• Recognise the potential and limitations of objectives, approaches and instruments in taxation in the light of current research and reflect on them critically.
Teaching methods
Different teaching and learning formats are used depending on the course.
Required attendance
Examination (type of examination, scope)
Exam or portfolio
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Advanced Economics

module number
Course name
Environmental and Health Economics
module coordinator
Prof. Dr. Stefan Bauernschuster / Dr. Benedikt Janzen

examination number	credit points (ECTS)	hours per week (SWS)
	5	2+2
availability	duration	recommended semester
Summer semester	1 semester	2

workload
Lecture 2 SWS (30 hours class instruction; 45 hours self-study) Uebung 2 SWS (30 hours class instruction; 45 hours self-study)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
module applicability
BA Version 2025: Modulbereich B: Minor Economics
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
reference to the LPO I
recommended requirements
Solid knowledge in (undergraduate) microeconomics Solid knowledge in microeconometrics, in particular quasi-experimental methods
obligatory requirements
language
English

Content
This course focuses on the economic analysis of health and the environment. We begin by introducing the theoretical concepts of environmental economics, including the theories of externalities and environmental policy. While these concepts provide a foundation, the primary focus of the course is empirical. We start by exploring the causal impact of temperature extremes on human health (and other aspects of human life) and the environmental policies aimed at mitigating or adapting to these effects. We will discuss different approaches to measuring the social cost of carbon, a key tool for effective climate policy design. We then turn our focus to other environmental hazards resulting from increased human economic activity—such as air pollution, water pollution,

<p>noise pollution, toxic substances, and biodiversity loss—and their causal impact on human health, while assessing the effectiveness of various environmental policies in mitigating these risks. We will look at inequalities in environmental exposure and damages from an economic perspective, and discuss the distributional impacts of environmental policies. Finally, we will explore international environmental issues, such as transboundary pollution and pollution-haven effects, and their connections to human health.</p>
<p>intended learning outcomes (ILOs)</p>
<p>Students who have successfully participated in this module should be able to</p> <ul style="list-style-type: none"> • demonstrate a clear understanding of theoretical concepts in the field of environmental economics • interpret empirical evidence on the topics discussed and assess the merits and limitations of empirical studies • describe and discuss the impact of environmental stressors on human health and other aspects of human life • assess the relative strengths and weaknesses of environmental policies and contribute to well-informed debates on the intersection of environmental and health economics
<p>teaching methods</p>
<p>Classroom lecture with interactive elements (Vorlesung mit Seminarcharakter) Übung with tutorials and student presentations</p>
<p>required attendance</p>
<p>examination (type of examination, scope)</p>
<p>Portfolio (final exam and presentation)</p>
<p>overall grade relevance</p>
<p>80% final exam and 20% presentation</p>
<p>possibility of retake exam</p>
<p>reading list</p>
<p>Textbook Phaneuf, D. J., & Requate, T. (2016). <i>A course in environmental economics: Theory, policy, and practice</i>. Cambridge University Press.</p> <p>Articles Graff Zivin, J., & Neidell, M. (2013). Environment, health, and human capital. <i>Journal of Economic Literature</i>, 51(3), 689-730. Dell, M., Jones, B. F., & Olken, B. A. (2014). What do we learn from the weather? The new climate-economy literature. <i>Journal of Economic literature</i>, 52(3), 740-798. Auffhammer, M. (2018). Quantifying economic damages from climate change. <i>Journal of Economic Perspectives</i>, 32(4), 33-52. Banzhaf, S., Ma, L., & Timmins, C. (2019). Environmental justice: The economics of race, place, and pollution. <i>Journal of Economic Perspectives</i>, 33(1), 185-208. Hsiang, S., Oliva, P., & Walker, R. (2019). The distribution of environmental damages. <i>Review of Environmental Economics and Policy</i>. Carleton, T., Jina, A., Delgado, M., Greenstone, M., Houser, T., Hsiang, S., ... & Zhang, A. T. (2022). Valuing the global mortality consequences of climate change accounting for adaptation costs and benefits. <i>The Quarterly Journal of Economics</i>, 137(4), 2037-2105. Barreca, A., Clay, K., Deschenes, O., Greenstone, M., & Shapiro, J. S. (2016). Adapting to climate change: The remarkable decline in the US temperature-mortality relationship over the twentieth century. <i>Journal of Political Economy</i>, 124(1), 105-159. Deryugina, T., Heutel, G., Miller, N. H., Molitor, D., & Reif, J. (2019). The mortality and medical costs of air pollution: Evidence from changes in wind direction. <i>American Economic Review</i>, 109(12), 4178-4219.</p>

Barwick, P. J., Li, S., Lin, L., & Zou, E. Y. (2024). From fog to smog: The value of pollution information. *American Economic Review*, 114(5), 1338-1381.

Zou, E. Y. (2021). Unwatched pollution: The effect of intermittent monitoring on air quality. *American Economic Review*, 111(7), 2101-2126.

Ebenstein, A. (2012). The consequences of industrialization: Evidence from water pollution and digestive cancers in China. *Review of Economics and Statistics*, 94(1), 186-201.

Marcus, M. (2022). Testing the water: Drinking water quality, public notification, and child outcomes. *Review of Economics and Statistics*, 104(6), 1289-1303.

Keiser, D. A., Mazumder, B., Molitor, D., & Shapiro, J. S. (2023). Water works: Causes and consequences of safe drinking water in America, mimeo.

Dean, J. T. (2024). Noise, cognitive function, and worker productivity. *American Economic Journal: Applied Economics*, 16(4), 322-360.

Taylor, M. S. (2011). Buffalo hunt: International trade and the virtual extinction of the North American bison. *American Economic Review*, 101(7), 3162-3195.

Frank, E., & Sudarshan, A. (2024). The social costs of keystone species collapse: Evidence from the decline of vultures in India. *American Economic Review*, 114(10), 3007-3040.

Hollingsworth, A., & Rudik, I. (2021). The effect of leaded gasoline on elderly mortality: Evidence from regulatory exemptions. *American Economic Journal: Economic Policy*, 13(3), 345-373.

Marcus, M. (2021). Going beneath the surface: Petroleum pollution, regulation, and health. *American Economic Journal: Applied Economics*, 13(1), 72-104.

Banzhaf, H. S., Ma, L., & Timmins, C. (2019). Environmental justice: Establishing causal relationships. *Annual Review of Resource Economics*, 11(1), 377-398.

Colmer, J., & Voorheis, J. (2020). The intergenerational effects of early-life pollution exposure, mimeo.

Currie, J., Voorheis, J., & Walker, R. (2023). What caused racial disparities in particulate exposure to fall? New evidence from the Clean Air Act and satellite-based measures of air quality. *American Economic Review*, 113(1), 71-97.

Hernandez-Cortes, D., & Meng, K. C. (2023). Do environmental markets cause environmental injustice? Evidence from California's carbon market. *Journal of Public Economics*, 217, 104786.

Tanaka, S., Teshima, K., & Verhoogen, E. (2022). North-South displacement effects of environmental regulation: The case of battery recycling. *American Economic Review: Insights*, 4(3), 271-288.

Heo, S. W., Ito, K., & Kotamarthi, R. (2025). International spillover effects of air pollution: Evidence from mortality and health data. *Review of Economics and Statistics*, forthcoming.

additional notes

Modulbereich B: Minor Entrepreneurship

5-Euro-Business

Modulnummer
32865
Modultitel
5-Euro-Business Wettbewerb (für Masterstudierende)
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Carolin Häussler, Dr. Patrick Figge

Prüfungsnummer	ECTS	SWS
264960	5	4
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
unregelmäßig	1 Semester	

Workload
4 SWS (60h Präsenzzeit, 90h Eigenstudium)
Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Minor Entrepreneurship
BA Version 1: International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration.
Verpflichtende Voraussetzungen
Teilnahme an der Auftaktveranstaltung in den ersten Wochen des Semesters.
Die Auswahl der Teilnehmenden, falls nötig, findet im Anschluss an die Anmeldung bei der Auftaktveranstaltung statt. (Bei den letzten Wettbewerben konnte allen Angemeldeten die Teilnahme ermöglicht werden).
Unterrichtssprache
Deutsch

Inhalte

<p>Spielen Sie mit dem Gedanken, ein Unternehmen zu gründen? Wollen Sie ausprobieren, ob Ihre Idee am Markt ankommt? Dann nehmen Sie am "5-Euro-Business"-Wettbewerb teil! Interessierte Studierende können sowohl mit als auch ohne Team und Idee teilnehmen.</p> <p>Sie entwickeln während des Wettbewerbs gemeinsam mit Ihrem Team eine Idee und setzen diese um. In Intensivkursen werden Sie von Coaches aus der Praxis begleitet (z.B. Ideenentwicklung, Teambildung, Marketing, Schutz, Projektmanagement). Ein(e) Pate/Patin aus der Wirtschaft steht Ihnen zur Seite und unterstützt Sie durchgehend bei der Umsetzung Ihrer Idee. Bei der Abschlussveranstaltung können Preise im Gesamtwert von über 1.500 Euro gewonnen werden.</p> <p>Wir freuen uns über Teilnehmende aller Fakultäten!</p> <p>Nach erfolgreichem Abschluss des Wettbewerbs erhalten Sie bei Abgabe einer zusätzlichen Seminararbeit nach dem Wettbewerb 5 ECTS (vom Lehrstuhl für Betriebswirtschaftslehre mit Schwerpunkt Organisation, Technologiemanagement und Entrepreneurship). Weitere Informationen: www.5-euro-business.de</p>
<p>Lernergebnisse Lernziele</p> <p>Studierende, die erfolgreich an dem Modul "5-Euro-Business Wettbewerb (für Masterstudierende)" teilgenommen haben,</p> <ul style="list-style-type: none"> • erläutern grundlegende Konzepte und Methoden im Bereich der Existenzgründung und identifizieren entscheidungsrelevante Meilensteine in verschiedenen Teilbereichen wie "Ideenentwicklung", "Projektmanagement", "Marketing" und "Finanzen", welche im Zuge der Existenzgründung essenziell sind. • stellen detaillierte, wirtschaftliche Zusammenhänge und Bedingungen, unter welchen unternehmerische Entscheidungen getroffen werden, dar. • arbeiten einen differenzierten Businessplan auf Basis des für Unternehmensgründungen notwendigen Grundwissen aus, welcher ihre entwickelte Geschäftsidee strukturiert und konzeptionell zielgruppenspezifisch illustriert. • schätzen ihre im spielerischen Umfeld des Wettbewerbs getätigten Entscheidungen, Handlungen und Erfahrungen kritisch reflektiert anhand von wissenschaftlichen Konzepten und Theorien ein. • analysieren das Potential der eigenen Geschäftsidee anhand verschiedener Dimensionen. Dabei nutzen die Studierenden Tools, um u.a. den Wettbewerb oder das mit der Geschäftsidee adressierte Problem zu analysieren. Auf Basis ihrer Ergebnisse entwickeln die Studierenden anschließend die Value Proposition der eigenen Geschäftsidee. • Entwickeln und reflektieren im Zuge der praktischen Erfahrung der Existenzgründung unternehmerisches Denken und Handeln, für welches Eigeninitiative, Entscheidungsfreude, Teamfähigkeit, Kreativität und Selbstständigkeit von zentraler Bedeutung sind.
<p>Lehr- und Lernformen</p> <ul style="list-style-type: none"> • Interaktiver Frontalunterricht • Problemorientiertes Lernen (POL), angeleitet durch die Dozierenden und Wirtschaftspaten und -patinnen aus der betrieblichen Praxis
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang)</p> <p>Zusätzlich zur Teilnahme am Wettbewerb: Abgabe einer Seminararbeit (100%).</p>
<p>Gesamtnotenrelevanz</p> <p>Seminararbeit (100%)</p>
<p>Wiederholungsmöglichkeit</p> <p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
<p>Literatur</p>

Weitere Hinweise
<p>Ablauf: Beim 5-Euro-Business-Wettbewerb können Studierende sich während eines Semesters als Unternehmer bzw. Unternehmerin versuchen. Sie erhalten ein Startkapital von fünf Euro und entwickeln gemeinsam im Team eine Geschäftsidee, die sie innerhalb der Unternehmensphase auf dem Markt umsetzen. In Crashkursen zu den Phasen der Gründung werden die Teilnehmenden mit dem notwendigen Grundwissen ausgestattet. Am Ende der Unternehmensphase treten die Teams im Rahmen der offiziellen Abschlussveranstaltung an. Dort präsentieren sie ihr Unternehmen, ihre Strategien und Ergebnisse vor einer fachkundigen Jury.</p>

Fundamentals of Digitalization and Digital Trends

Module number
Course name
Interdisciplinary Lecture Series for Master Students: Fundamentals of Digitalization and Digital Trends
Module coordinator
Prof. Dr. Andreas König

Examination number	Credit points (ECTS)	Hours per week (SWS)
266700	5	2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture 2 SWS (30h presence time and 120h working time)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Entrepreneurship
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Business Administration Master's programme
Requirements
Language of instruction
English

Content
This interdisciplinary lecture series addresses digital trends and how they can be utilized within society. Each year, the lecture focuses on a different topic within the field, such as digital health, human-computer interaction, brain-computer interfaces, wearable computing, anthro-pomorphic hardware, visual analytics, cyber security, data and health, legal tech, blockchain, fin tech, 4DPrinting, and so forth. In the lectures, scholars from the university, distinguished guest scholars, and practitioners introduce a variety of technological developments and their impact on businesses,

the economy, and society. Students will gain a deeper insight into the topic through scientific reading assignments.
Intended learning outcomes (ILOs)
After successful participation in this course, students <ul style="list-style-type: none"> • Formulate the core tools and concepts of current digital trends • Explain the central theories of research in the context of digital trends and the research environment and the theoretical issues discussed in current innovation and entrepreneurial research • Reflect real-life digital trends using the discussed instruments and develop strategies based on them • Identify and utilize digital trends to create own new business models • Understand and utilize modern strategic decision making tools
Teaching methods
<ul style="list-style-type: none"> • Interactive teaching • Lectures by professors and practitioners • Self-study of assigned research papers
Required attendance
Examination (type of examination, scope)
Written exam, 60 minutes + 5 min reading time, 100% of the final grade No ERASMUS special exams
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
For more information regarding the next semester's topics and lecturers, please visit Stud.IP.

Intercultural Entrepreneurship

Module number
Module title
Intercultural Entrepreneurship – Québec-Bavaria
Module coordinator
Prof. Dr. Christoph Barmeyer

Examination number	Credit points (ECTS)	Hours per week (SWS)
	10	2
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Seminar Class: 2 SWS (28 hrs. class instruction, ca. 100 hrs. teamwork and self-study)
Module applicability
<p>This course does <u>not</u> replace a major seminar!</p> <p>BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Minor Entrepreneurship</p> <p>BA Version 1: International Management and Marketing – Vertiefung (ehemals: Hauptseminar Interkulturelle Kommunikation)</p>
Reference to the LPO I
Recommended requirements
None M.A. ICBS students are strongly recommended to have successfully completed the lecture "Intercultural Management" from module area A beforehand."
Obligatory requirements
Language
English

Content
The advanced seminar "Intercultural Entrepreneurship" is aimed at students from Bavaria and Québec and offers an exceptional opportunity to experience the challenges and opportunities of entrepreneurship on an international level. During the seminar, students will work in virtual teams on a joint business creation project, using their skills in entrepreneurship, creativity and innovation to break down complex problems and develop innovative solutions. A particular challenge will be working in multicultural teams, which will make interculturality clear and tangible. Furthermore,

<p>students will reflect on their intercultural experiences and synthesize their insights into a cohesive and insightful final presentation.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students will be introduced to the theories and concepts of intercultural entrepreneurship and will have the opportunity to learn how intercultural experiences and perspectives influence the creativity and innovative capacity of founders.</p> <p>Participants will also exchange ideas on target-oriented start-up practices and can create intercultural added value. The special feature of the event lies in the combination of the complementary areas of Constructive Intercultural Management and Québec-Bavaria Entrepreneurship.</p> <ul style="list-style-type: none"> • Networking between the business and science locations of Bavaria and Quebec • Application and development of key competencies in the areas of intercultural competence/entrepreneurship • Experience of intercultural-virtual teamwork / leadership / decision-making • Implementation of social innovations and entrepreneurial thinking and action • Strengthening intercultural exchange by bringing together different ways of thinking and working methods • Strengthening intercultural communication and language skills • Explore strategies, organizational approaches and structures that respond to the changing global environment. • Learn and improve to understand, classify, and structure (scientific) literature • Learn and improve to present scientific insights and transfer knowledge to case studies
<p>Teaching methods</p>
<ul style="list-style-type: none"> • Interactive teaching • Intercultural training • Virtual collaboration • Discussion of contents and case studies as “good practices” • Student presentations and classroom discussions
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Portfolio consisting of</p> <ul style="list-style-type: none"> • Reflection on intercultural teamwork • Final presentation of the start-up Project • Term paper
<p>Overall grade relevance</p>
<p>Possibility of retake exam</p>
<p>Reading list</p>
<p>Additional notes</p> <p>This course aims to have a highly interactive character. We aim to engage in a lively discourse on entrepreneurial issues and mechanisms. We also require a high level of commitment from students and their multicultural teams in terms of developing their own ideas for a potential start-up.</p> <p>This course does <u>not</u> replace a major seminar!</p>

Network Management in Startup Processes

Module number
Course name
Network Management in Startup Processes
Module coordinator/ examiner(s)
Prof. Dr. Carola Jungwirth

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
4 SWS (hours per week) (= 60 hours attendance time and 90 hours own work time) The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is counted as 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Minor Entrepreneurship BA Version 1: International Management and Marketing – Vertiefung
LPO I applicability
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree program in Business Administration.
Requirements
Language of instruction
English; however: course will be held in German if all participants are proficient in German and do not prefer an English-language format

Content
<ul style="list-style-type: none"> • Entrepreneurs are increasingly faced with networking requirements, especially at the beginning of a business start-up. As these are very often crucial for the start-up success, this module aims to disclose the success factors and prepare students for possible hurdles in the context of founding a company. • In the course of the module, traditional principles of entrepreneurial networking are examined as well as those requirements that are specifically related to the start-up processes of purpose-driven companies.

<ul style="list-style-type: none"> The module is characterized by intensive feedback on questions of practical applicability as well as the endeavour to place network processes in a larger theoretical context.
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have participated in the Master's course "Network Management in Start-Up Processes":</p> <ul style="list-style-type: none"> understand the basic principles of network management in business start-ups, both theoretically and practically are able to identify and consider success factors for business start-ups know how challenges and hurdles in the network process of start-ups can be overcome are able to meet the special requirements of network management that exist when founding purpose-driven companies possess the ability to evaluate network requirements according to specific start-up contexts by themselves
<p>Teaching methods</p>
<p>It is a lecture with seminar character, designed for a small group size (approx. 20 participants).</p> <p>The course is based on “problem-based learning” (PBL) as a method for acquiring knowledge and developing interdisciplinary competences and problem-solving skills.</p> <p>The learning process is structured by the so-called PBL cycle:</p> <ol style="list-style-type: none"> 22. analyze problem scenario 23. identify facts 24. generate hypotheses 25. identify knowledge deficits 26. apply new knowledge 27. abstract 28. and the cycle begins again with the identification of further facts. <p>The teacher guides the students through the PBL cycle and imparts the necessary methodological knowledge (e.g. for hypothesizing).</p> <p>The students acquire knowledge about network management in start-up processes by means of 2-3 “vignettes” (= case studies). These practice-orientated case constellations, outlined on a few pages, illustrate the abstract topic of the course and require a practicable solution proposal, for which, however, a theoretical derivation is necessary. The groups therefore also develop the theoretical foundation for the topics of the course.</p> <p>The module (4 SWS) includes discussions, impulses from the teacher and presentations of the results in plenary sessions as well as teamwork in small groups (max. 7 people per group). The teacher supports the teamwork.</p> <p>All examinations are completed with the last week of the semester.</p>
<p>Required attendance</p>
<p>We expect you to attend. In case of absence (due to illness, meeting conflict, ...) please inform us in time.</p>
<p>Examination (type of examination, scope)</p>
<ul style="list-style-type: none"> slides of presentation, group presentation (50% of the final grade) individual solution proposal for one of the discussed case studies (vignettes) in the form of a written essay (17.000 characters, incl. spaces) (50% of the final grade)
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>In the event of failure, all courses can be repeated in accordance with Section 6 of the Study and Examination Regulations.</p>
<p>Recommended reading</p>

Basic literature:

- Hisrich, R. D., Shepherd, D. A. & Peters, M. P. (2016). Entrepreneurship. McGraw-Hill Education.
- Mueller, E.F. & Jungwirth, C. (2022): Are Cooperative Firms More Agile? A Contingency Perspective on Small and Medium-Sized Enterprises in Agglomerations and Peripheral Areas. Small Business Economics, 58(1), 281-302.

Further references will be announced during the course.

Additional notes

The course takes place as a face-to-face event during the semester. Students who are unable to attend due to illness can participate virtually. It is requested that virtual participation be announced before the respective lesson.

The number of participants is limited to 20 students. Places will be allocated on a first come, first served basis.

Further information can be found on the chair's homepage: <https://www.wiwi.uni-passau.de/governance/studium/lehrkonzept>

Ethical Entrepreneurship and Stakeholder Analysis

Module number
Course name
Ethical Entrepreneurship and Stakeholder Analysis
Module coordinator/ examiner(s)
Prof. Dr. Carola Jungwirth

Examination number	Credit points (ECTS)	Hours per week (SWS)
266204	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
4 SWS (hours per week) (= 60 hours attendance time and 90 hours own work time) The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is counted as 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Minor Entrepreneurship BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
LPO I applicability
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree program in Business Administration.
Requirements
Language of instruction
English; however: course will be held in German if all participants are proficient in German and do not prefer an English-language format

Content
<ul style="list-style-type: none"> • Ethical issues are playing an increasingly important role in business start-ups. Particularly with regard to CSR- or purpose-oriented companies, it has recently been discussed how authentic ethical values can be part of a successful corporate concept. • It is increasingly being recognized that issues like purpose-washing can be avoided particularly well if ethical assumptions have already been well thought through in the design of the company. This course aims to provide students with opportunities to make independent, reliable ethical decisions in the start-up process.

<ul style="list-style-type: none"> In order to make these decisions usable in the context of effective corporate governance, the course introduces not only ethical content but also key aspects of stakeholder analysis.
<p>Intended learning outcomes (ILOs)</p> <p>Students who have participated in the course Ethical Entrepreneurship and Stakeholder Analysis</p> <ul style="list-style-type: none"> understand ethical problem areas in company foundation processes are able to base a company design on sound ethical foundations are able to make, discuss and present ethical decisions independently have the tools to formulate coherent and practicable ethical corporate objectives identify and characterize stakeholders according to specific situations and involve stakeholders in effective corporate governance
<p>Teaching methods</p> <p>It is a lecture with seminar character, designed for a small group size (approx. 20 participants).</p> <p>The course is based on “problem-based learning” (PBL) as a method for acquiring knowledge and developing interdisciplinary competences and problem-solving skills. The learning process is structured by the so-called PBL cycle:</p> <ol style="list-style-type: none"> 29. analyze problem scenario 30. identify facts 31. generate hypotheses 32. identify knowledge deficits 33. apply new knowledge 34. abstract 35. and the cycle begins again with the identification of further facts. <p>The teacher guides the students through the PBL cycle and imparts the necessary methodological knowledge (e.g. for hypothesizing).</p> <p>The students acquire knowledge about network management in start-up processes by means of 2-3 “vignettes” (= case studies). These practice-orientated case constellations, outlined on a few pages, illustrate the abstract topic of the course and require a practicable solution proposal, for which, however, a theoretical derivation is necessary. The groups therefore also develop the theoretical foundation for the topics of the course.</p> <p>The module (4 SWS) includes discussions, impulses from the teacher and presentations of the results in plenary sessions as well as teamwork in small groups (max. 7 people per group). The teacher supports the teamwork. All examinations are completed with the last week of the semester.</p>
<p>Required attendance</p> <p>We expect you to attend. In case of absence (due to illness, meeting conflict, ...) please inform us in time.</p>
<p>Examination (type of examination, scope)</p> <ul style="list-style-type: none"> slides of presentation, group presentation (50% of the final grade) individual solution proposal for one of the discussed case studies (vignettes) in the form of a written essay (17.000 characters, incl. spaces) (50% of the final grade)
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>In the event of failure, all courses can be repeated in accordance with Section 6 of the Study and Examination Regulations.</p>
<p>Recommended reading</p> <p>Basic literature:</p> <ul style="list-style-type: none"> Brenkert, George G. (ed.), The Oxford Handbook of Business Ethics, Oxford Handbooks (2009; online edn, Oxford Academic, 2 Jan. 2010).

- Mueller, E.F. & Jungwirth, C. (2022): Are Cooperative Firms More Agile? A Contingency Perspective on Small and Medium-Sized Enterprises in Agglomerations and Peripheral Areas. *Small Business Economics*, 58(1), 281-302.

Further references will be announced during the course.

Additional notes

The course takes place as a face-to-face event during the semester. Students who are unable to attend due to illness can participate virtually. It is requested that virtual participation be announced before the respective lesson.

The number of participants is limited to 20 students. Places will be allocated on a first come, first served basis.

Further information can be found on the chair's homepage: <https://www.wiwi.uni-passau.de/governance/studium/lehrkonzept>

Organizations and Innovation Strategy

Module number
Course name
Organizations and Innovation Strategy
Module coordinator
Prof. Dr. Carolin Häussler, Dr. Patrick Figge

Examination number	Credit points (ECTS)	Hours per week (SWS)
264190	5	4
Availability	Duration	Recommended semester
irregular	1 semester	

Workload
Lecture: 2 SWS (30 hrs. class instruction, 65 hrs. self-study) Exercise Class: 2 SWS (15 hrs. class instruction, 40 hrs. self-study)
Calculation is based on: every hr. per semester week corresponds to 60 minutes. One semester presumably consists of 15 weeks, i.e., 14 course and 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Entrepreneurship
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
Requirements
Language of instruction
English

Content
This course focuses on the organizational and strategic challenges companies face in order to obtain a sustainable competitive advantage. It engages in an application-oriented analysis of intercompany interaction along the value chain. The course discusses how companies organize to innovate and decide for strategic moves in order to attain competitive advantage. Amongst others, topics covered

by this course will be pricing decisions, market entry decisions, intellectual property protection, network effects, and vertical relations within the value chain.
Intended learning outcomes (ILOs)
Students who have successfully participated in the module "Organizations and Innovation Strategy", <ul style="list-style-type: none"> • explain key theoretical concepts of management, competition and strategy science. • combine and compare knowledge of theoretical concepts with the understanding of emerging trends. In so doing, students discuss resulting consequences for strategic decision-making in organizations, e.g., the strategic implications of network effects on the management of platform ecosystems. • perform analyses to quantify abstract decision-making scenarios through game theoretic and economic models (e.g., simultaneous and sequential decision-making games). • assess corporate strategies through analyzing competitive environments surrounding organizations. • develop adequate recommendations for organizations.
Teaching methods
<ul style="list-style-type: none"> • Interactive lecture • Discussion of contents • Discussion of questions and case studies linked to the organizational and innovation strategy of companies • Interactive surveys and classroom experiments
Required attendance
Examination (type of examination, scope)
Written exam at the end of the course (60 Minutes)
Overall grade relevance
Exam (100%)
Exam resit opportunities
Gem. der Prüfungs- und Studienordnung für den Masterstudiengang
Recommended reading
Additional notes
<ul style="list-style-type: none"> • This lecture replaces the lecture "Organizational and Competitive Strategy" (you cannot include both courses in your degree program) • Guest lectures, integration of videos, case studies • A weekly exercise class (#32825) will supplement the lecture by repeating and intensifying core concepts. • The module is applicable to the Certificate Program in Digital Technology and Entrepreneurship: Entrepreneurial Pathfinder.

Strategy for High-Tech Startups

Module number
Course name
Strategy for High-Tech Startups
Module coordinator
Prof. Dr. Carolin Häussler, Dr. Patrick Figge

Examination number	Credit points (ECTS)	Hours per week (SWS)
264509	5	2+2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture: 2 SWS (30 hrs. class instruction, 65 hrs. self-study) Exercise Class: 2 SWS (15 hrs. class instruction, 40 hrs. self-study)
Calculation based on: every hr. per semester week corresponds to 60 minutes. One semester presumably consists of 15 weeks, i.e., 14 course and 1 exam week.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Major Management and Strategy Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Entrepreneurship
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
In accordance with § 3 of the study and examination regulation for the master degree program Business Administration.
Requirements
Language of instruction
English

Content
Founding one's own company requires not only a promising business idea but also a successful management of upcoming strategic and organizational challenges. Successfully performing these management tasks is a substantial part of being a successful entrepreneur.

<p>This course focuses on these management tasks concerning the founding of a company, especially with regard to high-technology startups. Inspired by the real founding process, the course starts with an introduction to venture opportunities, concepts, and strategies. Following this introduction, concepts on venture formation, organizational planning, as well as technology development strategy are discussed in the context of high-technology start-ups. The course closes with answers to the question how to finance and how to build the venture.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have successfully participated in the module "Strategy for High-Tech Startups",</p> <ul style="list-style-type: none"> • explain and apply the key concepts and theories in entrepreneurship. • outline core findings of most influential and recent scientific studies in the field of entrepreneurship. • transfer knowledge of entrepreneurship theories into in-class discussions so that they can interpret recent developments in entrepreneurship with a particular focus on the influences of digitalization, new technologies, and strategic implications for high-tech startups. • analyze different entrepreneurial strategies and assess their implications, e.g., for the economy. • develop adequate suggestions for entrepreneurial high-tech organizations.
<p>Teaching methods</p>
<ul style="list-style-type: none"> • Interactive lecture • Discussion of Contents • Discussion of case studies
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Written exam at the end of the course (60 Minutes)</p>
<p>Overall grade relevance</p>
<p>Exam (100%)</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<ul style="list-style-type: none"> • Byers, T.H./Dorf, R. /Nelson, A.J. (2010): Technology Ventures – From Idea to Enterprise, McGraw-Hill. • Selection of essays, articles, and case-studies
<p>Additional notes</p>
<ul style="list-style-type: none"> • Guest lectures, integration of videos, case studies. • A weekly exercise class (#32905) will supplement the lecture by repeating and intensifying core concepts. • The module is applicable to the Certificate Program in Digital Technology and Entrepreneurship: Entrepreneurial Pathfinder.

Advanced Entrepreneurship

Module number
Course name
Advanced Entrepreneurship
Module coordinator/ examiner(s)
Prof. Dr. Dirk Totzek

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-7	2-5
Availability	Duration	Recommended semester
Winter or summer semester	1 semester	

Workload
90 h to 210 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulbereich B: Minor Entrepreneurship
LPO I applicability
Recommended prerequisites
Requirements
Language of instruction
English

Content
This module provides in-depth knowledge in the field of entrepreneurship. This includes, among other things, in-depth topics in individual areas of innovation management, in the field of entrepreneurship and start-ups, the specifics of innovation and start-up activities in specific contexts, as well as current trends and developments in entrepreneurship and innovation management.
Intended learning outcomes (ILOs)
Students who have successfully completed the module, <ul style="list-style-type: none"> • identify and name relevant problems in entrepreneurship and relate them to each other. • name and interpret business fundamentals in entrepreneurship and mobilise them to address in-depth issues. • name central and in-depth methods in entrepreneurship, analyse their results and classify them in the context of the literature. • establish links between the issues and topics covered and current cases in business practice. • Recognise the potential and limitations of objectives, approaches and instruments in entrepreneurship in the light of current research and reflect on them critically.

Teaching methods
Different teaching and learning formats are used depending on the course.
Required attendance
Examination (type of examination, scope)
Exam or portfolio
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Modulbereich B: Minor Finance

Corporate Finance and Capital Markets

Module number
Course name
Corporate Finance and Capital Markets
Module coordinator
Prof. Dr. Oliver Entrop

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2+2
Availability	Duration	Recommended semester
Every summer semester	1 semester	1-3

Workload
Lecture 2 SWS (30 h presence and 45 h individual working hours) Exercise session (30 h presence and 45 h individual working hours)
Module applicability
BA Version 2025: Modulbereich B: Major Finance Modulbereich B: Minor Finance
BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
Reference to the LPO I
Recommended prerequisites
Introductory module in Finance
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Advanced methods of company valuation (APV, entity, equity approach, autonomous vs. value-based financing, annuity vs. two-phase model, equity costs and beta leverage, capital structure, taxes, multiplier method) • Determinants of stock price performance (basic performance measures, multifactor models, size and value factors, advanced factors such as liquidity) • Risk-oriented corporate management concepts (RORAC, RAROC, optimal capital allocation for different target values)

<ul style="list-style-type: none"> • Optimal risk policy and hedging (basics, foreign currency risks, hedging of currency risks, risk policy for perfect and imperfect markets, risk policy and optimal capital structure, empirical evidence: company value and risk policy for currency risks)
Intended learning outcomes (ILOs)
<p>Students who have successfully completed the module,</p> <ul style="list-style-type: none"> • identify and interpret in-depth methods of company valuation and characterize the possibilities and limitations of different methods. They apply these methods to specific problems. • identify and interpret the influence of various value determinants on the share price performance of companies and apply methods of external performance measurement. • identify and interpret capital market-oriented methods for internal corporate management and capital allocation and characterize the possibilities and limitations of the methods. • identify and interpret the theoretical foundations of optimal corporate risk policy and implement specific risk reduction decisions using the appropriate financial instruments.
Teaching methods
<p>Interactive lecture Exercices</p>
Required attendance
Examination (type of examination, scope)
Exam 60 minutes (100%)
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Given in class
Additional notes

Empirical Finance

Module number
Module name
Empirical Finance
Module coordinator
Dr. Patrizia Perras / Prof. Dr. Niklas Wagner

Examination number	Credit points (ECTS)	Hours per week (SWS)
200413	5	3
Availability	Duration	Recommended semester
summer semester	1 semester	3 or 4

Workload
Lecture 3 SWS (33,75 hours class instruction; 116,50 hours self-study)
Calculation is based on: every hr./sem.-week
Module applicability
BA Version 2025: Modulbereich B: Major Finance Modulbereich B: Minor Finance
BA Version 1: Methoden Accounting, Finance and Taxation – Vertiefung
Reference to the LPO I
Recommended prerequisites
Recommended prerequisites are fundamental skills in statistics and probability (random variables and their distributions, statistical methods, testing and inference), as well as the Contents of an introductory course in corporate finance (valuation of bonds and stocks, capital market theory, asset pricing).
Requirements
According to § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration
Language of instruction
English

Content
The course introduces to the principles of empirical methods in modern capital market research. Among the major issues to be discussed are the underlying economic models and assumptions, common statistical and econometric methods, as well as their application. Students participate actively via self-prepared presentations on studies in capital market research.
Intended learning outcomes (ILOs)
Students who have successfully participated in the module “Empirical Finance”

<ul style="list-style-type: none"> • know the fundamental problems of empirical capital market research. • learn the various methods of empirical capital market research. • apply the methods learned to carry out well-founded forecasts of capital market time series, event studies and asset pricing analyses. • understand and evaluate results of empirical studies. • present empirical research results. • independently work on problems in the area of empirical capital market research, especially as part of a master's thesis.
Teaching methods
The module consists of a lecture (interactive frontal teaching) with intensive preparation and follow-up of the individual sessions and a seminar accompanying the lecture. In addition to comprehensively deepening knowledge in the area of empirical capital market research, the module equips students with the ability to acquire new knowledge and independently formulate research-oriented problems.
Required attendance
Examination (type of examination, scope)
100% final exam (60 minutes) / summer semester
Overall grade relevance
Exam resit opportunities
None; Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Campbell/Lo/McKinlay (1997), The Econometrics of Financial Markets, Princeton University Press
Additional notes

Financial Data Analytics and Machine Learning

Module number
Course name
Financial Data Analytics and Machine Learning
Module coordinator
Prof. Dr. Ralf Kellner

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
150 h (60 h contact studies / 90 h self-studies)
Module applicability
BA Version 2025: Modulbereich B: Major Finance Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Finance
Reference to the LPO I
Recommended prerequisites
Fundamentals of mathematics and statistics
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Asset classes on capital markets • Stocks, bonds and options • Descriptive analysis of one- and multi-dimensional distributions of asset prices and returns • Introduction to portfolio theory • Factor models • Empirical analysis within and between asset classes • Principles of machine learning • Neural networks • Machine learning in the financial sector
Intended learning outcomes (ILOs)
Students gain a basic understanding of various asset classes on financial markets and the associated fundamental theories. Students are able to name the special features of financial data

and apply the knowledge acquired in the course to real financial market developments. In addition, students understand how machine learning can be used in the financial sector in an insightful and informative way. Students interpret their own analyses, through which profound references to financial market theories are established.
Teaching methods
<ul style="list-style-type: none"> • Interactive lectures incl. digital documents • Interactive exercise units
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none"> • Written Exam
Overall grade relevance
Exam resit opportunities
Recommended reading
<ul style="list-style-type: none"> • Options, Futures and other Derivatives (2021) – John C. Hull, Pearson Verlag • Machine Learning in Finance (2021) – Dixon, M.F., Halperin, I., Bilokon, P.; Springer Verlag • Statistics and Data Analysis for Financial Engineering (2015) – Ruppert, D., Matteson, D. S.; Springer
Additional notes

Financial Engineering and Structured Finance

Module number
Course name
Financial Engineering and Structured Finance
Module coordinator
Prof. Dr. Oliver Entrop

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2+2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (30 h presence and 45 h individual working hours) Exercise class 2 SWS (30 h presence and 45 h individual working hours)
Module applicability
BA Version 2025: Modulbereich B: Major Finance Modulbereich B: Minor Finance
BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
Reference to the LPO I
Recommended prerequisites
Introductory module in Finance; further (Bachelor) Finance modules are an advantage.
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Fixed income: spot market and symmetric derivatives (yield curve estimation, swaps, forwards, futures) • Equities: Options (value limits, single and multi-period binomial trees, Black/Scholes, European and American derivatives) • Fixed income: interest rate and bond options (caps, floors, Black model, yield curve models such as Vasicek and Cox/Ingersoll/Ross) • Fixed-income: certificates and structured products (market overview, capped, floored, collared floaters, reverse and fixed-maxi floaters, callable step-up bonds, capital market floaters, etc.)

<ul style="list-style-type: none"> • Equities: certificates and structured products (market overview, index certificates, reverse convertibles, discount certificates, quanto certificates, turbo certificates, etc.) • Structural models (liability positions as derivatives on corporate assets, agency-conflicts between equity and debt capital providers, covenants, determinants of optimal corporate default, impact analysis of capital structure measures, rating from market prices, estimation of asset values and volatilities from liability positions and derivatives) • Reduced form models • Asset backed securities (ABS, CLOs etc), credit default swaps and structured debt
<p>Intended learning outcomes (ILOs)</p> <p>Students who have successfully completed the module,</p> <ul style="list-style-type: none"> • explain and interpret the theoretical principles of modern financial securities and particularly derivatives valuation in depth. They characterise the economic principles as well as their possibilities and limitations. • recognise and structure valuation problems and develop practical solutions. • Recognise and assess possible applications of various financial instruments and their risk structure. • quickly transfer their knowledge to the valuation of innovative financial instruments. • recognise and analyse a company as a complex system of derivative claims and, in particular, characterise the impact of specific capital structure measures on existing financing instruments.
<p>Teaching methods</p> <p>Interactive lecture Excercises</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>Exam 60 minutes (100%)</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>According to the examination and study regulations for the Master's degree program.</p>
<p>Recommended reading</p> <p>Given in class</p>
<p>Additional notes</p>

Finanzcontrolling

Modulnummer
Veranstaltungstitel
Finanzcontrolling
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Niklas Wagner

Prüfungsnummer	ECTS	SWS
200414	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Sommersemester	1 Semester	

Workload
Zusammensetzung / Aufteilung des Workload: Veranstaltungen Vorlesung 2 SWS, Übung 1 SWS = Summe 3 SWS, 5 ECTS
Aufteilung des Workload (zu berechnen in Stunden à 60 Minuten auf 15 Semesterwochen, d.h. 14 Vorlesungs- + 1 Prüfungswoche)
Präsenzzeit: Vorlesung 30, Übung 15, Eigenarbeitszeit: Vorlesung 70, Übung 35
Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Finance Modulbereich B: Minor Finance
BA Version 1: Methoden Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration. Inhalte des Moduls Corporate Finance sowie solide Grundkenntnisse in Statistik und Wahrscheinlichkeitstheorie werden empfohlen.
Verpflichtende Voraussetzungen
Bachelor-Abschluss in einem wirtschaftswissenschaftlichen oder den Wirtschaftswissenschaften nahen Studiengang
Unterrichtssprache
Deutsch

Inhalt
<p>Die aus dem Grundmodul Corporate Finance bekannten Konzepte Kapitalstruktur, Barwert und Risiko-Return Profil werden in stochastische Kapitalmarktmodelle eingebettet, um auf dieser Basis die fortgeschrittenen Konzepte des Risikomanagements wie Hedging, Einsatz von Derivaten und Value at Risk in ihrer Funktionsweise zu erschließen. Dabei werden anhand folgender spezieller Inhalte Charakteristika einzelner Instrumente sowie die Dynamik der Ausdifferenzierung der Instrumentenvielfalt dargelegt:</p> <ul style="list-style-type: none"> • Anleihebewertung und Asset-Liability Management mittels Duration und Konvexität • Begriffe der Finanzmarktstochastik: Arbitrage, Hedging-Strategien, stochastische Prozesse, Risikoneutrale Bewertung • Bewertung von Derivaten im Black-Scholes-Merton Modell • Risikomanagement auf der Basis von Value at Risk • Prinzipien der Bonitätsbeurteilung und Kreditrisikomessung • Analyse von Rating-Methoden
Lernergebnisse Lernziele
<p>Studierende, die erfolgreich an dem Modul „Finanzcontrolling“ teilgenommen haben,</p> <ul style="list-style-type: none"> • wissen, dass die fundierte Risiko-Return Analyse im Zentrum vieler praktischer Entscheidungen steht. • kennen die zwingende sachliche Kontinuität zwischen den traditionellen Konzepten der Finanzierung und deren moderner Ausdifferenzierung. • erlernen die Ambivalenz von Arbitrage- und Hedgingstrategien, die in die Struktur des Risiko-Return trade-offs eingelassen ist und können deren Zielsetzung beurteilen. • verstehen, dass das Bewertungsproblem für Derivate sich auch unabhängig von der Entwicklung innovativer Kapitalmarktprodukte stellt, da viele Aspekte der Finanzierungsentscheidung synthetisch durch Auszahlungsprofile von Derivaten replizierbar sind. • erläutern in fundierter Weise, wie die Komplexität von Instrumenten mit Bewertungsaufwand, Bewertungsunsicherheit und Marktdatenbedarf zusammenhängt. • bearbeiten selbstständig Problemstellungen im Bereich des Finanzcontrollings, insbesondere im Rahmen einer Master-Arbeit.
Lehr- und Lernformen
Interaktiver Frontalunterricht, Bearbeitung von Übungsaufgaben, Lösung und Präsentation von Übungsaufgaben
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)
Endklausur 60 Minuten, Endklausur: 100%
Gesamnotenrelevanz
Wiederholungsmöglichkeit
Literatur
Weitere Hinweise

Advanced Finance

Module number
Course name
Advanced Finance
Module coordinator/ examiner(s)
Prof. Dr. Oliver Entrop

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-7	2-5
Availability	Duration	Recommended semester
Winter or summer semester	1 semester	

Workload
90 h to 210 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulbereich B: Minor Finance
LPO I applicability
Recommended prerequisites
Requirements
Language of instruction
English

Content
This module provides in-depth specialist knowledge in the field of finance. This includes, among other things, in-depth topics in asset management, corporate finance, financial engineering and the development of financial innovations, as well as capital markets and their regulation, banking and insurance and their regulation, and risk management. It also includes primarily methodological topics related to finance. The courses offered establish a connection to current topics and issues in corporate practice, capital markets, regulation and research.
Intended learning outcomes (ILOs)
Students who have successfully completed the module, <ul style="list-style-type: none"> • identify and name relevant problems in finance and relate them to each other. • name and interpret business fundamentals in finance and mobilise them to address in-depth issues. • name central and in-depth methods in finance research, analyse their results and classify them in the context of the literature. • establish links between the issues and topics covered and current cases in business and capital market practice.

<ul style="list-style-type: none">• Recognise the potential and limitations of objectives, approaches and instruments in finance in the light of current research and reflect on them critically.
Teaching methods
Different teaching and learning formats are used depending on the course.
Required attendance
Examination (type of examination, scope)
Exam or portfolio
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Modulbereich B: Minor Information Systems and Digital Business

AI-Based Business Information Systems

Module number
Course name
Artificial Intelligence (AI)-Based Business Information Systems
Module coordinator
Prof. Dr. Ulrich Gnewuch

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (30 h attendance and 45 h self-study) Exercise 2 SWS (30 h attendance and 45 h self-study) Calculation basis: 15 weeks in a semester, including an examination week; each SWS corresponds to 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Information Systems and Digital Business BA Version 1: Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the master's degree program in Business Administration. Basic skills in data analysis and/or programming (e.g., Python, R) are highly recommended.
Requirements
Language of instruction
English

Content
Artificial intelligence (AI) offers significant opportunities while also creating new challenges for businesses. In light of these dynamics, this course focuses on the design, management, use, and

<p>impact of AI-based business information systems. It is not a technical course, but rather takes a managerial/organizational perspective on the use of AI in businesses. Topics covered will include:</p> <ul style="list-style-type: none"> - Theoretical and conceptual foundations of AI-based business information systems - Business capabilities enabled by AI-based information systems: automation, engagement, insights & decisions, and innovation - Challenges in and strategies for designing and managing AI-based information systems - Exercises and case studies on selected AI-based information systems (e.g., robotic process automation, conversational AI, explainable AI, generative AI)
<p>Intended learning outcomes (ILOs)</p> <p>After successful participation in this course, students will be able to:</p> <ul style="list-style-type: none"> - Explain what AI-based business information systems are and how they enable important business capabilities - Describe the theoretical and conceptual foundations that guide the design and management of different AI-based business information systems - Identify key challenges in designing and managing different types of AI-based business information systems and develop strategies for addressing these challenges <p>In addition, students will gain some hands-on experience with explainable AI techniques and human-centered design approaches.</p>
<p>Teaching methods</p> <ul style="list-style-type: none"> - Interactive lectures and classroom discussions - Exercises, case studies, and student presentations - Readings and pre-recorded videos
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>Portfolio: Group work and presentations during the course (40%); final exam (60%)</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>According to the study and examination regulations for the master's degree program in Business Administration/ Annually.</p>
<p>Recommended reading</p> <p>Benbya, H., Pachidi, S., & Jarvenpaa, S. (2021). Artificial intelligence in organizations: Implications for information systems research. <i>Journal of the Association for Information Systems</i>, 22(2), 281-303.</p> <p>Berente, N., Gu, B., Recker, J., & Santhanam, R. (2021). Managing artificial intelligence. <i>MIS Quarterly</i>, 45(3), 1433-1450.</p> <p>Shneiderman, B. (2022). <i>Human-centered AI</i>. Oxford University Press.</p>
<p>Additional notes</p> <p>All teaching material in English language. Teaching language is English.</p> <p>Replaces the course "Design and Management of AI-Based Business Information Systems": Students who have already completed the course "Design and Management of AI-Based Business Information Systems" (35000) cannot register for this course.</p>

Business Intelligence & Analytics Systems

Module number
Course name
Business Intelligence & Analytics Systems
Module coordinator
Prof. Dr. Ulrich Gnewuch

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture 2 SWS (30 h attendance and 45 h self-study) Exercise 2 SWS (30 h attendance and 45 h self-study)
Calculation basis: 15 weeks in a semester, including an examination week; each SWS corresponds to 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Information Systems and Digital Business
BA Version 1: Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the master’s degree program in Business Administration.
Basic skills in data analysis and/or programming (e.g., Python, R) are recommended.
Requirements
Language of instruction
English

Content
With the exponential growth of data and technological advancements in analytics, organizations have recognized the value of using data to drive their business decisions. In order to enable employees across all facets of the business to become more data-driven in their decision-making, organizations employ a variety of business intelligence & analytics (BI&A) systems. Examples include BI&A systems for data provisioning (e.g., data warehouses), information generation (e.g., process mining platforms), and information presentation and distribution (e.g., dashboards). This

<p>course focuses on the fundamental concepts and core components of BI&A systems as well as their role in data-driven decision-making within organizations. It is not a technical course, but rather takes a managerial perspective on the design, use, and impact of BI&A systems. In the exercise, students will work on real-world BI&A case studies and get hands-on experience with state-of-the-art BI&A tools.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>After successful participation in this course, students will be able to:</p> <ul style="list-style-type: none"> - Explain what business intelligence & analytics (BI&A) systems are and how they enable data-driven decision-making in organizations - Differentiate between BI&A systems for data provisioning, information generation, and information presentation and distribution - Explain the theoretical and conceptual foundations guiding the design, implementation, and management of BI&A systems - Identify key challenges with different types of BI&A systems and develop strategies for addressing these challenges <p>In addition, students will gain hands-on experience with state-of-the-art BI&A tools.</p>
<p>Teaching methods</p> <ul style="list-style-type: none"> - Interactive lectures and classroom discussions - Exercises, case studies, and student presentations - Readings and pre-recorded videos
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Portfolio: Group work and presentations during the course (40%); final exam (60%)</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>According to the study and examination regulations for the master's degree program in Business Administration/ Annually.</p>
<p>Recommended reading</p> <p>Chen, H., Chiang, R. H. L., & Storey, V. C. (2012). Business intelligence and analytics: From big data to big impact. <i>MIS Quarterly</i>, 36(4), 1165–1188.</p> <p>Sharda, R., Delen, D., & Turban, E. (2014). Business intelligence and analytics: systems for decision support. 10th edition. Pearson.</p>
<p>Additional notes</p>
<p>All teaching material in English language. Teaching language is English.</p>

Digital Markets and Online Platforms

Module number
Course name
Digital Markets and Online Platforms
Module coordinator
Prof. Dr. Jan Krämer

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 Semester	

Workload
Lecture 2 SWS (30 hrs. attendance and 45 hrs. self-study) Tutorial 2 SWS (30 hrs. attendance and 45 hrs. self-study) Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Module applicability
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Information Systems and Digital Business BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung Wirtschaftsinformatik / Information Systems – Grundlagen Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
Gem. § 4 der Prüfungs- und Studienordnung für den Masterstudiengang Wirtschaftsinformatik (Information Systems). Basic knowledge of economics is highly recommended. Ideally, but not necessarily, basic knowledge of the Internet economy.
Requirements
Language of instruction
English

Content
The lecture lays a methodological foundation in the economics of digital markets and online platforms, while paying special attention to strategic, technological and behavioral aspects of platform design. Particularly, this includes the following topics:

<ul style="list-style-type: none"> • Strategies for successful launch and governance of platforms • Managing openness of platform ecosystems • Reviews, Ratings and Recommender Systems • Pricing on two-sided platforms • Data-driven platform design and consumer behavior • Regulating market power and competition issues in digital markets
<p>Intended learning outcomes (ILOs)</p> <p>Students who have successfully participated in the module “Digital Markets and Online Platforms”,</p> <ul style="list-style-type: none"> • explain the current state of research on online platforms, firms’ strategies in digital markets and the ongoing policy debate on regulation of digital markets. • interpret business models, governance and design, and competition in the Internet economy. • perform a complete analytical (algebraic) equilibrium analysis of game-theoretic models for competition between two-sided platforms. • understand the design of and computations performed by various types of recommender systems. • illustrate how platform design decisions shape behavior of economic actors on a platform. • assess how different methodological approaches in the literature contribute to a better understanding of the topic and, where appropriate, to academic or policy debates. • develop holistic strategies for platform businesses taking into account the idiosyncratic characteristics of digital markets.
<p>Teaching methods</p> <ul style="list-style-type: none"> • Interactive lecture • Tutorial
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>Final exam 60 minutes - 100 %</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p> <ul style="list-style-type: none"> • Parker, G., van Alstyne M., Choudary S. (2016). Platform Revolution. W. W. Norton & Company, Inc. • Belleflamme, P & M. Peitz (2021). The Economics of Platforms: Concepts and Strategies. Cambridge University Press.
<p>Additional notes</p> <ul style="list-style-type: none"> • All teaching material in English language • Teaching language in English • Replaces the course “Electronic Markets”, students who have already completed the course “Electronic Markets” (PN: 266200) cannot register for this course.

IT Architecture Management

Module number
Course name
IT Architecture Management
Module coordinator
Prof. Dr. Thomas Widjaja

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture 2 SWS (30 hours class attendance; 45 hours self-study) Exercise 2 SWS (30 hours class attendance; 45 hours self-study) Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Information Systems and Digital Business
BA Version 1: Wirtschaftsinformatik/ Information Systems - Vertiefung
LPO I applicability
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree programme in Business Information Systems. Successful attendance of the module "IT Management" (or comparable knowledge requirement) is recommended.
Requirements
Language of instruction
English

Content
IT architectures define the company's IT components and their interactions. This module provides an overview of the tasks and objectives of IT architecture management and covers the following topics in more detail: 1. Introduction and Overview (information systems, systems theory, IT architecture, enterprise architecture, IT architectures as models, meta-models, and goals of IT architecture management).

<p>2. Operating Model (standardization, integration, types of operating models, enterprise architecture core diagrams)</p> <p>3. Frameworks for IS architecture management</p> <p>4. Maturity levels of IT architectures (cost, management, outsourcing, and agility aspects of maturity levels of IT architectures)</p> <p>5. Management of IT complexity (complex adaptive systems, emergence, IT complexity, IT heterogeneity, Ashby's Law of Requisite Variety, standards, management of functional redundancy)</p> <p>6. Modularity (design structure matrices, IT architecture modularity and IT governance decentralization, design parameters, bi-modal architectures, and organizational ambidexterity)</p> <p>7. Architecture of digital platforms and Decentralized Autonomous Organizations (DAOs) (layered modular architecture, generativity, platform governance and boundary resources, platform openness).</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students, who have successfully participated in the module,</p> <ul style="list-style-type: none"> • classify enterprise architecture management as a sub-field of IT management. • explain the goals of IT architecture management and their dependencies. • explain the interactions between enterprise architectures and IT architectures. • model enterprise and IT architectures from different perspectives. • classify the management of redundancy and degree of standardization as central tasks of IT architecture management. • explain the essential frameworks and methods for IT architecture management. • implement the essential frameworks and methods for IT architecture management.
<p>Teaching methods</p> <ul style="list-style-type: none"> • Interactive frontal teaching • Case studies • Working on exercises
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <ul style="list-style-type: none"> • Exam, 60 Minutes, 100 %
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p> <ul style="list-style-type: none"> •
<p>Additional notes</p> <p>The course will be extended by guest lectures if necessary. Literature references will follow at the beginning of the course.</p>

IT-Services und IT-Servicemanagement

Modulnummer
Veranstaltungstitel
IT-Services und IT-Servicemanagement
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Thomas Widjaja

Prüfungsnummer	ECTS	SWS
266180	5	4
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
jedes Wintersemester Nicht im WiSe 25/26	1 Semester	

Workload
Vorlesung 2 SWS (30 St. Präsenzzeit und 45 St. Eigenarbeitszeit) Übung 2 SWS (30 St. Präsenzzeit und 45 St. Eigenarbeitszeit) Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Information Systems and Digital Business BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration. IT-Management sowie Geschäftsprozessmanagement aus dem Bachelor-Studiengang Wirtschaftsinformatik oder gleichwertige Kenntnisse empfohlen.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalt
Die Vorlesung setzt sich mit den zentralen IT-Managementaufgaben zur Erbringung von Services auseinander. Folgende Themen werden unter anderem behandelt: 1. Einführung und Überblick über digitale Dienstleistungen und das Management Digitaler Dienstleistungen aus zwei Perspektiven 2. Service Dominant Logic (SDL)

<p>3. Digitalisierungsgrad von Services 4. Qualität von Services: u. a. „SERVQUAL“ zur Messung der Servicequalität sowie IT-spezifische Anpassungen (z. B. e-SERVQUAL) 5. Serviceorientierte Architekturen 6. Cloud Computing und Software as a Service (SaaS) 7. Nutzerdatenbasierte Services 8. IT-Service-Management: Aufgaben des IT-Service-Managements, Modelle und Rahmenkonzepte (ITIL, COBIT), Unterstützung durch Software-Werkzeuge</p>
<p>Lernergebnisse Lernziele</p>
<p>Studierende, die an diesem Modul teilgenommen haben,</p> <ul style="list-style-type: none"> • erklären die wichtigsten Grundbegriffe aus dem Bereich des IT-Service-Managements. • spezifizieren IT-Services korrekt. • unterstützen Organisationen bei der Entscheidung, ob ein IT-Service selbst erstellt oder vom Markt bezogen werden sollte. • setzen Verfahren zur Messung der IT-Servicequalität um. • bestimmen den Digitalisierungsgrad von Services. • erklären die wesentlichen Parameter beim Erstellen von nutzerdatenbasierten Services nennen und deren Zusammenhänge. • beschreiben die Wirkung von IT-Service-Management auf IT-Business-Alignment.
<p>Lehr- und Lernformen</p>
<ul style="list-style-type: none"> • Interaktiver Frontalunterricht • Bearbeitung von Fallstudien in Gruppenarbeit • Praktische Übung
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)</p>
<p>Klausur, 60 Minuten, 100 %</p>
<p>Gesamtnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p>
<p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
<p>Literatur</p>
<p>Weitere Hinweise</p>
<p>Die Veranstaltung wird ggf. um Gastvorträge erweitert. Literaturhinweise folgen zu Beginn der Lehrveranstaltung.</p>
<p>WICHTIG: Im WiSe 25/26 findet diese Veranstaltung NICHT statt.</p>

Management of Information Security and Privacy

Module number
Course name
Management of Information Security and Privacy
Module coordinator
Prof. Dr. Jin Gerlach

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2+2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (30 hrs. attendance time and 45 hrs. self-study time) Exercise 2 SWS (30 hrs. attendance time and 45 hrs. self-study time)
The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Information Systems and Digital Business
BA Version 1: Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree programme Information Systems.
Requirements
Language of instruction
English

Content
The ongoing digitization increases the importance for organizations to protect their digital assets, customer information, and privacy. To ensure such protection, organizations must adequately manage information security and customer privacy, which is associated with numerous challenges. This course addresses central organizational and management issues, processes, frameworks, theories, and challenges associated with the management of information security and privacy. Note: the course focuses on a management/organizational perspective. It is not a technical course.

<p>Topics covered by this course are:</p> <ul style="list-style-type: none"> • Basic concepts associated with information security and privacy • Risk management techniques for information security • Organization of information security and privacy management • Investment decisions with respect to information security • Countermeasures for preventing information security and privacy incidents • Measures for detecting security breaches • Responding to information security breaches • Tensions and tradeoffs with respect to privacy management • Ethical perspectives on managing information security and privacy
<p>Intended learning outcomes (ILOs)</p>
<p>This course aims to provide advanced knowledge on the management of information security and privacy in organizations. After attending this course, students</p> <ul style="list-style-type: none"> • explain key challenges regarding the management of information security and privacy in organizations, • conceptualize organizational measures that help to improve information security and privacy protection, • and, based on the knowledge they have acquired, students develop well-founded management decisions in organizations to enhance information security and privacy protection.
<p>Teaching methods</p>
<p>Interactive frontal teaching Processing of exercise tasks</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Exam, 60 minutes, 100 %</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Additional notes</p>
<p>- All teaching material in English language - Teaching language also in English</p>

Strategic IT-Management (IT-Management für Fortgeschrittene)

Module number
37500
Course name
Strategic IT Management
Module coordinator
Prof. Dr. Thomas Widjaja

Examination number	Credit points (ECTS)	Hours per week (SWS)
283003	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (30 hours class attendance; 45 hours self-study) Exercise 2 SWS (30 hours class attendance; 45 hours self-study) Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Information Systems and Digital Business BA Version 1: Wirtschaftsinformatik/Information Systems – Grundlagen Wirtschaftsinformatik/Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree program in Information Systems. Successful attendance of the module "IT Management" (or comparable knowledge requirement) is recommended.
Requirements
Language of instruction
English

Content
This module provides conceptual and analytical skills for designing, managing, and implementing information technology and information systems for organizations. The course provides an overview of the main tasks and goals of strategic IT management. In addition, selected current challenges of IT management will be discussed. Among others, the following topics will be addressed: 1. Value of IT 2. IT governance

<p>3. IT outsourcing 4. Management of IT architectures 6. Standardization of IT 7. IT integration 8. Business intelligence and big data 9. Data-driven business models</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have successfully participated in the module are able to</p> <ul style="list-style-type: none"> • describe and explain the value contribution of IT. • discuss the advantages and disadvantages of different IT governance archetypes. • evaluate the economic benefits of IT outsourcing. • describe the tasks of business intelligence. • explain the goals of IT architecture management. • perform selected methods of IT architecture management. • evaluate the advantages and disadvantages of IT standardization. • explain the key characteristics of data-driven business models.
<p>Teaching methods</p>
<ul style="list-style-type: none"> • Interactive frontal teaching • Case studies • Working on exercises
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Exam, 60 Minutes, 100%</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Literature references will follow at the beginning of the course.</p>
<p>Additional notes</p>
<p>The course will be extended by guest lectures and case studies if necessary. The course is a lecture with seminar character. The emphasis is on an interactive form of teaching and learning and is achieved, among others, through the work on and presentation of practical case studies.</p>

Strategies in the Software Industry

Module number
Course name
Strategies in the Software Industry
Module coordinator
Prof. Dr. Jin Gerlach

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2+2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (30 hrs. attendance time and 45 hrs. self-study time) Exercise 2 SWS (30 hrs. attendance time and 45 hrs. self-study time) The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Information Systems and Digital Business Modulbereich B: Minor Information Systems and Digital Business BA Version 1: Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree programme Information Systems.
Requirements
Language of instruction
English

Content
With many of the big tech companies being software companies nowadays, software is no longer only a product. Instead, a business model has developed around software. However, software characteristics differ from physical products, making it important to take specific strategic considerations into account. This course addresses the specifics of software as a good as well as the software industry and resulting consequences for strategies of software providers (e.g., software startups or established tech firms). Essential Contents include: <ul style="list-style-type: none"> • Characteristics of digital goods

<ul style="list-style-type: none"> • Network effects and network effect markets • Digital value chains • Platforms • Fundamental principles of the software industry • Cloud computing and Software as a Service • Pricing strategies for software vendors • Cooperation strategies for software vendors • The value of data • Data-based business models • Privacy in data-based business models • Specifics of Open Source Software
<p>Intended learning outcomes (ILOs)</p> <p>This course aims to provide fundamental knowledge on the specifics of the software industry with a focus on strategies in the software industry for software providers. After attending this course, the students</p> <ul style="list-style-type: none"> • explain central factors and specifics of software from an economic point of view, • explain important aspects of the market for software, • and, based on their acquired knowledge, students develop management decisions for software companies and develop strategies for software vendors.
<p>Teaching methods</p> <p>Interactive frontal teaching Processing of exercise tasks</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>Exam, 60 minutes, 100 %</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation..</p>
<p>Recommended reading</p>
<p>Additional notes</p> <p>- All teaching material in English language - Teaching language also in English</p>

Advanced Information Systems and Digital Business

Module number
Course name
Advanced Information Systems and Digital Business
Module coordinator/ examiner(s)
Prof. Dr. Thomas Widjaja

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-7	2-5
Availability	Duration	Recommended semester
Winter or summer semester	1 semester	

Workload
90 h to 210 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulbereich B: Minor Information Systems and Digital Business
LPO I applicability
Recommended prerequisites
Requirements
Language of instruction
English

Content
This module provides in-depth specialist knowledge in the field of information systems and digital business. This includes, among other things, in-depth topics regarding the digital transformation of business networks, digital platforms, the effects of digitalisation on individuals and society, and the use of digitalisation for the environment and sustainability, IT security, software development, IT innovation management, digital services, service engineering and user behaviour in the context of digital products.
Intended learning outcomes (ILOs)
Students who have successfully completed the module, <ul style="list-style-type: none"> • identify and name relevant problems in information systems and digital business and relate them to each other. • name and interpret business fundamentals in information systems and digital business and mobilise them to address in-depth issues. • name central and in-depth methods in information systems and digital business, analyse their results and classify them in the context of the literature.

<ul style="list-style-type: none">• establish links between the issues and topics covered and current cases in business practice.• Recognise the potential and limitations of objectives, approaches and instruments in information systems and digital business in the light of current research and reflect on them critically.
Teaching methods
Different teaching and learning formats are used depending on the course.
Required attendance
Examination (type of examination, scope)
Exam or portfolio
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Modulbereich B: Minor Marketing

B2B Marketing and Sales Management

Module number
33840
Course name
B2B Marketing and Sales Management
Module coordinator
Prof. Dr. Dirk Totzek

Examination number	Credit points (ECTS)	Hours per week (SWS)
264790	5	2
Availability	Duration	Recommended semester
Three-semester cycle	1 semester	

Workload
Lecture 2 SWS (30 hours attendance & 120 hours own study)
The calculation is based on 15 semester weeks (14 lecture weeks and 1 exam week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Management and Strategy Modulbereich B: Minor Marketing
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
Knowledge of "Marketing" and prior attendance of basic methods modules (e.g. "Multivariate Methods") is of advantage.
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Fundamentals of sales management • Design and management of sales systems • Managing the sales force and personal selling • Specifics of B2B marketing • Theories and concepts of organizational buying behavior • Relationship marketing

<ul style="list-style-type: none"> • Peculiarities and central decision areas in the marketing mix • B2B marketing across different business types
Intended learning outcomes (ILOs)
<p>Students who have participated in the module “B2B Marketing and Sales Management”,</p> <ul style="list-style-type: none"> • explain central concepts and theories of sales management and B2B marketing. • evaluate the design and management of sales systems and the sales force based on theory and empirical evidence. • explain the particularities of B2B markets and organizational purchasing behavior. • discuss the implications of these particularities for the design of the marketing mix in B2B markets in different contexts. • develop an integrated understanding of B2B marketing and sales management reflecting the current state of research.
Teaching methods
Interactive teaching supplemented with guest lectures from practitioners.
Required attendance
Examination (type of examination, scope)
Written exam (duration 60 minutes, 100% of the total grade)
Overall grade relevance
Exam resit opportunities
in the following semester; Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
<p>Homburg, Christian, Schäfer, Heiko, Schneider, Janna (2012), Sales Excellence: Systematic Sales Management, Berlin.</p> <p>Palmatier, Robert W., Stern, Louis W., El-Ansary, Adel I. (2014), Marketing Channel Strategy, 8th edition, Upper Saddle River, New Jersey.</p> <p>Anderson, James C., Narus, James A., Narayandas, Das (2009), Business Market Management, 3rd edition, Upper Saddle River, New Jersey.</p> <p>Lilien, Gary L., Petersen, J. Andrew, Wuyts, Stefan (2022) (Eds.), Handbook of Business-to-Business Marketing, 2nd edition, Cheltenham.</p> <p>A list with mandatory readings will be provided at the beginning of the lecture.</p>
Additional notes
The module and the exam are in English language.

V Branding and Marketing Communications

Modulnummer
33820
Modultitel
Produkt-, Marken und Kommunikationsmanagement
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Dirk Totzek

Prüfungsnummer	ECTS	SWS
264950	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Dreisemesterturnus	1 Semester	

Workload
Vorlesung 2 SWS (30 Std. Präsenz- und 120 Std. Eigenarbeitszeit)
Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- und 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Minor Marketing
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Grundlegende Kenntnisse in Marketing und Modulen des Gebiets Methoden (z.B. „Multivariate Verfahren“) werden empfohlen.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch (will be in English from 2026 onwards)

Inhalte
<ul style="list-style-type: none"> • Präferenztheoretische Grundlagen des Konsumentenverhaltens • Zentrale Entscheidungsfelder der Ausgestaltung und Führung von Produktprogrammen • Zentrale Entscheidungsfelder der Gestaltung und Führung von Marken • Zentrale Entscheidungsfelder und Instrumente des Kommunikationsmanagements • Instrumente zur Budgetierung von Kommunikationsausgaben • Modellierung und Messung der Kommunikationswirkung
Lernergebnisse Lernziele
Studierende, die am Modul „Produkt-, Marken und Kommunikationsmanagement“ teilgenommen haben,
<ul style="list-style-type: none"> • erläutern zentrale Konzepte und Methoden zur Führung von Produktprogrammen und Marken. • wenden Methoden zur Bewertung und Steuerung von Marken an.

<ul style="list-style-type: none">• führen Messungen zur Wirkung von Kommunikationsmaßnahmen durch.• entwickeln optimale Verteilungen von Kommunikationsbudgets.• beurteilen zentrale Vor- und Nachteile unterschiedlicher Kommunikationsinstrumente.• entwickeln ein integriertes und kritisches Verständnis von Markenführung und effektiver Marketingkommunikation vor dem Hintergrund des aktuellen Forschungsstands.
Lehr- und Lernformen
Interaktiver Frontalunterricht ergänzt durch Praxisvorträge
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang)
Schriftliche Klausur (Dauer 60 Minuten) Gewichtung: 100%
Gesamnotenrelevanz
Wiederholungsmöglichkeit
jeweils im folgenden Semester; Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.
Literatur
Basisliteratur: Homburg, Ch. (2020), Marketingmanagement, 7. Aufl., Wiesbaden Spezielle Literatur zu den einzelnen Kapiteln wird in der Vorlesung bekannt gegeben. Ausgewählte Artikel als Pflichtlektüre.
Weitere Hinweise

Consumer Behavior

Modulnummer
Modultitel
Konsumentenverhalten
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Jan Schumann

Prüfungsnummer	ECTS	SWS
Klicken oder tippen Sie hier, um Text einzugeben.	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Sommersemester	1 Semester	

Workload
Vorlesung = 2 SWS (30 Std. Präsenzzeit + 120 Std. Eigenarbeitszeit)
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Minor Marketing
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration. Grundkenntnisse in "Marketing" werden empfohlen.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
Das Modul gibt einen Überblick über konsumrelevante Wahrnehmungs-, Bewertungs- und Entscheidungsprozesse im Rahmen der individuellen Informationsverarbeitung. Hierbei werden aktuelle Erkenntnisse aus der Motivations-, Emotions-, Wahrnehmungs- und Sozialpsychologie berücksichtigt und aus einer problem- und managementorientierten Perspektive dargestellt. Zahlreiche Beispiele illustrieren, wie diese grundlegenden theoretischen Prinzipien in der Unternehmenspraxis zur Anwendung kommen können.
Lernergebnisse Lernziele
Studierende, die an dem Modul „Konsumentenverhalten“ teilgenommen haben, ... - ... verinnerlichen wesentliche Aussagen der zentralen verhaltenswissenschaftlichen Theorien.

<p>- ... wenden verhaltenswissenschaftliche Theorien auf Erkenntnisse und praktische Problemstellungen des Marketings an.</p> <p>- ... sind vertraut mit der optimalen Gestaltung der Instrumente des Marketing-Mix im Hinblick auf den Konsumenten.</p> <p>- ... beurteilen Anwendungsfälle im Kaufverhalten und in der Unternehmenspraxis im Rahmen des Konsumentenverhalten.</p> <p>- ... bewerten Erkenntnisse aus der Motivations-, Emotions-, Wahrnehmungs- und Sozialpsychologie im Marketingkontext.</p>
<p>Lehr- und Lernformen</p>
<p>Interaktiver Frontalunterricht</p>
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang)</p>
<p>Schriftliche Klausur am Ende des Semesters, 60 min., 100 %</p>
<p>Gesamnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p>
<p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
<p>Literatur</p>
<ul style="list-style-type: none"> • Koeber-Riel, W. Weinberg, P. / Gröppel-Klein, A. (2008): Konsumentenverhalten (9. Aufl.), München: Vahlen. • Homburg, Christian (2017). Marketingmanagement. Strategie, Instrumente, Umsetzung, Unternehmensführung. Wiesbaden, Springer-Gabler. • Hoyer, W.D./MacInnis, D.J. (2009): Consumer Behavior, International Edition (5 th ed.), Cengage Laerning Services. • Trommsdorff, H. (2004): Konsumentenverhalten (6. Aufl.), Stuttgart.
<p>Weitere Hinweise</p>
<p>Die Lehrveranstaltung soll durch Gastvorträge ergänzt werden.</p>

Customer Relationship Management

Module number
34540
Course name
Customer Relationship Management (ehemals: Kundenmanagement)
Module coordinator/ examiner(s)
Prof. Dr. Jan Hendrik Schumann

Examination number	Credit points (ECTS)	Hours per week (SWS)
264940	5	2
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (30 hours attendance time and 120 hours individual work time)
Module applicability
BA Version 2025: Modulbereich B: Major Management and Strategy Modulbereich B: Minor Marketing
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
LPO I applicability
Recommended prerequisites
Bachelor's degree in an economics or business-related degree program. Basic knowledge of marketing is advantageous.
Requirements
Language of instruction
English

Content
The lecture covers the basics of (data-based) customer management. As part of the lecture, students learn about typical customer management problems and how to solve them. Basic methods and concepts (e.g. customer acquisition, cross-selling, customer loyalty, complaint management and churn) and their implementation in practice are discussed.
Intended learning outcomes (ILOs)
Students who have participated in the course "Customer Relationship Management" ...
- ... understand the CRM approach and concepts of value-oriented customer management.
- ... internalize the difference between past-based customer evaluation and

forecasted customer evaluation as well as their respective strengths and weaknesses.
- ... know important customer management strategies and key figures.
- ... understand the specific challenges that the introduction of value-oriented customer management and know suitable approaches to meet them.
- ... take a critical look at typical customer management scenarios.
- ... derive suitable customer management strategies based on the key variables of customer lifetime value and customer equity.
Teaching methods
Required attendance
Examination (type of examination, scope)
Written exam at the end of the semester (duration: 60 minutes)
Weighting of the individual performances in the module grade: Final exam 100%
Overall grade relevance
Exam resit opportunities
Recommended reading
Additional notes

Marketing Research

Module number
33860
Course name
Marketing Research
Module coordinator
Prof. Dr. Dirk Totzek

Examination number	Credit points (ECTS)	Hours per week (SWS)
200514	5	3
Availability	Duration	Recommended semester
Summer semester	1 semester	2-3

Workload
Lecture 2 SWS (30 hours attendance and 60 hours own study) Exercise 1 SWS (Nr. 33861) (15 hours attendance and 45 hours own study)
The calculation is based on 15 semester weeks (14 lecture weeks and 1 exam week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Minor Marketing
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
Prior attendance of basic methods modules (e.g. "Fundamentals of Business Analytics", "Multivariate Methods") is strongly recommended. Bachelor's level knowledge of statistics is assumed.
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Importance of market research for marketing decisions • Design and implementation of quantitative surveys • Analysis of survey data with multivariate methods (regression analysis, confirmatory factor analysis, structural equation models, cluster analysis) • Design and implementation of experimental studies • Evaluation of experimental data (ANOVA, moderation and mediation analysis, conjoint analysis)

Intended learning outcomes (ILOs)
Students who have participated in the module "Marketing Research", <ul style="list-style-type: none"> • explain the process steps and the goals, decision options, and limitations of quantitative primary data collection in marketing. • identify appropriate data and research methods against reflecting the current state of research to address a concrete research problem. • apply appropriate analytical procedures to identify complex relationships in primary data sets. • interpret statistical results and critically evaluate the validity of statistical conclusions. • plan a quantitative primary data collection to adequately address a specific problem in marketing research or practice.
Teaching methods
Interactive teaching with a seminar character. ("Vorlesung mit Seminarcharakter") The lecture is supplemented with guest lectures from practitioners.
Required attendance
Examination (type of examination, scope)
Written exam (duration 60 minutes, 100% of the total grade)
Overall grade relevance
Exam resit opportunities
in the following semester; Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Homburg, Ch., Klarmann, M., Vomberg, A. (2021), Handbook of Market Research. Springer, Cham. Hayes, Andrew F. (2018), Introduction to Mediation, Moderation, and Conditional Process Analysis, 2 nd ed., New York. A list with mandatory readings will be provided at the beginning of the lecture.
Additional notes
The module and the exam are in English language.

V oder SE Practical Course in Marketing

Modulnummer
Modultitel
Praxisprojekt Marketing und Services
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Dirk Totzek

Prüfungsnummer	ECTS	SWS
	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Winter- oder Sommersemester	1 Semester	

Workload
Blockseminar (30 Std. Präsenz- und 120 Std. Eigenarbeitszeit)
Verwendbarkeit
BA Version 2025: Modulbereich B: Minor Marketing
BA Version 1: International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Erfolgreicher Besuch von mindestens zwei Master-Vorlesungen im Fach Marketing.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
<ul style="list-style-type: none"> • Die Studierenden erhalten eine Einführung in Konzepte, Methoden und Strategien aus der Marketingpraxis eines Unternehmens. • Die Studierenden fertigen einzeln oder in Gruppen eine Präsentation an, in der ein fundierter Lösungsansatz für eine reale Problemstellung aus der Marketingpraxis dargestellt wird. • Die Studierenden präsentieren und diskutieren ihren erarbeiteten Lösungsansatz.
Lernergebnisse Lernziele
<p>Studierende, die erfolgreich an dem Modul "Praxisprojekt Marketing und Services" teilgenommen haben,</p> <ul style="list-style-type: none"> • wenden Methoden und Theorien des Marketings auf eine konkrete Problemstellung an. • analysieren und strukturieren komplexe Sachverhalte und Problemstellungen aus der Marketingpraxis vor dem Hintergrund ihres theoretischen und methodischen Wissens. • entwickeln selbständig Lösungen für aktuelle Problemstellungen in der Marketingpraxis und reflektieren die Stärken und Schwächen der entwickelten Lösungsstrategie. • stellen die wesentlichen Ergebnisse ihrer Arbeit in einer Präsentation dar. • formulieren, diskutieren und verteidigen ihre Entscheidungen, die auf komplexen Zusammenhängen beruhen.

Lehr- und Lernformen
<ul style="list-style-type: none">• Bearbeitung eines Praxisproblems in Gruppenarbeit• Präsentation und Diskussion der Ergebnisse
Anwesenheitspflicht
Ja
Prüfungsleistung (Prüfungsform, Umfang)
Portfolio (Gruppenleistung, Einzelleistung)
Weitere Hinweise werden zu Beginn der jeweiligen Veranstaltung bekannt gegeben.
Gesamtnotenrelevanz
Wiederholungsmöglichkeit
Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.
Literatur
Weitere Hinweise
Die Veranstaltung findet bei Bedarf in Kooperation mit Praxispartnern statt.
Weitere Informationen zum Thema, zum Zeitplan und zu Anmeldeformalitäten werden rechtzeitig bekannt gegeben und können der jeweiligen Ausschreibung entnommen werden.

Price Management

Module number
Course name
Price Management
Module coordinator
Prof. Dr. Dirk Totzek

Examination number	Credit points (ECTS)	Hours per week (SWS)
200519	5	3
Availability	Duration	Recommended semester
Three-semester cycle	1 semester	

Workload
Lecture 2 SWS (30 hours attendance & 90 hours own study) Exercise 1 SWS (Nr. 33801) (15 hours attendance & 15 hours own study)
The calculation is based on 15 semester weeks (14 lecture weeks and 1 exam week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Minor Marketing
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
Knowledge in "Marketing" and basic mathematical skills are strongly recommended. Attendance of basic method modules (e.g. "Multivariate Methods") is of advantage.
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Fundamentals of price management • The economics of price (demand functions, price elasticity) • Estimation of demand functions and willingness-to-pay • The psychology of price • Pricing strategy and price structure • Methods of price determination

<ul style="list-style-type: none"> • Key challenges of price implementation
Intended learning outcomes (ILOs)
<p>Students who have participated in the module "Price Management",</p> <ul style="list-style-type: none"> • explain theories and concepts of price management reflecting the current state of research. • critically discuss procedures and application problems to estimate demand functions and willingness-to-pay. • determine optimal prices analytically. • explain and assess problems in the design of pricing strategies and price structures. • discuss problems of price implementation and possible solutions in marketing practice.
Teaching methods
Interactive teaching supplemented with guest lectures from practitioners.
Required attendance
Examination (type of examination, scope)
Written exam (duration 60 minutes, 100% of the total grade)
Overall grade relevance
Exam resit opportunities
in the following semester; Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Simon, H., Fassnacht, M. (2019), Price Management, Cham. A list with mandatory readings will be provided at the beginning of the lecture.
Additional notes
The module and the exam are in English language.

Services Marketing

Module number
Course name
Services Marketing
Module coordinator
Prof. Dr. Jan Hendrik Schumann

Examination number	Credit points (ECTS)	Hours per week (SWS)
265111	5	2
Availability	Duration	Recommended semester
Jeweils im Wintersemester nach Ankündigung	1 semester	

Workload
Vorlesung 2 SWS (30 Std. Präsenzzeit und 120 Std. Eigenarbeitszeit)
Module applicability
BA Version 2025: Modulbereich B: Major Entrepreneurship Modulbereich B: Minor Marketing
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
reference to the LPO I
reference to the LPO I
Bachelor-Abschluss in einem wirtschaftswissenschaftlichen oder einem den Wirtschaftswissenschaften nahen Studiengang. Grundkenntnisse in "Marketing" sind vorteilhaft.
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Focus on the characteristics of services marketing • Distinction between services and products • Organizational challenges of service management • Tools used to market services • Overarching tools for planning strategic control and examples of selected service industries (media, financial services)
Intended learning outcomes (ILOs)
<p>Students who have successfully participated in the module "Services Marketing" ...</p> <ul style="list-style-type: none"> • ... compare the specific challenges regarding management and marketing of services versus physical products.

<ul style="list-style-type: none">• ... develop and establish the organizational preconditions for an effective service management.• ... plan and implement the marketing mix for services.• ... recognize and evaluate customers' perceptions of services.
Teaching methods
Interaktiver Frontalunterricht
Required attendance
Required attendance
schriftliche Klausur am Ende des Semesters, 60 Minuten, 100%
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Die relevante Literatur wird am Ende jeder Lehreinheit aufgelistet.
Additional notes
Das Modul kann sowohl als Grundlagen- als auch Vertiefungsmodul im Gebiet "International Management und Marketing" eingebracht werden. Es ist für alle Studiengänge geeignet, die ihren Studierenden in diesem Bereich ein Angebot machen möchten.

Advanced Marketing

Module number
Course name
Advanced Marketing
Module coordinator/ examiner(s)
Prof. Dr. Dirk Totzek

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-7	2-5
Availability	Duration	Recommended semester
Winter or summer semester	1 semester	

Workload
90 h to 210 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulbereich B: Minor Marketing
LPO I applicability
Recommended prerequisites
Requirements
Language of instruction
English

Content
This module provides in-depth specialist knowledge in the field of marketing. This includes, among other things, in-depth topics in individual areas of the marketing mix and sales, the special features of marketing in specific contexts, and current marketing trends and developments.
Intended learning outcomes (ILOs)
Students who have successfully completed the module, <ul style="list-style-type: none"> • identify and name relevant problems in marketing and relate them to each other. • name and interpret business fundamentals in marketing and mobilise them to address in-depth issues. • name central and in-depth methods in marketing, analyse their results and classify them in the context of the literature. • establish links between the issues and topics covered and current cases in business practice. • Recognise the potential and limitations of objectives, approaches and instruments in marketing in the light of current research and reflect on them critically.

Teaching methods
Different teaching and learning formats are used depending on the course.
Required attendance
Examination (type of examination, scope)
Exam or portfolio
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Modulbereich B: Minor Optimization

Artificial Intelligence and Optimization

Module number
Course name
Artificial Intelligence and Optimization
Module coordinator
Prof Dr Marc Goerigk

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture classes 2 SWS (30h presence, 45h unsupervised work) Tutorial classes 2 SWS (30h presence, 45h unsupervised work)
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Artificial Intelligence Modulbereich B: Minor Optimization
BA Version 1: Wirtschaftsinformatik / Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
Basic knowledge of optimization and/or AI helpful
Requirements
Language of instruction
English

Content
We study the relationship between problems and methods in artificial intelligence (in particular, machine learning) and optimization. Concepts that are discussed include: <ul style="list-style-type: none"> • classification and regression trees • neural networks • nearest neighbors classification • support vector machines • clustering • robustness, interpretability, explainability

Each aspect is discussed from both the AI and optimization perspective, including issues of complexity. Methods are tested computationally.
Intended learning outcomes (ILOs)
Upon completion of the module, students are able to <ul style="list-style-type: none"> • identify typical tasks in machine learning, • formulate them as optimization models, • distinguish between problems of different complexity classes, • identify and apply the most suitable optimization strategy, and • evaluate the quality of these methods
Teaching methods
<ul style="list-style-type: none"> • interactive lectures • group work in tutorial classes, including programming of AI and optimization methods
Required attendance
Examination (type of examination, scope)
Oral exam (duration 45 minutes), OR written exam (90 minutes) The type of exam will be communicated within the first two weeks of teaching.
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Related literature includes: <ul style="list-style-type: none"> • D. Bertsimas, J. Dunn: "Machine Learning under a Modern Optimization Lens", Dynamic Ideas LLC, Belmont, Massachusetts, 2019 • M. Mohri, A. Rostamizadeh, A. Talwalkar: "Foundations of Machine Learning", second edition, MIT Press, Cambridge, Massachusetts, 2018 • W. Ertel: "Grundkurs Künstliche Intelligenz", fifth edition, Springer Vieweg, Wiesbaden, 2021
Additional notes

Combinatorial Optimization

Module number
Course name
Combinatorial Optimization
Module coordinator
Prof Dr Marc Goerigk

Examination number	Credit points (ECTS)	Hours per week (SWS)
271036	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	any

Workload
Lecture classes 2 SWS (30h presence, 45h unsupervised work) Tutorial classes 2 SWS (30h presence, 45h unsupervised work)
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Data Science Modulbereich B: Minor Optimization
BA Version 1: Methoden
Reference to the LPO I
Recommended prerequisites
Mathematical maturity and previous work with optimization problems
Requirements
Language of instruction
English

Content
We study fundamentals of combinatorial decision making problems. These include <ul style="list-style-type: none"> - graph theory - complexity classes - approximation methods - spanning tree problems - path problems - matching problems - knapsack problems - traveling salesperson problems

Intended learning outcomes (ILOs)
<p>Upon completion of the module, students are able to</p> <ul style="list-style-type: none"> - identify fundamental problems of combinatorial optimization, also in the context of more complex decision-making situations - choose appropriate heuristic and exact solution methods and apply them to solve such problems - classify problems by their complexity, and demonstrate hardness using different proof techniques, including polynomial reductions
Teaching methods
<ul style="list-style-type: none"> - lecture with seminar character - interactive lectures - group work in tutorial classes - online forums and discussions - take-home mock exam and its discussion - blended learning
Required attendance
Examination (type of examination, scope)
<p>Oral exam (duration 45 minutes), OR written exam (90 minutes) The type of exam will be communicated within the first two weeks of teaching.</p>
Overall grade relevance
Exam resit opportunities
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
Recommended reading
<p>Related literature: Korte, B. H., Vygen, J. (2011). <i>Combinatorial optimization</i>. Berlin: Springer.</p>
Additional notes

Data Science in Operations Management
--

Modulnummer
Veranstaltungstitel
35610 Paneldatenanalyse (VL) und 35611 Paneldatenanalyse (Ü)
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Harry Haupt, Dr. Markus Fritsch

Prüfungsnummer	ECTS	SWS
261080	5	2+2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Sommersemester	1 Semester	2

Workload
Vorlesung 2 SWS (30 St. Präsenzzeit und 45 St. Eigenarbeitszeit) und Übung 2 SWS (30 St. Präsenzzeit und 45 St. Eigenarbeitszeit). Es wird mit 15 Semesterwochen gerechnet (Vorlesung, Übung und Prüfung) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Data Science Modulbereich B: Minor Optimization
BA Version 1: Accounting, Finance and Taxation – Grundlagen International Management and Marketing – Grundlagen Methoden
Bezug zur LPO I
Empfohlene Voraussetzungen
Kenntnis der Inhalte von „Econometric Methods“. Dies umfasst eine detaillierte Kenntnis des multiplen linearen Regressionsmodells für Querschnittsdaten (OLS-Schätzung, Tests sowie entsprechende zugrundeliegende Annahmen, Projektionsmatrizen) sowie solide Kenntnisse im Umgang mit der Statistiksoftware R. Kenntnisse von Modellen für Zeitreihendaten sind hilfreich, werden jedoch nicht vorausgesetzt.
Verpflichtende Voraussetzungen
Keine
Unterrichtssprache
Deutsch

Inhalte
Zentraler Gegenstand des Moduls ist die Schätzung von Regressionsmodellen für Paneldaten. Hierbei werden neben grundlegenden Schätzverfahren und Fehlerkomponentenmodellen unter anderem die Fixed-Effects- und Random-Effects-Schätzung behandelt. Weitere Kursinhalte sind

dynamische Paneldatenmodelle sowie Test- und Prognoseverfahren für Paneldaten (Stichwort: Best linear unbiased prediction). Die Vermittlung der Kursinhalte erfolgt in Form von Modelltheorie und Anwendung sowie mittels Besprechung und Diskussion ausgewählter Literatur. Die Inhalte werden auch anhand von Beispielen in der Statistiksoftware R veranschaulicht.
Lernergebnisse Lernziele
Nach erfolgreicher Teilnahme am Modul sind die Studierenden in der Lage: <ul style="list-style-type: none"> • Fragestellungen, Anwendungsfelder und Potenziale von Panelmodellschätzungen zu erkennen. • die zentralen Annahmen für statische und dynamische Panelmodellschätzer erläutern und kritisch reflektieren. • geeignete Schätzverfahren für Paneldaten auf Basis der zugrundeliegenden Modelltheorie auszuwählen. • statische und dynamische Panelmodellschätzungen in der Statistiksoftware R implementieren und die Schätzergebnisse interpretieren zu können. • Hypothesen- und Modellspezifikationstests für Panelmodellschätzer anzuwenden und deren Ergebnisse einzuordnen und kritisch zu reflektieren. • aktuelle Literatur zu lesen, zu verstehen und zu diskutieren.
Lehr- und Lernformen
Interaktiver Frontalunterricht und Diskussion von Lehrinhalten. Vermittlung der theoretischen Grundlagen und Illustration anhand von Beispielen in der Vorlesung und Übung. Die Theorie wird auch durch Beispiele in der Statistiksoftware R veranschaulicht. Wöchentliche Vorlesungs- und Übungsmaterialien sowie Pflichtliteratur.
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang)
Schriftliche Prüfung oder häusliche Leistungsfeststellung (60 Minuten) oder mündliche (Online-)Prüfung
Gesamnotenrelevanz
100%
Wiederholungsmöglichkeit
Literatur
Basisliteratur (andere Auflagen dieser Bücher sind ebenfalls verwendbar): <ul style="list-style-type: none"> - Wooldridge, J.M. (2019), Introductory Econometrics, 7A, Thomson South-Western. - Stock, J.H. und M.W. Watson (2019), Introduction to Econometrics, 4A, Pearson. - Greene, W.H. (2019), Econometric Analysis, 8A., Pearson. <p>Weiterführende Literatur:</p> <ul style="list-style-type: none"> - Baltagi, B.H. (2021), Econometric Analysis of Panel Data, 6A., Wiley. - Wooldridge, J. (2010), Econometric Analysis of Cross Section and Panel Data, 2A, MIT Press. - Arellano, M. (2004), Panel Data Econometrics, Oxford University Press. - Angrist, J.D. und J.-S. Pischke (2009), Mostly Harmless Econometrics, Princeton University Press.
Weitere Hinweise
Die Theorie wird auch anhand von Beispielen in der Statistiksoftware R illustriert.

Decision Making Under Uncertainty

Module number
Course name
Decision Making Under Uncertainty
Module coordinator
Prof Dr Marc Goerigk

Examination number	Credit points (ECTS)	Hours per week (SWS)
271034	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	any

Workload
Lecture classes 2 SWS (30h presence, 45h unsupervised work) Tutorial classes 2 SWS (30h presence, 45h unsupervised work)
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Data Science Modulbereich B: Minor Optimization
BA Version 1: Methoden
Reference to the LPO I
Recommended prerequisites
Mathematical maturity and previous work with optimization problems
Requirements
Module "Fundamentals of Management Science"
Language of instruction
English

Content
We study decision-making problems under uncertainty using optimization tools, including <ul style="list-style-type: none"> - robust optimization, in particular - min-max, min-max regret, and ordered weighted averaging - one- and two-stage problems - different types of uncertainty sets (discrete, polyhedral, budgeted, ellipsoidal) - complexity, approximation and solution methods - the application to combinatorial problems - stochastic optimization - other approaches, such as fuzzy sets

Intended learning outcomes (ILOs)
<p>Upon completion of the module, students are able to</p> <ul style="list-style-type: none"> - recognize and model uncertain data, taking into account resulting complexity consequences - apply suitable techniques to model and solve uncertainty in decision-making - differentiate between hard and easy uncertain problems
Teaching methods
<ul style="list-style-type: none"> - lecture with seminar character - interactive lectures - group work in tutorial classes - online forums and discussions - take-home mock exam and its discussion - blended learning
Required attendance
Examination (type of examination, scope)
<p>Oral exam (duration 45 minutes), OR written exam (90 minutes) The type of exam will be communicated within the first two weeks of teaching.</p>
Overall grade relevance
Exam resit opportunities
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
Recommended reading
Additional notes

Heuristics and Approximation Methods

Module number
Course name
Heuristics and Approximation Methods
Module coordinator
Prof Dr Marc Goerigk

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Lecture classes 2 SWS (30h presence, 45h unsupervised work) Tutorial classes 2 SWS (30h presence, 45h unsupervised work)
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Optimization
BA Version 1: Methoden
Reference to the LPO I
Recommended prerequisites
Basic knowledge of combinatorial optimization is helpful
Requirements
Language of instruction
English

Content
<p>We discuss optimization algorithms for problems that are too difficult to solve exactly. They either provide no guarantee (heuristics in general) or do provide a guarantee (approximation methods) on the quality of the resulting solution. Types of methods we study include</p> <ul style="list-style-type: none"> • greedy algorithms • local search • meta-heuristics and matheuristics • dynamic programming • deterministic and randomized rounding • primal-dual methods • approximation schemes

Intended learning outcomes (ILOs)
<p>Upon completion of the module, students are able to</p> <ul style="list-style-type: none"> • differentiate between approximable and inapproximable problems, • apply techniques to analyze the approximation guarantee of solution methods, • develop effective heuristic strategies for complex economical problems, and • find solutions of good quality for difficult decision problems
Teaching methods
<ul style="list-style-type: none"> • interactive lectures • group work in tutorial classes
Required attendance
Examination (type of examination, scope)
<p>Oral exam (duration 45 minutes), OR written exam (90 minutes) The type of exam will be communicated within the first two weeks of teaching.</p>
Overall grade relevance
Exam resit opportunities
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
Recommended reading
<p>Recommended literature includes:</p> <ul style="list-style-type: none"> • D. P. Williamson, D.B. Shmoys: "The Design of Approximation Algorithms", Cambridge University Press, New York, 2011
Additional notes

Network Optimization

Module number
Course name
Network Optimization
Module coordinator
Prof Dr Marc Goerigk

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Lecture classes 2 SWS (30h presence, 45h unsupervised work) Tutorial classes 2 SWS (30h presence, 45h unsupervised work)
Module applicability
BA Version 2025: Modulbereich B: Major Data Science Modulbereich B: Minor Optimization
BA Version 1: Methoden
Reference to the LPO I
Recommended prerequisites
Basic knowledge of combinatorial optimization or linear programming is helpful
Requirements
Language of instruction
English

Content
We study optimization problems on graphs. We develop an understanding of different problem types and discuss corresponding solution methods. Problem applications include: <ul style="list-style-type: none"> • shortest path problems • minimum spanning tree problems • maximum flow problems • minimum cost flow problems • assignments and matchings • multicommodity flow problems
Intended learning outcomes (ILOs)
Upon completion of the module, students are able to <ul style="list-style-type: none"> • identify network optimization problems,

<ul style="list-style-type: none"> • differentiate between polynomially solvable and hard types of problems, • choose and apply an appropriate solution method, • assess the impact of using different data structures for the implementation of algorithms, and • model real-world problems using networks.
Teaching methods
<ul style="list-style-type: none"> • interactive lectures • group work in tutorial classes
Required attendance
Examination (type of examination, scope)
<p>Oral exam (duration 45 minutes), OR written exam (90 minutes) The type of exam will be communicated within the first two weeks of teaching.</p>
Overall grade relevance
Exam resit opportunities
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
Recommended reading
<p>Recommended literature includes:</p> <ul style="list-style-type: none"> • R. K. Ahuja, T. L. Magnanti, J. B. Orlin: "Network Flows – Theory, Algorithms, and Applications", Pearson, Harlow, 2014
Additional notes

Advanced Optimization

Module number
Course name
Advanced Optimization
Module coordinator/ examiner(s)
Prof. Dr. Marc Goerigk

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-7	2-5
Availability	Duration	Recommended semester
Winter or summer semester	1 semester	

Workload
90 h to 210 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulbereich B: Minor Optimization
LPO I applicability
Recommended prerequisites
Requirements
Language of instruction
English

Content
This module provides in-depth specialist knowledge in the field of applied mathematical optimisation and closely related fields. It covers both theoretical aspects of optimisation and discusses and, where applicable, implements specific examples using computers. The courses offered within this module establish the link to current topics and issues in business practice and research.
Intended learning outcomes (ILOs)
Students who have successfully completed the module, <ul style="list-style-type: none"> • identify and name relevant problems in optimisation and relate them to each other. • name and interpret business fundamentals in optimisation and mobilise them to address in-depth issues. • name central and in-depth methods in optimisation, analyse their results and classify them in the context of the literature. • establish links between the issues and topics covered and current cases in business practice. • Recognise the potential and limitations of objectives, approaches and instruments in optimisation in the light of current research and reflect on them critically.

Teaching methods
Different teaching and learning formats are used depending on the course.
Required attendance
Examination (type of examination, scope)
Exam or portfolio
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Modulbereich B: Minor Reporting and Controlling

Advanced International Accounting

Module number
Course name
Advanced International Accounting
Module coordinator/ examiner(s)
Prof. Dr. Christoph Pelger

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2
Availability	Duration	Recommended semester
Every summer semester	1 semester	Master students

Workload
Lecture 2 SWS (30 hours class instruction; 45 hours self-study) Tutorials 2 SWS (30 hours class instruction; 45 hours self-study)
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Reporting and Controlling
BA Version 1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Requirements
Basic knowledge in IFRS is required.
Language of instruction
English

Content
This course aims to provide insights into advanced topics in international accounting.
The course presents research on the effects of IFRS adoption and introduces a number of specific standards in IFRS, dealing with topics such as lease accounting, deferred taxes, post-employment benefits, consolidation, business combinations, joint operations, associates.
Intended learning outcomes (ILOs)
The learning objectives of this course are to: •Understand and apply specific accounting topics in IFRS.

<ul style="list-style-type: none"> •Discuss recent developments in IFRS. •Reflect on the content and application of IFRS. <p>Overall, together with the basic course on International Accounting (offered in the winter term), this course aims to provide master students with a comprehensive overview of IFRS. Major Accounting and Tax, Minor Reporting and Controlling</p>
Teaching methods
Lecture, cases, discussions
Required attendance
Examination (type of examination, scope)
100 % final exam (60 minutes)
Overall grade relevance
Exam resit opportunities
Recommended reading
Additional notes
This course is taught in English.

Corporate Valuation (Unternehmensbewertung)

Module number
Course name
Corporate Valuation
Module coordinator/ examiner(s)
Prof. Dr. Robert Obermaier

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture: 2 SWS (30h present time, 45h own working time) Exercise: 2 SWS (30h present time, 45h own working time)
The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is counted as 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Reporting and Controlling
BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Basic knowledge of accounting and capital budgeting is recommended.
Requirements
Language of instruction
English or German

Content
The lecture “Corporate Valuation” deals with one of the most interesting and complex areas of business administration. After a systematization of the reasons and purposes for the valuation of entire companies or parts of companies, an overview of the theoretical foundations and relevant components of corporate valuation is provided. The lecture focuses on the theoretically and methodically sound application of Discounted Cash-Flow (DCF) approaches and the corresponding

determination of adequate cost of capital rates. Finally, advanced research topics in the field of corporate valuation and practitioner standards (IDW S1) are discussed.
Intended learning outcomes (ILOs)
After successful participation in the course “Corporate Valuation”, students <ul style="list-style-type: none"> • know the different occasions and purposes for which companies or parts of companies are valued. • understand the theoretical underpinnings and the formal relationships between the Discounted Cash-Flow (DCF) approaches. • apply their conceptual and methodological knowledge to determine appropriate valuation-relevant cash-flows and cost of capital rates. • combine their theoretical, conceptual, and methodical knowledge by applying different DCF approaches in a reflective and suitable manner. • analyze, critically evaluate, and prepare company valuations, whether as controllers, auditors or investment bankers. • transfer their knowledge of valuation theory to the areas of investment controlling, mergers & acquisitions, and value-based management of companies and business units.
Teaching methods
Interactive lecture Completion of exercises and case studies
Required attendance
Examination (type of examination, scope)
a) Written exam 100% or b) Written exam 90% + 10% through optional semester-accompanying performance (subject to reservation; if the number of participants is suitable, the chair can offer a voluntary semester-accompanying assignment, through which up to 6 bonus points (10% of the final exam) can be acquired. These are added to the points achieved in the final exam).
Overall grade relevance
Exam resit opportunities
In the event of failure (grade worse than 4.0), all courses can be repeated in accordance with § 9 of AStuPO.
Recommended reading
Additional notes
International students are welcome! The exam can be written in English or German. The language of lectures and tutorials will be determined in the first lecture. Guest lectures by practitioners are planned. The chair reserves the right to offer a voluntary graded assignment during the semester.

International Accounting

Module number
Course name
International Accounting
Module coordinator/ examiner(s)
Prof. Dr. Christoph Pelger

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 2 SWS (30 hours class instruction; 45 hours self-study) Tutorials 2 SWS (30 hours class instruction; 45 hours self-study). The calculation is based on 15 semester weeks (14 lecture weeks + 1 exam week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Reporting and Controlling BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Basic knowledge in accounting (not necessarily IFRS)
Requirements
Language of instruction
English

Content
International Financial Reporting Standards (IFRS) are the global language of business because listed companies in more than 140 countries around the world (and many large non-listed companies) are required or at least have an option to use them for preparing their financial statements. This course aims to provide an in-depth understanding of IFRS in terms of the institutional structure of the standard-setter, the conceptual mindset of IFRS, and selected key standards. For instance,

<p>this course covers topics such as revenue recognition, intangible assets, provisions and fair value measurement. Together with the course on Advanced International Accounting (offered in the summer term), this course aims to provide master students with a comprehensive overview of IFRS.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>After successful participation in this course, students</p> <ul style="list-style-type: none"> • Explain the historical development of international accounting and the institutional setting of the International Accounting Standards Board (IASB). • Understand the conceptual mind-set of IFRS as outlined in the IASB's Conceptual Framework and characterize the interplay between framework and standards. • Summarize key accounting topics on recognition and measurement arising in specific standards in IFRS and apply them to examples and practical cases. • Assess the pros and cons associated with internationalization in accounting, IASB policies and specific concepts and standards in IFRS. • Develop suggestions on possible ways forward regarding IFRS standard-setting and implementation in light of practical concerns and research insights.
<p>Teaching methods</p>
<p>Interactive lecture with cases and discussions; exercises in the tutorial</p>
<p>Required attendance</p>
<p></p>
<p>Examination (type of examination, scope)</p>
<p>100 % final exam (60 minutes)</p>
<p>Overall grade relevance</p>
<p></p>
<p>Exam resit opportunities</p>
<p></p>
<p>Recommended reading</p>
<p></p>
<p>Additional notes</p>
<p>This course is taught in English.</p>

Reporting of Digital Business Models

Module number
Course name
Reporting of Digital Business Models
Module coordinator/ examiner(s)
Prof. Dr. Christoph Pelger

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	3
Availability	Duration	Recommended semester
Every summer semester, but not in the summer term 2025	1 semester	

Workload
Lecture 3 SWS (45 hours class interaction; 105 hours self-study). The calculation is based on 15 semester weeks (14 lecture weeks + 1 exam week) and each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Reporting and Controlling
BA Version 1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Basic knowledge of financial accounting (not necessarily IFRS)
Requirements
Language of instruction
English

Content
Digital business models are ever more pervasive in business practice. The traditional financial reporting approaches, however, are limited in depicting the key value drivers of digital business models in a transparent and useful manner. This raises the following questions: <ul style="list-style-type: none"> • How informative are financial reports of (listed) companies with digital business models about their key value drivers? • How could financial reporting be transformed to reflect the increasing importance of digital business models?

<p>This course first introduces relevant International Financial Reporting Standards (IFRS) that focus on the recognition and measurement of intangible assets. Cases of listed companies with digital business models are used to reflect on the abilities and limitations of current accounting standards to provide decision-useful information. Current research is then mobilized to shed light on more general Major Accounting and Tax, Minor Reporting and Controlling, Minor Digital Management and Strategy issues with the accounting for intangible assets under IFRS. Finally, current standard-setting and other regulatory developments in the area of intangible assets accounting are discussed.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>After successful participation in this course, students</p> <ul style="list-style-type: none"> • Summarize relevant financial reporting standards on intangible assets and apply them to examples and practical cases. • Assess academic research on the reporting of intangible assets. • Outline key aspects of digital business models and assess the limits of depicting them in financial statements. • Analyze the financial statements of listed companies with digital business models. • Develop suggestions of how the financial reporting standards could be improved to provide more decision-useful information about companies with digital business models. • Present their insights into practical cases and research studies effectively in oral presentations and short essays.
<p>Teaching methods</p>
<p>Lecture with seminar character (Interactive lecture with cases, student presentations and discussions; exercises in the tutorial).</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Individual essay(s), individual and group presentations, active participation in the sessions.</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Recommended reading</p>
<p>Additional notes</p> <p>The course is taught in English.</p> <p>The number of participants is limited. Prior application for this course is necessary. Information on the application process are provided on the website of the Chair of Accounting and Auditing and in Stud.IP.</p>

Sustainability Reporting

Module number
Course name
Sustainability Reporting
Module coordinator/ examiner(s)
Prof. Dr. Christoph Pelger

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	3
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 3 SWS (45 hours class interaction; 105 hours self-study)
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Reporting and Controlling Modulbereich B: Minor Sustainability
BA Version 1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Basic knowledge in accounting
Requirements
Language of instruction
English

Content
In recent years, corporate sustainability reporting has moved from a voluntary activity, prone to “greenwashing”, to a regulated field. The European Union has been particularly instrumental in promoting regulations on sustainability reporting, as becomes manifest in the recent Corporate Sustainability Reporting Directive (CSRD).
This course aims to provide an overview and to analyse current dynamic developments in the area of sustainability reporting. This involves some background on the development and theories of (voluntary) sustainability reporting, insights into current and planned regulations, standards, guidances and frameworks as well as actual practices of sustainability reporting. In this course, cases of companies’ sustainability reports are presented and discussed and academic research is mobilized to reflect on current (and future) developments in regulation/standards and practice.

Intended learning outcomes (ILOs)
<p>After successful participation in this course, students</p> <ul style="list-style-type: none"> • Explain the development of sustainability reporting and understand the limits of voluntary reporting in this area. • Compare different frameworks, guidelines and standards of sustainability reporting and evaluate them based on theories of sustainability reporting. • Analyze sustainability reports of listed companies and assess their content in light of relevant standards. • Develop suggestions on how current practices of sustainability reporting and reporting standards in this area could be improved. • Present their insights into practical cases, reporting standards and research studies effectively in oral presentations and short essays.
Teaching methods
Lecture with seminar character (input lectures, cases, student presentations, discussions)
Required attendance
Examination (type of examination, scope)
Individual essays, individual and group presentations, active participation in the sessions.
Overall grade relevance
Exam resit opportunities
Recommended reading
Additional notes
<p>The course is taught in English.</p> <p>The maximum number of participants is limited. Prior application for this course is necessary. Information on the application process are provided on the website of the Chair of Accounting and Auditing and in Stud.IP.</p>

Value-based Management

Module number
Course name
Value-based Management (ehemals: Wertorientiertes Controlling)
Module coordinator/ examiner(s)
Prof. Dr. Robert Obermaier

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture: 2 SWS (30 hours attendance time; 45 hours individual work time) Tutorial: 2 SWS (30 hours attendance time; 45 hours individual work time)
We calculate with 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is included in the calculation with 60 minutes.
Module applicability
PO Version 2025: Modulgruppe B: Major Accounting and Tax Modulgruppe B: Minor Reporting and Controlling Modulgruppe B: Minor Sustainability
BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Basic knowledge of controlling, reporting, financing and investment accounting.
Requirements
Language of instruction
English or German

Content
Value-based management is a fundamental and widely adopted management accounting practice, guiding organizations toward long-term maximization of shareholder value. The course covers key concepts and frameworks of shareholder value and value-based management to support value-based decision-making in organizations. Topics include economic profit and residual income as foundations for value-based performance measurement, regulatory requirements in the context of corporate governance, and value-based compensation systems for aligning management incentives. Beyond

economic considerations, social and environmental aspects of management decision-making are discussed.
Intended learning outcomes (ILOs)
<p>Students who have taken part in the module Value-based Management,</p> <ul style="list-style-type: none"> • analyze and critically evaluate corporate objectives from an economic perspective, considering both theoretical frameworks and practical implications within the context of corporate governance; • demonstrate a profound understanding of the design, implementation and inherent complexities of value-based controlling systems aligned with shareholder value principles, while critically assessing their limitations and potential trade-offs; • evaluate the complexities of performance measurement systems that align with shareholder value principles, addressing methodological challenges and their impact on managerial decision-making; • critically assess and develop recommendations for incentive-compatible management compensation schemes, considering their strategic alignment, incentive structure and implications for management retention and shareholder cost.
Teaching methods
<ul style="list-style-type: none"> • Interactive lecture • Exercises and case studies
Required attendance
Examination (type of examination, scope)
<p>a) Written exam, 60 minutes, or b) Written exam, 60 minutes + optional semester-long performance (subject to change)</p>
Overall grade relevance
Exam resit opportunities
In the event of failure (grade worse than 4.0), all courses can be repeated in accordance with § 9 of AStuPO.
Recommended reading
Additional notes
<p>International students are welcome! The exam can be written in English or German. The language of lectures and tutorials will be determined in the first lecture.</p>

Workshop Unternehmensbewertung

Modulnummer
Veranstaltungstitel
Workshop Unternehmensbewertung
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Robert Obermaier, externe Dozierende

Prüfungsnummer	ECTS	SWS
	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Sommersemester	1 Semester	

Workload
Blockveranstaltung 2 SWS (16 Std. Präsenzzeit und 134 Std. Eigenarbeitszeit) 2 Blocktermine + Eigenarbeit
Verwendbarkeit
BA Version 2025: Modulgruppe B: Major Accounting and Tax Modulgruppe B: Minor Reporting and Controlling
BA Version 1: Accounting, Finance and Taxation – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Erfolgreiche Teilnahme an der Veranstaltung „Unternehmensbewertung“ oder einer äquivalenten Veranstaltung (z.B. im Rahmen des Auslandssemesters).
Verpflichtende Voraussetzungen
Fachliche Kenntnisse aus der Unternehmensbewertung sind erforderlich. Für den ersten Präsenztermin ist ein PC mit einem Kalkulationsprogramm (z.B. Excel) erforderlich.
Unterrichtssprache
Deutsch

Inhalte
Anhand eines Fallbeispiels werden ausgewählte Themengebiete der Unternehmensbewertung vertieft. Schwerpunkt ist die praktische Anwendung der Bewertungstheorie im Rahmen einer simulierten Praxissituation.
Lernergebnisse Lernziele
Studierende, die an dem Modul „Workshop Unternehmensbewertung“ teilgenommen haben, <ul style="list-style-type: none"> • verstehen ökonomische Grundlagen der Bewertungstheorie und deren Zusammenhänge. • analysieren und diskutieren Bewertungsthemen fachlich fundiert.

<ul style="list-style-type: none"> wenden Ihre Kenntnisse in der Bewertungstheorie durch die Erstellung einer integrierten Planungsrechnung und der Durchführung einer Unternehmensbewertung anhand eines komplexen Fallbeispiels praktisch an. verteidigen ein eigenes Kaufpreisangebot und beurteilen konkurrierende Kaufpreisangebote kritisch.
Lehr- und Lernformen
Die Studierenden sollen – weitgehend in Teamarbeit – eine Bewertung durchführen, ihre Ergebnisse knapp und verständlich präsentieren, eigene Positionen / Ergebnisse erläutern und verhandeln, (Rück-) Fragen beantworten und kritische Einwände behandeln.
Anwesenheitspflicht
Ja
Prüfungsleistung (Prüfungsform, Umfang)
Erstellung einer Fallstudie Präsentation der Ergebnisse Aktive Teilnahme an allen Terminen des Workshops (insbes. Mitarbeit bei Fallstudie, Diskussion der Präsentationen)
Gesamtnotenrelevanz
Wiederholungsmöglichkeit
Bei Nichtbestehen (Note schlechter als 4,0) können alle Veranstaltungen gemäß § 9 der AStuPO wiederholt werden.
Literatur
Weitere Hinweise
Es werden max. 12 Studierende als Teilnehmer zugelassen. Sofern die Anmeldungen die Maximalteilnehmerzahl übersteigen, erfolgt eine Auswahl der Teilnehmer/innen durch die Referenten.

Advanced Reporting and Controlling

Module number
Course name
Advanced Accounting
Module coordinator/ examiner(s)
Prof. Dr. Robert Obermaier

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-7	2-5
Availability	Duration	Recommended semester
Winter or summer semester	1 semester	

Workload
90 h to 210 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulbereich B: Minor Reporting and Controlling
LPO I applicability
Recommended prerequisites
Requirements
Language of instruction
English

Content
This module provides in-depth specialist knowledge in reporting and controlling. This includes, among other things, in-depth topics in the area of external accounting and further financial and non-financial reporting, as well as topics in internal accounting and controlling, and corporate governance. The courses offered establish a connection to current topics and issues in business practice, regulation and research.
Intended learning outcomes (ILOs)
Students who have successfully completed the module, <ul style="list-style-type: none"> • identify and name relevant problems in the areas of accounting/reporting and controlling and relate them to each other. • name and interpret legal and business fundamentals in accounting and controlling and mobilise them to address in-depth issues. • name central and in-depth methods in accounting and controlling research, analyse their results and classify them in the context of the literature. • establish links between the issues and topics covered and current cases in business practice and current regulatory discussions.

<ul style="list-style-type: none">• Recognise the potential and limitations of objectives, approaches and instruments in accounting and controlling in the light of current research and reflect on them critically.
Teaching methods
Different teaching and learning formats are used depending on the course.
Required attendance
Examination (type of examination, scope)
Exam or portfolio
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Advanced Reporting and Controlling – Accounting for financial instruments according to IFRS
--

Module number
Course name
Accounting for financial instruments according to IFRS
Module coordinator/ examiner(s)
Prof. Dr. Christoph Pelger

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	3
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Lecture 2 SWS (30 hours attendance time and 60 hours individual work time) Tutorial 1 SWS (15 hours attendance time and 45 hours individual work time)
The calculation is based on 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is counted as 60 minutes.
Module applicability
BA Version 2025: Modulgruppe B: Major Accounting and Tax Modulgruppe B: Minor Reporting and Controlling
LPO I applicability
Recommended prerequisites
Basic knowledge in international accounting
Requirements
Language of instruction
English

Content
This module provides in-depth specialist knowledge in the area of accounting for financial instruments in accordance with International Financial Reporting Standards (IFRS). This includes the definition, classification, recognition and measurement of derivative and non-derivative financial instruments. In addition, special features of accounting for the disposal and derecognition of financial assets are examined and the application of impairment models and hedge accounting are discussed.
Intended learning outcomes (ILOs)
After successfully completing the module, students will be able to <ul style="list-style-type: none"> Distinguish between equity and debt instruments on the basis of key distinguishing features.

<ul style="list-style-type: none"> • Classify financial instruments and apply the relevant measurement concepts. • Assess special features in the structure of specific financial instruments with regard to recognition and measurement. • Perform the impairment of financial instruments on the basis of the scope of application and different impairment models. • Describe the use and types of derivative financial instruments and recognise and measure them. • Outline the economic background for the use of hedging and hedge accounting and derive different accounting methods for these instruments. • Assess the informative value of the information contained in the notes.
Teaching methods
Interactive lecture with case studies; students work on exercises in the accompanying tutorial.
Required attendance
Examination (type of examination, scope)
Written exam at the end of the semester (60 minutes)
Overall grade relevance
Exam resit opportunities
Recommended reading
Additional notes
The lecture is given by expert practitioners from accounting advisory/auditing.

Modulbereich B: Minor Sustainability

Environmental, Social and Corporate Governance Analytics

Module number
Course name
Environmental, Social and Corporate Governance Analytics
Module coordinator
Prof. Dr. Ralf Kellner

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every winter semester	1 semester	1-4

Workload
150 h (60 h contact studies / 90 h self-studies)
Module applicability
BA Version 2025: Modulbereich B: Major Finance Modulbereich B: Minor Sustainability
BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
Reference to the LPO I
Recommended prerequisites
Fundamentals of statistics
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Definition of physical and transitory risks of climate change on financial markets • Definition of the environmental, social and governance risk factors • Integration of risks in capital market theories - what connection to the market value of companies can be expected? • Content analysis and discussion of empirical studies in this context • Measurement and identification of financial climate risks and ESG risks • Hedging systematic climate risks

Intended learning outcomes (ILOs)
Students gain a basic understanding of the role that climate-friendly, social, fair and transparent behavior of companies has for their market value on capital markets. Students learn how to correctly interpret empirical studies on these topics and gain the knowledge to correctly categorize corporate disclosures in these areas.
Teaching methods
<ul style="list-style-type: none"> • Interactive lectures • Own presentations • Teaching materials on the contents of the course
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none"> • Presentation • Written exam
Overall grade relevance
Exam resit opportunities
Recommended reading
Additional notes

Green and Sustainable Finance

Module number
Course name
Sustainable and Green Finance
Module coordinator/ examiner(s)
Prof. Dr. Oliver Entrop

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	2
Availability	Duration	Recommended semester
Every winter semester	1 semester	1-3

Workload
30h presence time and 180h own working time
Module applicability
BA Version 2025: Modulbereich B: Major Finance Modulbereich B: Minor Sustainability
BA Version 1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Requirements
Language of instruction
English

Content
<ul style="list-style-type: none"> • Introduction to Sustainable and Green Finance • ESG criteria and their relevance for financial markets • Regulatory framework (EU taxonomy, SFDR, TCFD, ISSB) • Sustainable investment strategies (impact investing, ESG screening, best-in-class approaches) • Financial instruments for sustainability (such as green bonds, social bonds, sustainability-linked bonds) • The role of banks and institutional investors in sustainable finance • Risk and return aspects of ESG investments • Empirical analysis of sustainable financial products

<ul style="list-style-type: none"> • Case studies on sustainable investment decisions • Future prospects of sustainable and green finance
Intended learning outcomes (ILOs)
<p>Students who have successfully completed the module</p> <ul style="list-style-type: none"> • understand and apply the principles and concepts of sustainable finance • identify the most important players and instruments in the area of sustainable and green finance and evaluate them • analyse relevant regulatory frameworks • value sustainability risks and opportunities for companies and investors • explain financial instruments such as green bonds, sustainability-linked bonds and ESG investment strategies and critically question them • understand the role of banks, institutional investors and companies in the transformation to a sustainable economy • apply empirical methods to analyse sustainable financial investments
Teaching methods
<p>Lecture with seminar character Interactive Lecture Vorlesung mit Seminarcharakter</p>
Required attendance
Examination (type of examination, scope)
Exam 60 minutes (100%)
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Given in class
Additional notes

Organization Theory and Sustainable Leadership

Module number
39756
Course name
Organization Theory and Sustainable Leadership
Module coordinator
Prof. Dr. Suleika Bort

Examination number	Credit points (ECTS)	Hours per week (SWS)
264517	5	3
Availability	Duration	Recommended semester
Summer semester	1 Semester	

Workload
3 SWS
Module applicability
BA Version 2025: Modulbereich B: Major Management and Strategy Modulbereich B: Minor Sustainability
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
According to § 3 of the study and examination regulations for the Master's degree program in Business Administration.
Requirements
Language of instruction
English

Content
This course provides an overview of the key issues and arguments within organization theory and critically discusses and applies them in the context of sustainability, justice, and social responsibility. Furthermore, the course discusses various sustainable and ethical leadership ideas and highlights the value of theory for organizational analysis, leadership and decision making.
Intended learning outcomes (ILOs)
After successful participation in this course, students <ul style="list-style-type: none"> • develop the perspective that leaders and organizations have agency and a role in addressing issues such as social inequality and environmental degradation. • understand different theoretical approaches to explain the activities of organizations and apply them to examples and practical cases. • critically reflect the boundaries of these theories, asking whether there are alternative ways to manage firms and engage in sustainable leadership.

<ul style="list-style-type: none"> • examine different cases of leaders and firms that have reimagined their roles, objectives, and directions they have followed.
Teaching methods
<ul style="list-style-type: none"> • Interactive lecture with seminar character • Discussion of questions, readings and case studies linked to the topic
Required attendance
Yes
Examination (type of examination, scope)
Portfolio
Overall grade relevance
Exam resit opportunities
No; Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
References will be given in the course.
Additional notes

Sustainability and Business Ethics: Ethische Konzepte für nachhaltiges Wirtschaften

Modulnummer
Modultitel
Sustainability and Business Ethics: Ethische Konzepte für nachhaltiges Wirtschaften
Modulverantwortliche*r / Prüfer*innen
Dr. Annekatriin Meißner/ Prof. Dr. Suleika Bort

Prüfungsnummer	ECTS	SWS
	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Wintersemester	1 Semester	ab 1. Studiensemester möglich

Workload
2 SWS (30 h Präsenzzeit, 60 h Eigenarbeitszeit) Eigenarbeitszeit: Lesen und Vorbereiten der Texte, die zur ersten Sitzung bekannt gegeben werden. Übernahme der Präsentation eines Textes - Argumente und Inhalte sowie Diskussionsleitung.
Verwendbarkeit
BA Version 2025: Modulbereich B: Minor Sustainability
BA Version 1: International Management and Marketing - Grundlagen International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Voraussetzung für den Erhalt eines Zertifikats ist die Teilnahme an alle drei Teilmodulen (11016A & Organizational Theory & Sustainable Leadership (VL & Übung) (im SoSe) Masterseminar: Sustainability and Business Ethics: Shaping Transformation (im SoSe) Eine Einzelbelegung ist aber ebenfalls möglich.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
Das Modul Sustainability & Business Ethics richtet sich an alle Studierende, die sich für die Verbindung von Wirtschaft mit Konzepten der Nachhaltigkeit und der Ethik interessieren.
<ul style="list-style-type: none"> • Unterschiedliche Theorien und Ansätze innerhalb der Wirtschafts- und Unternehmensethik • Theorien der Verantwortung und globaler Gerechtigkeit • Corporate Social Responsibility • Consumer Responsibility • Ethische Grundlagen nachhaltigen Wirtschaftens

<ul style="list-style-type: none"> • Alternative Wirtschaftskonzepte ethisch reflektiert <p>Die gesamte Modulgruppe setzt sich aus folgenden Veranstaltungen zusammen:</p> <ul style="list-style-type: none"> • Sustainability & Business Ethics: Ethische Konzepte für nachhaltiges Wirtschaften (WS) • Organizational Theory & Sustainable Leadership (VL & Übung) (im SoSe) • Masterseminar: Sustainability and Business Ethics: Shaping Transformation (im SoSe)
<p>Lernergebnisse Lernziele</p> <p>Studierende, die am Modul „Sustainability and Business Ethics: Diskussion ethischer Konzepte“ erfolgreich teilgenommen haben,</p> <ul style="list-style-type: none"> • benennen zentrale Theorien und Begrifflichkeiten der Wirtschafts- und Unternehmensethik sowie ethischer Grundlagen von nachhaltigem Wirtschaften • verorten diese innerhalb der grundlegenden Ansätze und Positionen der Ethik • analysieren und reflektieren kritisch die zugrundeliegenden Prämissen und Argumente dieser Theorien sowie mögliche Gegenargumente • wenden die Theorien in Bezug auf Praxisbeispiele an und positionieren sich zu ihnen • verstehen den Argumentationsaufbau wirtschafts- und unternehmensethischer Texte • präsentieren die behandelten Theorien / Konzepte, leiten Diskussionen in diesem Themenbereich • entwickeln eigene Forschungsperspektiven basierend auf dem erworbenen vertieften Fachwissen
<p>Lehr- und Lernformen</p> <p>Die Veranstaltung besitzt Seminarcharakter mit Präsentations-, Diskussions- und Reflexionsformaten.</p>
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang)</p> <p>Portfolio</p>
<p>Gesamtnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p> <p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
<p>Literatur</p>
<p>Weitere Hinweise</p> <p>Für Rückfragen steht Ihnen sehr gerne Frau Dr. Annekatriin Meißner (annekatrin.meissner@uni-passau.de) zur Verfügung.</p>

Sustainability and Business Ethics: Shaping Transformation

Module number
Course name
Sustainability and Business Ethics: Shaping Transformation
Module coordinator/ examiner(s)
Prof. Dr. Suleika Bort, Dr. Annekatriin Meißner

Examination number	Credit points (ECTS)	Hours per week (SWS)
	7	3
Availability	Duration	Recommended semester
Every summer semester	1 semester	3

Workload
3 SWS
Module applicability
BA Version 2025: Modulbereich B: Minor Sustainability
BA Version 1: International Management and Marketing - Vertiefung
LPO I applicability
Recommended prerequisites
Participation in the courses 11016A: Sustainability & Business Ethics: Ethical concepts for sustainable business; 39756: Organization Theory and Sustainable Leadership
Requirements
Language of instruction
English

Content
The seminar primarily centers around CSR and sustainability disclosure and communication, encompassing diverse forms of reporting. It aims to scrutinize and critically assess the transparency and quality of CSR and sustainability disclosure and communication processes.
Intended learning outcomes (ILOs)
After successfully completing the seminar "Sustainability and Business Ethics: Shaping Transformation", students will be able to <ul style="list-style-type: none"> • recognize various forms of sustainability reporting, and discern the similarities and differences among them. • evaluate and reflect critically on the quality of CSR and sustainability disclosure • acquire analytical and assessment competence (ethical and economic). • transfer of the learned methods and theories into practice. • systematically research and retrieve information from relevant scientific literature and practice-oriented sources.

<ul style="list-style-type: none"> present their scientific work and write a seminar paper which serve as a preparation for their thesis.
Teaching methods
Teamwork, theoretical input and practical insights, presentation of own work by students and writing of a seminar paper.
Required attendance
Yes
Examination (type of examination, scope)
Portfolio
Overall grade relevance
Exam resit opportunities
No. Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
Guest lectures may be offered.

Sustainability by Digitalization

Module number
33154
Course name
Sustainability by Digitalization
Module coordinator
Prof. Dr. Marina Fiedler

Additional notes	Credit points (ECTS)	Hours per week (SWS)
XXXXXX	5	2
Availability	Duration	Recommended semester
Every semester	1 semester	

Workload
Distributed Workload (to calculate as 60 minutes per SWS for 15 semester weeks; 14 lectures + 1 examination week).
Module applicability
BA Version 2025: Modulbereich B: Minor Digital Management and Strategy Modulbereich B: Minor Sustainability
BA Version 1: International Management and Marketing – Grundlagen International Management and Marketing – Vertiefung
reference to the LPO I
Recommended prerequisites
According to the Studien- und Prüfungsordnung of the respective degree.
Requirements
Language of instruction
English

Content
In the course, the students learn how digitalization can contribute to the realization of ecological, social and governance sustainability goals. The following topics are covered as part of the course: <ul style="list-style-type: none"> • Social Sustainability by Digitalization • Ecological Sustainability by Digitalization • Sustainable Governance by Digitalization • Sustainability and Digital Interventions • Discussion points, commonalities and conflicts on ecological, social and sustainable governance • Further information will be provided at the start of the course (in Stud.IP) and the course will be hosted in Ilias.

Intended learning outcomes (ILOs)
<p>After successful participation in the course, students can</p> <ul style="list-style-type: none"> • explain the role that digitalization plays in the attainment of ecological sustainability (e.g., circular economy, internal IS systems that foster ecological sustainability, real time feedback and energy conservation, and in practical environments such as an airport) • explain the role that digitalization plays in the attainment of social sustainability (e.g., the touchpoints of digitalization and social sustainability in general, and in practical environments such as the workplace) • explain the role that digital technologies play for governance aspects of sustainability (e.g., in the creation, management and use of key performance indicators) • assess the institutional logics that may support or hinder sustainability and digitalization efforts • illustrate how goals can contribute to individual and organizational motivation to attain higher levels of sustainability • reflect on the conflicts and commonalities of the various aspects of sustainability
Teaching methods
<ul style="list-style-type: none"> • Hybrid lecture with asynchronous and synchronous elements provided in Zoom and Ilias • Self-learning elements like quizzes to assess understanding of presented topics • Guest lectures of experts on the synergies of sustainability and digitalization
Required attendance
Examination (type of examination, scope)
100% final exam (60 minutes)
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
The lecture is in English; exam questions can be answered in German and English

Sustainability Reporting

Module number
Course name
Sustainability Reporting
Module coordinator/ examiner(s)
Prof. Dr. Christoph Pelger

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	3
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
Lecture 3 SWS (45 hours class interaction; 105 hours self-study)
Module applicability
BA Version 2025: Modulbereich B: Major Accounting and Tax Modulbereich B: Minor Reporting and Controlling Modulbereich B: Minor Sustainability
BA Version 1: Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Basic knowledge in accounting
Requirements
Language of instruction
English

Content
In recent years, corporate sustainability reporting has moved from a voluntary activity, prone to “greenwashing”, to a regulated field. The European Union has been particularly instrumental in promoting regulations on sustainability reporting, as becomes manifest in the recent Corporate Sustainability Reporting Directive (CSRD).
This course aims to provide an overview and to analyse current dynamic developments in the area of sustainability reporting. This involves some background on the development and theories of (voluntary) sustainability reporting, insights into current and planned regulations, standards, guidances and frameworks as well as actual practices of sustainability reporting. In this course, cases of companies’ sustainability reports are presented and discussed and academic research is mobilized to reflect on current (and future) developments in regulation/standards and practice.

Intended learning outcomes (ILOs)
<p>After successful participation in this course, students</p> <ul style="list-style-type: none"> • Explain the development of sustainability reporting and understand the limits of voluntary reporting in this area. • Compare different frameworks, guidelines and standards of sustainability reporting and evaluate them based on theories of sustainability reporting. • Analyze sustainability reports of listed companies and assess their content in light of relevant standards. • Develop suggestions on how current practices of sustainability reporting and reporting standards in this area could be improved. • Present their insights into practical cases, reporting standards and research studies effectively in oral presentations and short essays.
Teaching methods
Lecture with seminar character (input lectures, cases, student presentations, discussions)
Required attendance
Examination (type of examination, scope)
Individual essays, individual and group presentations, active participation in the sessions.
Overall grade relevance
Exam resit opportunities
Recommended reading
Additional notes
<p>The course is taught in English.</p> <p>The maximum number of participants is limited. Prior application for this course is necessary. Information on the application process are provided on the website of the Chair of Accounting and Auditing and in Stud.IP.</p>

Value-based Management

Module number
Course name
Value-based Management (ehemals: Wertorientiertes Controlling)
Module coordinator/ examiner(s)
Prof. Dr. Robert Obermaier

Examination number	Credit points (ECTS)	Hours per week (SWS)
	5	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture: 2 SWS (30 hours attendance time; 45 hours individual work time) Tutorial: 2 SWS (30 hours attendance time; 45 hours individual work time)
We calculate with 15 semester weeks (14 lecture weeks + 1 examination week) and each SWS is included in the calculation with 60 minutes.
Module applicability
PO Version 2025: Modulgruppe B: Major Accounting and Tax Modulgruppe B: Minor Reporting and Controlling Modulgruppe B: Minor Sustainability
BA Version 1: Accounting, Finance and Taxation – Grundlagen Accounting, Finance and Taxation – Vertiefung
LPO I applicability
Recommended prerequisites
Basic knowledge of controlling, reporting, financing and investment accounting.
Requirements
Language of instruction
English or German

Content
Value-based management is a fundamental and widely adopted management accounting practice, guiding organizations toward long-term maximization of shareholder value. The course covers key concepts and frameworks of shareholder value and value-based management to support value-based decision-making in organizations. Topics include economic profit and residual income as foundations for value-based performance measurement, regulatory requirements in the context of corporate governance, and value-based compensation systems for aligning management incentives. Beyond

economic considerations, social and environmental aspects of management decision-making are discussed.
Intended learning outcomes (ILOs)
<p>Students who have taken part in the module Value-based Management,</p> <ul style="list-style-type: none"> • analyze and critically evaluate corporate objectives from an economic perspective, considering both theoretical frameworks and practical implications within the context of corporate governance; • demonstrate a profound understanding of the design, implementation and inherent complexities of value-based controlling systems aligned with shareholder value principles, while critically assessing their limitations and potential trade-offs; • evaluate the complexities of performance measurement systems that align with shareholder value principles, addressing methodological challenges and their impact on managerial decision-making; • critically assess and develop recommendations for incentive-compatible management compensation schemes, considering their strategic alignment, incentive structure and implications for management retention and shareholder cost.
Teaching methods
<ul style="list-style-type: none"> • Interactive lecture • Exercises and case studies
Required attendance
Examination (type of examination, scope)
<p>a) Written exam, 60 minutes, or b) Written exam, 60 minutes + optional semester-long performance (subject to change)</p>
Overall grade relevance
Exam resit opportunities
In the event of failure (grade worse than 4.0), all courses can be repeated in accordance with § 9 of AStuPO.
Recommended reading
Additional notes
<p>International students are welcome! The exam can be written in English or German. The language of lectures and tutorials will be determined in the first lecture.</p>

Advanced Sustainability

Module number
Course name
Advanced Sustainability
Module coordinator/ examiner(s)
Prof. Dr. Suleika Bort

Examination number	Credit points (ECTS)	Hours per week (SWS)
	3-7	2-5
Availability	Duration	Recommended semester
Winter or summer semester	1 semester	

Workload
90 h to 210 h (presence and individual working hours depending on the course)
Module applicability
BA Version 2025: Modulbereich B: Minor Sustainability
LPO I applicability
Recommended prerequisites
Requirements
Language of instruction
English

Content
This module provides in-depth specialist knowledge in sustainability. This includes, among other things, in-depth topics from all areas of business that are related to sustainability, such as environmental, social and governance issues, ethical aspects of corporate governance, sustainability along value chains, social and sustainable entrepreneurship, sustainable and sustainability management, sustainable finance and reporting. The courses offered within this module establish the link to current topics and issues in business practice, regulation and research.
Intended learning outcomes (ILOs)
Students who have successfully completed the module, <ul style="list-style-type: none"> • identify and name relevant problems in sustainability and relate them to each other. • name and interpret business fundamentals in sustainability and mobilise them to address in-depth issues. • name central and in-depth methods in sustainability research, analyse their results and classify them in the context of the literature. • establish links between the issues and topics covered and current cases in business practice and current regulatory discussions.

<ul style="list-style-type: none">• recognise the potential and limitations of objectives, approaches and instruments in sustainability in the light of current research and reflect on them critically.
Teaching methods
Different teaching and learning formats are used depending on the course.
Required attendance
Examination (type of examination, scope)
Exam or portfolio
Overall grade relevance
Exam resit opportunities
According to the examination and study regulations for the Master's degree program.
Recommended reading
Additional notes

Module für M.Sc. Business Administration Version 1

25160 EU and US Banking and Financial Law

Module number
25160
Module title
EU and US Banking and Financial Law
Module coordinator
Dr. Antonio Marcacci

Examination number	Credit points (ECTS)	Hours per week (SWS)
	2	1 (block)
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
The lecture "EU and US Banking and Financial Law" will be held as a block course (8 hours in total). For the rest, the Contents of the module are to be acquired or deepened by means of self-study; a time expenditure of 42 hours to 52 hours (depending on the individual learning speed) is planned for this.
Module applicability
BA Version 1: Accounting, Finance and Taxation - Vertiefung
Reference to the LPO I
None (Not offered for teaching degree)
Recommended prerequisites
Requirements
Language of instruction
English

Content
The course covers the legislative and institutional features of the EU Banking and Financial Laws with a comparative perspective given through US Securities Regulation. Core attention will be paid to key pieces of European legislation dealing with Banking Supervision, Banking Resolution Mechanism, Primary and Secondary Financial Markets, Conduct of Business Rules, Financial Instruments (with a focus on derivatives), and Market Infrastructures.
Moreover, the course will cover the law-making process for financial regulations – the Lamfalussy procedure – as well as the new pan-European supervision systems. In order to give students a broader picture, the course will give an overview of the post-crisis reform of the US financial system and of the Federal supervision systems for securities markets. This is important to draw the key

<p>differences between the two systems. Finally, in order to give students a more concrete idea of the increasing importance of the EU in the global financial arena, the course will include a section dealing with the regulatory dialogue between ESMA and the American SEC, and the role played by the EU in the International Organization of Securities Commissions – IOSCO, and in defining transnational financial standard.</p>
<p>Intended learning outcomes (ILOs)</p>
<ul style="list-style-type: none"> • Students can explain the fundamental structure of European Capital Market and Banking Regulation. • Students are able to critically analyze legislative procedure and effectiveness of current means of EU securities regulation. • Students are able to determine applicable rules to actual market players and transactions. • Students can interpret and explain the applicable European regulatory system to persons from other legislations. • Students can point out advantages and disadvantages of the European system in comparison to regulatory systems established in the United states.
<p>Teaching methods</p>
<p>Lecture with discussion possibility in presence (group size up to 40 persons), among them also lawyers in the main area of study (6th semester); online course with discussion forum and self-control elements.</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Multiple-Choice-Exam (60 Minutes) at the end of class</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Additional notes</p>
<p>Suggested reading:</p> <ol style="list-style-type: none"> 1. “EU Securities and Financial Markets Regulation”, Third Edition, Oxford University Press, by Niamh Moloney 2. “Securities Regulation: Cases and Materials”, Ninth Edition, Wolters Kluwer, James D. Cox, Robert W. Hillman, Donald C. Langevoort 3. “International Capital Markets: Law and Institutions”, Second Edition, Oxford University Press, by Cally Jordan.

31824 Master-Seminar Real Estate Finance

Modulnummer
31824
Modultitel
Masterseminar im Schwerpunkt Accounting, Finance and Taxation
Modulverantwortliche*r / Prüfer*innen
PD Dr. Harald Kinateder, Prof. Dr. Niklas Wagner

Prüfungsnummer	ECTS	SWS
262570	7	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Sommersemester	1 Semester	

Workload						
Zusammensetzung / Aufteilung des Workload: 2 SWS						
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;"></th> <th style="width: 40%;">Präsenzzeit</th> <th style="width: 40%;">Eigenarbeitszeit</th> </tr> </thead> <tbody> <tr> <td>Seminar</td> <td style="text-align: center;">30</td> <td style="text-align: center;">180</td> </tr> </tbody> </table>		Präsenzzeit	Eigenarbeitszeit	Seminar	30	180
	Präsenzzeit	Eigenarbeitszeit				
Seminar	30	180				
Aufteilung des Workload (zu berechnen in Stunden à 60 Minuten auf 15 Semesterwochen, d.h. 14 Vorlesungs- + 1 Prüfungswoche)						
Verwendbarkeit						
BA Version 1: Accounting, Finance and Taxation – Vertiefung						
Bezug zur LPO I						
Empfohlene Voraussetzungen						
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration bzw. Bachelor-Abschluss in einem wirtschaftswissenschaftlichen oder einem den Wirtschaftswissenschaften nahen Studiengang.						
Verpflichtende Voraussetzungen						
Bachelor-Abschluss in einem wirtschaftswissenschaftlichen oder einem den Wirtschaftswissenschaften nahen Studiengang.						
Unterrichtssprache						
Deutsch						

Inhalt
In dem Seminar „Real Estate Finance“ sollen verschiedene, ausgewählte Themenfelder der Immobilienwirtschaft näher beleuchtet werden. Im Fokus stehen einzelne Immobilien-Anlageformen, insbesondere offene und geschlossene Immobilienfonds, Real Estate Investment Trusts (REITs) sowie Immobilienaktien. Das Seminar behandelt u.a. Themen aus folgenden Bereichen: <ul style="list-style-type: none"> • Bewertung und Liquidität von Immobilienanlagen • Fondsmanagement • Management finanzieller Risiken (Markt- und Kreditrisiken sowie operationelle Risiken) • Immobilienfinanzierung • Performancemessung

<ul style="list-style-type: none"> • Prinzipal Agenten Probleme • Rating von Immobilienfonds • Strategische Aspekte des Immobilienmanagements
Lernergebnisse Lernziele
<p>Studierende, die erfolgreich an dem Model „Master-Seminar Real Estate Finance“ teilgenommen haben,</p> <ul style="list-style-type: none"> • kennen die Methodik des wissenschaftlichen Arbeitens. • bestimmen relevante Literatur in Real Estate Finance. • bearbeiten die oben angesprochenen Fragestellungen nicht nur theoretisch, sondern führen empirische Analysen mit einschlägiger Software durch. • entwickeln klare Kriterien für Qualität und Angemessenheit des Managements von finanziellen Risiken. • beurteilen wie zielführend verschiedene Konzepte der Immobilienfinanzierung und des Managements von Immobilienfonds sind. • stellen ihre Ergebnisse im Rahmen einer wissenschaftlichen Arbeit fundiert dar.
Lehr- und Lernformen
<ul style="list-style-type: none"> • Selbstständige Bearbeitung wissenschaftlicher Fragestellungen anhand quantitativer Forschungsmethoden • Präsentation der einzelnen Ergebnisse durch Studierende
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)
<p>Schriftliche Hausarbeit (12 – 15 Seiten) und mündliche Präsentation (ca. 20 Minuten) der Studierenden. Hausarbeit: 2/3 Präsentation: 1/3</p>
Gesamtnotenrelevanz
Wiederholungsmöglichkeit
<p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
Literatur
Weitere Hinweise
<p>Persönliche Anmeldung per E-Mail nur am Lehrstuhl Finanzcontrolling (s. Infos auf der Homepage) und zwingend über Stud-IP im vorgegebenen Bewerbungszeitraum.</p>

32430 Evaluation of Development Policies

Module number
32430
Module title
Evaluation of Development Policies
Module coordinator
Prof. Dr. Michael Grimm

Examination number	Credit points (ECTS)	Hours per week (SWS)
271090	5	2+2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture 2 SWS (28 h Contact hours and 48 h Self study) Tutorial 2 SWS (24 h Contact hours and 24 h Self study) Exam Preparation (2 h Contact hours and 24 h Self study)
We are calculating with 15 semester weeks (14 lecture + 1 examination week). Each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
Reference to the LPO I
Recommended prerequisites
Basic knowledge in Econometrics is required. Prior knowledge in development economics/development studies is an advantage.
Requirements
Language of instruction
English

Content
Slow economic growth in many parts of the world has led to development aid pessimism. While some believe aid in general does not work and argue that development cannot be planned others think that in fact aid was simply not significant enough to be successful. Hence the former argue in favour of smaller steps and to build on what works, while the latter ask for a substantial increase of aid. This debate has raised the interest in and need of rigorous policy and project evaluations which can in a credible way establish a link between cause and effect. This course introduces students to the concept and various methods of experimental and quasi experimental impact evaluations. All methods are presented using real world examples. Hence policies and projects are discussed in conjunction with the methods that can be used to evaluate them. Examples include conditional cash

<p>transfer programs, the implementation of health insurance, unemployment insurance and a school construction programme among many others.</p> <p>The methods that are discussed in this course are similar to those used in OECD countries to evaluate for example active labour market policies and social security reforms. Hence, the course is not only of interest for students with a special interest in development, but for all students that aim to get experience in policy evaluation more generally.</p> <p>The course is accompanied by a tutorial in which students acquire hands-on experience on how to assess impacts using real data and an econometric software package, STATA. The first few lessons help students to get acquainted with STATA, the leading statistical software package in economics and other social sciences.</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who have successfully participated in the Module “Evaluation of Development Policies”:</p> <ul style="list-style-type: none"> • explain the concept of causal inference. • identify an adequate evaluation strategy for a given policy or project. • develop the theory of change associated with a policy or project. • perform power calculations and alternative sampling strategies. • analyse the data in line with the various evaluation methods using the Stata software package. • interpret results from impact evaluations. • complement quantitative evidence with relevant qualitative research to further illustrate the underlying mechanisms linking project inputs to outcomes and ultimate impacts. • assess critically the quality of impact evaluations. • derive policy recommendations from impact evaluations.
<p>Teaching methods</p>
<p>“Vorlesung mit Seminarcharakter”</p> <p>Lecture with interactive elements, hands-on exercises in the computer lab. Students discuss concepts and evaluation problems in class using real world case studies. They engage in group work to solve problem sets and to discuss review questions.</p> <p>The course starts with 2 lectures per week, lectures ending presumably 4 weeks before the end of the semester. The accompanying exercises are held until the end of the semester.</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Assignment to be submitted (100%). The assignment consists of an evaluation problem that has to be solved using a data set and the Stata software package. Students submit a corresponding research note explaining the evaluation problem, the used evaluation approach, the main results and a policy relevant conclusion.</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<ul style="list-style-type: none"> • A course book with detailed information about the course. • Lecture notes. • Readings (for details, see course book).
<p>Additional notes</p>
<p>One guest-lecture</p>

32870 Interactive Innovation and Public Policy Workshop

Module number
32870
Module title
Interactive Innovation and Public Policy Workshop
Module coordinator
Prof. Dr. Carolin Häussler

Examination number	Credit points (ECTS)	Hours per week (SWS)
264521	5	2
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
2 SWS (30 hrs. class instruction, 120 hrs. self-study) Calculation is based on: every hr. per semester week corresponds to 60 minutes. One semester presumably consists of 15 weeks, i.e., 14 course and 1 exam week.
Module applicability
BA Version 1: International Management and Marketing – Vertiefung
Reference to the LPO I
Recommended prerequisites
A successful application on the Chair's website. In accordance with § 3 of the study and examination regulation for the master degree program Business Administration.
Requirements
Language of instruction
English

Content
Innovation, broadly described as the intervention, development, and diffusion of new goods, services, or production processes, has been recognized as pivotal for long-run economic growth. Successfully applying various mechanisms that promote innovation is therefore a key challenge of government and institutional actors. This class covers the state of the literature on the economics of innovation, addressing crucial public policy questions. Amongst others, central topics will be market failures in markets for innovation, the role of science and scientific institutions, and innovation incentives. Students are provided with course materials and a syllabus to investigate key ideas of the respective readings.

<p>Intended learning outcomes (ILOs)</p> <p>Students who have successfully participated in the module "Interactive Innovation and Public Policy Workshop",</p> <ul style="list-style-type: none"> • explain assumptions, mechanisms and methods of relevant theories that underly political discussions on innovation policy. • classify scientific frameworks and critically assess their employed methods and assumptions. • structure the main results of scientific literature. • develop suggestions for improvements on the current state of literature with respect to the topic. • transfer insights from scientific literature into in-class discussions on recent topics in the field of innovation and public policy. • implement scientific presentation skills in a slide-assisted, free presentation of an assigned topic on innovation and public policy.
<p>Teaching methods</p> <ul style="list-style-type: none"> • Interactive teaching • Reading assignments • Student presentations and classroom discussions • Reading and digital presentation methods
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <ul style="list-style-type: none"> • Set of slides, presentation of assigned reading materials including a discussion part (60%) • Active participation in discussions (40%)
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Additional notes</p> <p>This workshop aims to have a highly interactive character. We aim to engage in a lively discourse on recent innovation-related issues and mechanisms; participants will be assigned to topics and provided with reading and presentation materials to prepare, present and discuss.</p> <p>The kick-off event will take place during the second week of lectures.</p> <p>Please note that you have to apply for this course. For further information, please visit the homepage of the chair: https://www.wiwi.uni-passau.de/organisation/</p>

35857 Economics of Crime

Module number
35857
Module title
Economics of Crime
Module coordinator
Dr. Aixa Maria Garcia-Ramos

Examination number	Credit points (ECTS)	Hours per week (SWS)
271040	5	2+2
Availability	Duration	Recommended semester
Summer semester	1 semester	2

Workload
Lecture 2 SWS (30 hours class instruction; 45 hours self-study) Uebung 2 SWS (30 hours class instruction; 45 hours self-study)
Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
Reference to the LPO I
Recommended prerequisites
Solid knowledge in (undergraduate) microeconomics and statistics/econometrics
Requirements
Language of instruction
English

Content
This module introduces students to the theoretical and empirical contributions of economists to the understanding of crime. The economic approach to crime assumes that individuals choose whether to commit a crime based on a rational comparison of its expected costs and benefits. We start by reviewing the theoretical model of crime developed by Becker (1968), which has been the seminal work in the field. After introducing the key elements and implications of this model, we focus on the growing number of empirical studies that have attempted to test its predictions. More specifically, the module covers topics such as the role of policing, imprisonment, labour market opportunities, education, immigration, drug policy, and guns. We also examine the recent contributions in the subfields of intimate partner violence and organised crime. Throughout the course we will become familiar with a variety of sources of crime data, as well as policy evaluation methods commonly used in these empirical analyses.

<p>Table of Contents:</p> <p>Chapter 1: Introduction</p> <p>Chapter 2: Economic models of crime</p> <p>Chapter 3: Taking the model to the data</p> <p>Chapter 4: Probability of apprehension</p> <p>Chapter 5: Severity of punishment</p> <p>Chapter 6: Labour market</p> <p>Chapter 7: Education</p> <p>Chapter 8: Immigration</p> <p>Chapter 9: Returns to crime</p> <p>Chapter 10: Illegal drugs</p> <p>Chapter 11: Social interactions</p> <p>Chapter 12: Intimate partner violence</p> <p>Chapter 13: Organised crime</p>
<p>Intended learning outcomes (ILOs)</p> <p>Students who have successfully participated in this module should be able to</p> <ul style="list-style-type: none"> • demonstrate a clear understanding of the main topics in the field of the economics of crime including Becker's theoretical model and the role of several determinants of crime • interpret and think critically about Becker's theoretical model and approximately 15 empirical studies reviewed in the lectures and tutorials • synthesise and communicate the Content of the reviewed papers effectively in written and oral forms • conduct rigorous research and participate in well-informed debates on the area of the economics of crime.
<p>Teaching methods</p> <p>Classroom lecture with interactive elements (Vorlesung mit Seminarcharakter)</p> <p>Uebung with tutorials and student presentations</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>Portfolio (final exam and presentation or seminar paper and presentation)</p>
<p>Overall grade relevance</p> <p>75% final exam and 25% presentation or 60% seminar paper and 40% presentation</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p> <ul style="list-style-type: none"> • Aizer, A. (2010). The gender wage gap and domestic violence. <i>The American Economic Review</i>, 100(4), 1847-1859. • Becker, G. (1968) Crime and punishment: An economic approach. <i>Journal of Political Economy</i>, 76(2): 169-217. • Bell, B., Fasani, F., Machin, S. (2013). Crime and immigration: Evidence from large immigrant waves. <i>Review of Economics and statistics</i>, 21(3): 1278–1290. • Brassiolo, P. (2016). Domestic violence and divorce law: When divorce threats become credible. <i>Journal of Labor Economics</i>, 2(34), 443-477. • Cameron, S. (1988). The economics of crime deterrence: A survey of theory and evidence. <i>Kyklos</i>, 41: 301-323. • Chalfin, A., McCrary, J. (2017). Criminal deterrence: A review of the literature. <i>Journal of Economic Literature</i>, 55(1): 5-48. • Cook, P. J., Kang, S. (2016). Birthdays, schooling, and crime: Regression-discontinuity analysis of school performance, delinquency, dropout, and crime initiation. <i>American Economic Journal: Applied</i>

- Economics, 8(1): 33-57.
- Corno, L. (2017). Homelessness and crime: do your friends matter? *The Economic Journal*, 127(602): 959-995.
- Di Tella, R., Schargrodsky, E. (2013). Criminal recidivism after prison and electronic Monitoring. *Journal of Political Economy*, 121(1): 28-73.
- Dobkin, C., Nicosia, N. (2009). The War on Drugs: methamphetamine, public health, and crime. *The American Economic Review*, 99(1): 324-349.
- Draca, M., Koutmeridis, T., Machin, S. (2018). The changing returns to crime: Do criminals respond to prices? *Review of Economic Studies*, 0: 1-30.
- Draca, M., Machin, S., Witt, R. (2011). Panic on the streets of London: police, crime and the July 2005 terror attacks. *The American Economic Review*, 101(5): 2157-2181.
- Dube, O., Garcia-Ponce, O., Thom, K. (2016). From maize to haze: agricultural shocks and the growth of the Mexican drug sector. *Journal of the European Economic Association*, 14(5): 1181-1224.
- Ehrlich, I. (1973) Participation in illegitimate activities: A theoretical and empirical investigation. *Journal of Political Economy*, 81(3): 521-65.
- Gould, E. D., Weinberg, B. A., Mustard, D. B. (2002). Crime rates and local labor market opportunities in the United States: 1979-1997. *The Review of Economics and Statistics*, 84(1): 45-61.
- Monteiro, J., Rocha, R. (2017). Drug battles and school achievement: Evidence from Rio de Janeiro's favelas. *The Review of Economics and Statistics*, 99(2): 213-228.
- Pinotti, P. (2015). The causes and consequences of organised crime: preliminary evidence across countries. *The Economic Journal*, 125(586): F158-F174.

Additional notes

Exam questions must be answered in English

36328 Lab and Field Experiments: Corruption, Conflict & Cooperation

Module number
36328
Module title
Masterseminar
Module coordinator
Prof. Dr. Johann Graf Lambsdorff, Dr. Katharina Werner

Examination number	Credit points (ECTS)	Hours per week (SWS)
271020	7 (group project) / 10 (individual)	4
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Class attendance time (in hours) = 60, out-of-class study time (in hours) = 240 (150 in case of a group work).
Module applicability
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
Reference to the LPO I
Recommended prerequisites
Requirements
Behavioral Game Theory and / or Economics of Corruption
Language of instruction
English

Content
Intended learning outcomes (ILOs)
Students who have participated in the module "Lab and Field Experiments: Corruption, Conflict & Cooperation", <ul style="list-style-type: none"> - recognize experimental standards on anonymity, double blindness, incentives, deception and experimenter demand-effects, - compare the relevant literature to their own design, - program their own experiment and implement it in the lab or the field, - test the outcomes from their experiment against pure game theoretic predictions and related findings from other experiments, - combine a statistical analysis of their findings with a discussion of the literature, a description of their procedures and the hypotheses, - produce their own experimental research project and scientific paper.

Teaching methods
Seminar with own research project (experiment).
Required attendance
Examination (type of examination, scope)
100% report
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Additional notes
Students can also run a group project. Groups of 2 (or in case of a reasonable and sound application even more) persons develop a joint idea for a research question. They design and run the experiment, analyze and present the data and write the seminar paper together. In the seminar paper, it must be clearly distinguishable which of the group members wrote which chapters. For such a group project, students receive 7 ECTS, because the Workload per group member will be approximately 150 hours.

37040 The Empirics of International Trade

Module number
37040
Module title
The Empirics of International Trade
Module coordinator
Dr. Davide Sala

Examination number	Credit points (ECTS)	Hours per week (SWS)
272170	5	2
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
Lecture: 2 SWS (30 hours of attendance and 45 hours of independent study time) Exercise class: 2 SWS (30 hours of attendance and 45 hours of independent study time) Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 week courses + 1 week exam.
Module applicability
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
Reference to the LPO I
Recommended prerequisites
Knowledge of microeconomics, international economics, and econometrics (bachelor level) is highly desirable. Knowledge of microeconometrics or international trade theories (e.g., from the course "Fundamentals of International Trade") is an asset (but not required).
Requirements
Language of instruction
English

Content
Trade in commodities or final goods is today only a minimal part of international trade. The bulk of international trade is actually made of intermediate parts, components, and services exchanged along international global value chains. This course encompasses some of these aspects (trade in value added, outsourcing, GVCs, FDI, partnerships), which find little coverage in basic trade classes, but characterize a modern and globalized economy. The focus lies on issues that animate the public debate (mapping GVCs, the impact of outsourcing on jobs and wages, FDI motives ...).

<p>A second part of the course is dedicated to one of the most robust empirical finding in economics, the <i>gravity equation</i>, which, for this reason, has also become the workhorse tool to investigate the effects of trade policy and regional economic integration. Article headings like “Can <i>Brexit</i> defy gravity?” will suddenly make sense ...</p> <p>A detailed syllabus of the class containing the course structure and the readings for the course will be handed out to students at the beginning of the semester in the classroom (and StudIP).</p>
<p>Intended learning outcomes (ILOs)</p>
<p>Students who successfully participated in the module “The Empirics of International Trade”</p> <ul style="list-style-type: none"> • define and describe modern features of a trading economy (e.g., trading components, GVCs, FDI). • express an empirical question (e.g., economic effects of outsourcing) • Interpret the empirical findings. • recognize an empirical methodology (e.g., OLS, IV and “matching” estimation methods) • appraise problems in bringing theory to the data • synthesize critically the literature • compare and justify different empirical approaches
<p>Teaching methods</p>
<p>Lectures and exercise classes taught in English. Discussion of papers and introduction of empirical estimation methods.</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Written exam</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Additional notes</p>

37507 Data Analysis in R for Information Systems Research

Module number
37507
Course Name
Data Analysis in R for Information Systems Research
Module coordinator /examiner(s)
Prof. Dr. Thomas Widjaja

Examination number	Credit points (ECTS)	Hours per week (SWS)
266501	2	2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
Lecture 2 SWS (30 hours class instruction; 30 hours self-study) Calculation is based on: every hr./sem.-week corresponds to 60 minutes. One semester is presumed to be 15 weeks, i.e. 14 course + 1 exam week
Module applicability
BA Version 1: Wirtschaftsinformatik/Information Systems - Vertiefung
LPO I applicability
Recommended prerequisites
In accordance with § 3 of the study and examination regulations for the master degree program information systems. Students should have knowledge in statistics on master level (preferably via the complementary course 'Computational Statistics – Regression in R'). It is possible to attend this course and the complementary course 'Computational Statistics – Regression in R' in the same semester (see "additional notes" for further information). Also, students should be familiar with the programming language R and RStudio (e.g., via prior experience or reading of the online documentation).
Requirements
Language of instruction
English

Content
The application of computational, data-driven research methods is an important skill for information systems researchers. These research methods can use data from various sources such as surveys. To analyze the data sets, this course focuses on structural equation modeling. The course provides the necessary statistical foundations and introduces the basic concepts and techniques of structural equation modeling. The concepts and techniques are applied to a self-collected real-world data-set and application examples from information systems research. The implementation of our own structural equation models will be demonstrated using the programming language R. On this basis, the course covers the following topics:

<ol style="list-style-type: none"> 1. Specification of measurement models 2. Specification of structural models 3. Data collection and examination 4. PLS path model estimation 5. Reflective and formative measurement model assessment 6. Assessment of the structural model 7. Moderator and mediator analysis
<p>Intended learning outcomes (ILOs)</p>
<p>Students, who have successfully participated in this module,</p> <ul style="list-style-type: none"> • have gone through the research process from data collection to analysis • can differentiate different techniques for structural equation modeling • can assess structural equation models used in information systems research papers • are able to handle data sets and estimate their own structural equation models
<p>Teaching methods</p>
<p>Lecture with seminar character. The lecture will be conducted through an interactive classroom lecture, with real world exercises in the computer lab. Individual student presentations will be discussed in the classroom. Additionally, teams of students will analyze a self-collected data set from the context of information systems through structural equation modelling using R and consolidate their analysis results in a written report.</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>To successfully pass the course, teams of students must analyze a data set from the context of information systems research.</p> <p>The teams provide a written report about their analysis (approx. 10 pages) which is worth 60% of the course grade. The teams of students additionally give an oral presentation (approx. 5 minutes per team member) followed by a discussion (approx. 10 minutes) about the analysis which they have conducted, which is worth 40%.</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Additional notes</p> <ul style="list-style-type: none"> • Hands-on exercises on techniques of structural equation modeling in the computer lab using R • Collection of field data conducted by teams of students • Please visit the website of the chair (www.bis.uni-passau.de) four weeks before the semester starts for information about the enrolment (especially for information about attendance on this course and the complementary course 'Computational Statistics – Regression in R')

37509 Cloud Anwendungsentwicklung und Applikationstest

Modulnummer
37509
Modultitel
Cloud Anwendungsentwicklung und Applikationstest
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Widjaja, Dr. Maximilian Reiter

Prüfungsnummer	ECTS	SWS
283017	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Jedes Wintersemester	14 Tage (Blockveranstaltung)	3

Workload
14-tägige Blockveranstaltung vor Beginn des Semesters. Es wird mit folgendem Aufwand gerechnet: <ul style="list-style-type: none"> • 6 Stunden pro Tag mit Dozenten • Ca. 2 Stunden Nachbereitungszeit pro Tag • Ca. 4 Stunden Vorbereitungszeit für Abschlussvortrag
Verwendbarkeit
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Keine
Verpflichtende Voraussetzungen
Programmierkenntnisse (z.B. mit JavaScript oder TypeScript) sind erforderlich, da diese nicht im Rahmen der 2-wöchigen Blockveranstaltung vermittelt werden können. Zur Überprüfung der empfohlenen Voraussetzungen ist ein gesondertes Anmeldeverfahren vorgesehen. Bewerbungsfristen und Bewerbungsmodus werden den Studierenden rechtzeitig über die studienbezogenen Informationskanäle mitgeteilt.
Unterrichtssprache
Deutsch

Inhalt
<ul style="list-style-type: none"> • Einführung in Domain Driven Design und Microservices • Grundlagen Qualitätssicherung • Arbeiten im agilen Umfeld • Agiles Testen • Einführung in die Cloudentwicklung • Architektur Cloud-nativer Anwendungen

<ul style="list-style-type: none"> • Entwicklung Cloud-nativer Anwendungen • Testautomatisierung Cloud-nativer Anwendungen <p>Das Modul führt Studierende in die aktuelle Softwareentwicklungspraxis ein. Der Schwerpunkt liegt dabei auf der Softwareentwicklung in der Cloud und insbesondere dem Testen der erzeugten Software.</p> <p>Im Rahmen der 14-tägigen Veranstaltung wird eine kleine App entwickelt und getestet. Als Vorgehensmodell wird ein agiler Ansatz gewählt, da ein Großteil der Software heutzutage auf Basis dieses Vorgehensmodells erstellt wird. Dabei wird auf diejenigen Konzepte näher eingegangen, die auch im Rahmen dieses Moduls zum Einsatz kommen.</p>
<p>Lernergebnisse Lernziele</p>
<p>Nach erfolgreicher Teilnahme am Modul 37509</p> <ul style="list-style-type: none"> • verstehen Studierende, wie Software zum aktuellen Zeitpunkt entwickelt wird • können Studierende die agilen Methoden von Scrum in der Praxis anwenden • können Studierende Applikationen in der AWS-Cloud entwickeln • können Studierende begründen, wie durch Tests qualitativ hochwertige Software entsteht
<p>Lehr- und Lernformen</p>
<p>Interaktiver Frontalunterricht. Die Praxisübungen sind in die Blockveranstaltung integriert.</p>
<p>Anwesenheitspflicht</p>
<p>Ja</p>
<p>Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)</p>
<p>Selbständige Bearbeitung eines Projekts, Präsentation. Bewertung der Projektergebnisse (100 % der Gesamtnote) mit einer Note am Ende der Blockveranstaltung (inkl. Zwischendokumente und Projektplanung, System- und Benutzerdokumentation des fertigen Endproduktes). Portfolioprüfung.</p>
<p>Gesamtnotenrelevanz</p>
<p></p>
<p>Wiederholungsmöglichkeit</p>
<p>Keine Wiederholungsmöglichkeit der Prüfung; Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
<p>Literatur</p>
<p></p>
<p>Weitere Hinweise</p>
<p></p>

38566 Projektseminar II in Strategie, Innovation, und Entrepreneurship

Modulnummer
38566
Modultitel
Projektseminar II in Strategie, Innovation, und Entrepreneurship
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Andreas König

Prüfungsnummer	ECTS	SWS
265090	3	1
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Unregelmäßig	1 Semester	

Workload
Projektseminar 1 SWS (15 St. Präsenz- und 75 St. Eigenarbeitszeit)
Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 1: International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
<ul style="list-style-type: none"> • Das Projektseminar dient als Übung zum wissenschaftlichen Arbeiten. • Ziel dieses Projektseminars ist die Durchführung eines kleinen Forschungsprojekts mit aktuellem Bezug, welches sich die Studierenden gemeinsam mit den Seminarleitenden erarbeiten. Dabei sollen betriebswirtschaftliche Zusammenhänge empirisch analysiert werden.
Lernergebnisse Lernziele
<p>Nach erfolgreicher Teilnahme am Seminar sind die Studierenden in der Lage:</p> <ul style="list-style-type: none"> • Die Grundlagen über das wissenschaftliche Arbeiten zu erläutern. • Die theoretischen Grundlagen zur Lösung eines betriebswirtschaftlichen Problems mithilfe von empirischen Methoden anzuwenden und die Forschungsergebnisse zu interpretieren. • Ihr erworbenes Wissen selbstständig praktisch anzuwenden und umsetzen. • Fachspezifische Inhalte wissenschaftlich zu analysieren und argumentativ zu verteidigen.

<ul style="list-style-type: none"> Eigene Forschungsergebnisse gut strukturiert und inhaltlich stringent zu präsentieren und sich über Probleme und Lösungen wissenschaftlich auszutauschen.
Lehr- und Lernformen
<ul style="list-style-type: none"> Durchführung eines Forschungsprojekts inklusive Zusammenfassung und Vorstellung der Ergebnisse
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang)
<ul style="list-style-type: none"> Portfolioleistung
Gesamtnotenrelevanz
Wiederholungsmöglichkeit
Gem. der Prüfungs- und Studienordnung für den Masterstudiengang.
Literatur
Weitere Hinweise
<p>Es ist eine vorherige Bewerbung und Themenabsprache mit dem Lehrstuhl nötig. Bei Interesse kontaktieren Sie bitte Hendrike Werwigk (hendrike.werwigk@uni-passau.de).</p> <p>Die Veranstaltung findet unregelmäßig (voraussichtlich im HK 14b Raum 202) statt. Unter Umständen beinhaltet das Forschungsprojekt die Erhebung und Analyse von englischen Daten, daher sollten teilnehmende Studierende mindestens über ein sehr gutes Leseverständnis der englischen Sprache verfügen.</p>

38611 Managerial Communication

Modulnummer
38611
Modultitel
Managerial Communication
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Andreas König

Prüfungsnummer	ECTS	SWS
265120	2	3
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Unregelmäßig	1 Semester	

Workload
Workshop 3 SWS (45 St. Präsenz- und 15 St. Eigenarbeitszeit)
Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 1: International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
Effektive Kommunikation, Teamarbeit und sozial kompetente Mitarbeiterinnen und Mitarbeiter sind seit jeher unverzichtbar für den Erfolg von Unternehmen und werden zunehmend zu einem Differenzierungsfaktor für Bewerberinnen und Bewerber. Ziel dieses Workshops ist es, mit Studierenden, die sich in einer Bewerbungsphase befinden bzw. sich als Gründerinnen und Gründer in verschiedenen Kontexten präsentieren müssen, Techniken der Präsentationsvorbereitung und – durchführung, intensiv zu besprechen und anhand vieler Einzel- und Gruppenübungen praktisch umzusetzen.
Folgende Themen werden behandelt:
<ul style="list-style-type: none"> • Stimme und ihre Funktion; Physiologie, Atem, Artikulation, Ausdruck + Übungen • Stimme im Beruf • Körpersprache und Präsentationsteamentwicklung • Analyse von Reden • Umgang mit Lampenfieber / Entspannungstechniken

<ul style="list-style-type: none"> • Praktische Übungen zur Präsentation
Lernergebnisse Lernziele
<p>Nach erfolgreicher Teilnahme an der Veranstaltung können die Studierenden</p> <ul style="list-style-type: none"> • Zugang zur eigenen Stimme durch bewusste Atmung. • Die Modulationsfähigkeit und Artikulation ausbauen. • Überzeugende Präsentationen bzw. Pitches mit authentischer Körpersprache untermalen und durchführen • Methoden zur Bewältigung von Lampenfieber im Businesskontext erläutern und diese anwenden • Im Team zusammenarbeiten
Lehr- und Lernformen
<ul style="list-style-type: none"> • Interaktiver Unterricht • Übungen zur Stimm- und Teambildung (Gruppen- und Einzelcoaching)
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang)
<p>Essay, ca. 5 Seiten, 100% der Gesamtnote</p>
Gesamtnotenrelevanz
Wiederholungsmöglichkeit
<p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
Literatur
Weitere Hinweise
<p>Aufgrund begrenzter Kapazitäten ist ein Bewerbungsprozess erforderlich. Weitere Informationen zum Bewerbungsprozess sowie zum Ablauf des Workshops entnehmen Sie bitte Stud.IP oder unserer Homepage unter https://www.wiwi.uni-passau.de/strategie-innovation/studium/seminare-und-workshops/</p>

39999 Masterkurs: Unternehmensführung - Unternehmensverfassung - Corporate Governance

Modulnummer
39999
Modultitel
Masterkurs: Unternehmensführung - Unternehmensverfassung - Corporate Governance
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Carola Jungwirth

Prüfungsnummer	ECTS	SWS
264516 (VA 39999)	5	4
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Sommersemester	1 Semester	

Workload
Kurs 4 SWS (60h Präsenzzeit und 90h Eigenarbeitszeit)
Es wird mit 15 Semesterwochen gerechnet (14 Vorlesungs- + 1 Prüfungswoche) und jede SWS geht mit 60 Minuten in die Berechnung ein.
Verwendbarkeit
BA Version 1: International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Gem. § 3 der Studien- und Prüfungsordnung für den Masterstudiengang Business Administration.
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch

Inhalte
Unternehmensverfassungen ordnen Entscheidungskompetenzen zu und legen Entscheidungsregeln auf der Leitungsebene eines Unternehmens fest. Die Rechtsform, der Gesellschaftervertrag sowie die Leitungsorganisation eines Unternehmens sind die wesentlichen Elemente der Unternehmensverfassung (vgl. Neus 2018, Einführung in die BWL, 10. Aufl.). Die Ausgestaltungen von Unternehmensverfassungen sind im Gesellschaftsrecht geregelt (z.B. GmbHG, AktG). Der Masterkurs „Unternehmensführung – Unternehmensverfassung – Corporate Governance“ analysiert anhand von Fallbeispielen, wie eine Unternehmensverfassung im Hinblick auf die zu erreichenden Unternehmensziele gestaltet sein sollte. Er nutzt die Methodik des Problem Based Learning (PBL) als Methode zur Aneignung flexibel nutzbaren Wissens, zur Entwicklung von fächerübergreifenden Kompetenzen und Problemlösungsfähigkeiten. Die Studierenden erarbeiten die Lerninhalte in Teams und werden dabei von der Lehrkraft begleitet.

<p>Lernergebnisse Lernziele</p> <p>Studierende, die an dem Modul „PBL Unternehmensführung“ teilgenommen haben,</p> <ul style="list-style-type: none"> • erläutern die Hypothesen, die die Wahl einer bestimmten Unternehmensverfassung begründet • erklären die Alternativen der Gestaltung der Unternehmensverfassung und geben dezidierte Vor- und Nachteile für die Wahl der jeweiligen Alternative ab • nutzen die Schwarmintelligenz ihrer Arbeitsgruppe, um sich in kurzer Zeit in für sie neue Themen einzuarbeiten • veranschaulichen die Lösungen für die kleinen Fälle (Vignetten) mithilfe von gut strukturieren Präsentationen, die grafische und verbale Elemente beinhalten • bewerten die im Fall beschriebenen Unternehmenskontexte und setzen sie in den Kontext einer nachhaltigen Lösungsstrategie • entwickeln klare Kriterien die Konstruktion einer klaren und fairen Unternehmensverfassung, die einem agilen und wachsenden Unternehmen förderlich ist
<p>Lehr- und Lernformen</p> <p>Es handelt sich um eine Vorlesung mit Seminarcharakter, die für eine kleine Gruppengröße (ca. 20 Teilnehmer:innen) konzipiert ist.</p> <p>Der Kurs setzt auf "problembasiertes Lernen" (PBL) als Methode zum Wissenserwerb und zur Entwicklung von überfachlichen Kompetenzen und Problemlösungsfähigkeiten. Der Lernprozess wird durch den sogenannten PBL-Zyklus strukturiert: 1. Problemszenario analysieren, 2. Fakten identifizieren, 3. Hypothesen generieren, 4. Wissensdefizite identifizieren, 5. neues Wissen anwenden, 6. abstrahieren, 7. und der Zyklus beginnt wieder mit dem Identifizieren weiterer Fakten. Die Lehrkraft führt durch den PBL-Zyklus und vermittelt das notwendige methodische Wissen (z. B. zur Hypothesenbildung).</p> <p>Das Modul (4 SWS) beinhaltet Diskussionen, Impulse durch die Lehrkraft und Präsentationen der Ergebnisse im Plenum sowie Teamarbeit in Kleingruppen (max. 7 Personen). Die Lehrkraft unterstützt bei der Kleingruppenarbeit.</p> <p>Alle Prüfungsleistungen können mit der letzten Lehrveranstaltung des Semesters erbracht sein.</p>
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang)</p> <ul style="list-style-type: none"> - Foliensatz, Gruppenpräsentation, 50% der Endnote (Teamnote) - Individueller Lösungsvorschlag zu einer der besprochenen Fallskizzen (Vignetten) (17.000 Zeichen, inkl. Leerzeichen), 50% der Endnote (individuelle Note)
<p>Gesamtnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p> <p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
<p>Literatur</p> <p>Grundlagenliteratur:</p> <ul style="list-style-type: none"> - v. Werder, Axel (2015), Führungsorganisation: Grundlagen der Corporate Governance, Spitzen- und Leitungsorganisation, 3. Auflage. Gabler Verlag, Wiesbaden 2015, ISBN 978-3-8349-4447-4 - Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn? Educational Psychology Review, 2004, H. 16, S. 235-266 - Schulz von Thun, F. (1998): Miteinander reden 3 – Das 'innere Team' und situationsgerechte Kommunikation. Rowohlt, Reinbek 1998, ISBN: 3499605457 - Picot, A. et al. (2020), Organisation - Theorie und Praxis aus ökonomischer Sicht. Schäffer-Poeschel Verlag, 8. Auflage 2020, ISBN: 3791047086 <p>Weitere Literaturangaben werden im Kurs bekannt gegeben.</p>

Weitere Hinweise
<p>Der Kurs findet semesterbegleitend als Präsenzveranstaltung statt. Studierende, die aus Krankheitsgründen nicht anwesend sein können, können virtuell teilnehmen. Es wird darum gebeten, die virtuelle Teilnahme vor der jeweiligen Unterrichtsstunde anzukündigen.</p> <p>Die Teilnahmezahl ist auf 30 Studierende begrenzt. Die Plätze werden nach dem first come, first served Prinzip vergeben.</p> <p>Weitere Informationen finden Sie auf der Homepage des Lehrstuhls: https://www.wiwi.uni-passau.de/governance/</p>

48500 Interkulturelles Management

Modulnummer
48500
Modultitel
Interkulturelles Management
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Christoph Barmeyer

Prüfungsnummer	ECTS	SWS
264720	5	2
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
jedes Sommersemester	1 Semester	

Workload
In der Präambel wird definiert, dass dieser Wert mit 15 Vorlesungswochen (inkl. Prüfung) berechnet wird. Er ist standardisiert und im Einklang mit der Angabe unter „SWS“ anzugeben, d.h. Für eine Lehrveranstaltung mit 2 SWS und 5 ECTS lautet die Angabe „30 h Kontaktstudium, 120 h Selbststudium“, Für eine Lehrveranstaltung mit 4 SWS und 5 ECTS lautet die Angabe „60 h Kontaktstudium, 90 h Selbststudium“, Für eine Lehrveranstaltung mit 2 SWS und 10 ECTS lautet die Angabe „30 h Kontaktstudium, 270 h Selbststudium“ etc.
Verwendbarkeit
BA Version 1: International Management and Marketing – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Verpflichtende Voraussetzungen
Unterrichtssprache
Deutsch, English

Inhalt
In der Vorlesung wird der Gegenstandsbereich des interkulturellen Managements behandelt, das sich als Forschungs- und Praxisfeld versteht, das sich mit Unterschieden und Gemeinsamkeiten von Fach- und Führungskräften verschiedenkultureller Zugehörigkeit im Rahmen interpersonaler Kommunikation, Interaktion und organisationaler Prozesse beschäftigt. In theoretischer wie anwendungsorientierter Weise werden Methoden, Fragestellungen und Forschungsergebnisse der Kultur-, Kommunikations-, Sozial- und Managementwissenschaften integriert.

<p>Als Anwendungsbereiche dienen u.a. Strategie, Führung, Teams, zwischenmenschliche Kommunikation, Organisationskultur, Wissensmanagement, internationaler Transfer in Mutter-Tochterbeziehungen, Personal- und Organisationsentwicklung. Dabei dienen international-komparative und interkulturelle Aspekte dazu, neben kulturspezifischen Darstellungen, gewohnte Referenzrahmen zu relativieren und kritisch zu hinterfragen. Ebenso sollen die Grenzen der Globalisierung und Standardisierung anhand divergierender kultureller Werte und Praktiken sowie Rezeptionsweisen gezeigt werden.</p>
<p>Lernergebnisse Lernziele</p>
<p>Studierende...</p> <ul style="list-style-type: none"> • erweitern und vertiefen ihr Grundlagen- und Überblickswissen in den Kultur- und Wirtschaftswissenschaften sowie dem Interkulturellen Management und sind in der Lage, ihre Fachkenntnisse interdisziplinär zu bündeln • kennen grundlegende Konzepte, Modelle und Theorien der Interkulturellen Kommunikation, des Interkulturellen Managements, der vergleichenden Kulturwissenschaft • erhalten Einblicke in verschiedene internationale Potentiale und Probleme der Vernetzung von Kultur und Wirtschaft • erwerben anhand begleitender Lektüre den Umgang mit fachwissenschaftlichen Texten in deutscher und englischer Sprache • reflektieren kritisch konzeptionelle, begriffliche und methodologische Bedingungen Interkulturellen Managements • reflektieren synergetische und komplementäre Aspekte von Kultur für die Wertschöpfung von Organisationen
<p>Lehr- und Lernformen</p>
<p>Das Modul besteht aus einer Vorlesung (Lehrvortrag) mit intensiver Vor- und Nachbereitung einzelner Sitzungen anhand begleitender und ergänzender Materialien und Aufgaben (Fallstudien, Simulationen und Reflexionen). Zudem werden Inhalte aus der Praxis durch Gastvorträge an die Studierenden herangetragen.</p>
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)</p>
<p>Schriftliche Klausur (60 Minuten)</p>
<p>Gesamtnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p>
<p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
<p>Literatur</p>
<p>Weitere Hinweise</p>
<p>Dieses Seminar wird nicht als wirtschaftswissenschaftliches Seminar anerkannt, sondern nur in der Modulgruppe G (Wahlprogramm).</p>

5622V Software-Sicherheit / System Security

Modulnummer
5622V
Modultitel
Software-Sicherheit / System Security
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Joachim Posegga

Prüfungsnummer	ECTS	SWS
405143	5	2V + 1Ü
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
jedes Sommersemester / every summer semester	1 Semester	

Workload
45 Std. Präsenz + 30 Std. Übungsaufgaben + 75 Std. Nachbearbeitung des Vorlesungsstoffes, Vorbereitung eines Referats und Prüfungsvorbereitung 45 contact hours + 30 hrs exercises + 75 hrs follow-up, preparing a presentation and exam preparation
Verwendbarkeit
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Advanced IT Security
Verpflichtende Voraussetzungen
Keine / None
Unterrichtssprache
Vorlesung in Deutsch oder English

Inhalt
Der Inhalt des Moduls umfasst dabei z.B. risk & threat analysis, buffer und heap overflows, scripting languages, filter techniques, SQL injections, race conditions, attack surfaces, patch management, software testing, low level software security, Java security, reference monitors, least privilege principle, smart phone security, stack walks und history based access control. The content of the module includes, i.e., risk & threat analysis, bffer and heap overflows, scripting languages, filter techniques, SQL injections, race conditions, attack surfaces, patch management, software testing, low-level software security, Java security, reference monitors, leases privilege principle, smart phone security, stack walks and history based access control.
Lernergebnisse Lernziele
Kenntnisse / Skills / Knowledge: Verständnis über Verwundbarkeiten deren Arten, Entstehung, Möglichkeiten der Ausnutzung und deren Folgen. Verstehen der Prinzipien für die Entwicklung sicherer Software. Überblick über Maßnahmen zur Schadensbegrenzung. Kenntnisse über Schritte zur forensischen Analyse von

<p>Sicherheitsvorfällen. Überblick der Akademische Leitsätze und praxisrelevante, „best practice“ Ansätze.</p> <p>Understanding of the types of vulnerabilities, development, possibilities of use and its consequences. Understand the principles for the development of secure software. Overview of mitigation measures. Knowledge of steps for a forensic analysis of security incidents. Overview of Academic principles and practice-relevant “best practice“ approaches.</p> <p><u>Fähigkeiten / Abilities:</u> Aufspüren von Verwundbarkeiten; Ausbesserung von vorhandenen Verwundbarkeiten und forensische Analyse von Sicherheitsvorfällen.</p> <p>Detection of vulnerabilities; repair of existing vulnerabilities and forensic analysis of security incidents.</p> <p><u>Kompetenzen / Competencies:</u> Betrachtung von Systemen aus unterschiedlichen Blickwinkeln. Entwicklung, Analyse und Umsetzung möglicher Perspektiven und Reaktionsalternativen. Transformation und Reduktion akademischer Leitsätze auf praxisbezogene Anforderungen.</p> <p>Consideration of systems from different angles. Development, analysis and implementation of possible perspectives and response alternatives. Transformation and reduction of academic principles to practical requirements.</p>
<p>Lehr- und Lernformen</p>
<p>Präsentation und Beamer, Tafel Presentation and projector, blackboard</p>
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)</p>
<p>Teilprüfungsleistungen:</p> <ul style="list-style-type: none"> • Referat: ca. 30-min. Referat mit Präsentation über selbsterarbeitetes Thema. Die Studierenden können am Semesterbeginn aus einer Auswahl von Themen wählen. • Schriftliche/mündliche Prüfung: 60-min. schriftliche Prüfung oder ca. 20-min. mündliche Prüfung. Die Prüfungsart wird am Semesterbeginn durch den/die Dozent(in) festgelegt und bekanntgegeben. <p>Eine Anmeldung zum Referat impliziert automatisch eine Anmeldung zu einem der angebotenen Termine zur schriftlichen/mündlichen Prüfung im Anschluss an den gleichen Vorlesungszeitraum. Zum Bestehen des Moduls müssen beide Teilprüfungsleistungen bestanden werden. Dabei wird die schriftliche/mündliche Prüfung mit 80% gewichtet, das Referat mit 20%.</p> <p>This module is assessed in partial examinations:</p> <ul style="list-style-type: none"> • Oral presentation: approx 20 min. Students in small groups will present selected topics chosen during the semester. • 60-minute written or 20-minute oral examination. The specific mode of assessment will be announced by the lecturer at the start of the semester. <p>Registration for the presentation automatically implies a registration for any of the dates offered for written/oral examination following the same course of lectures. In order to pass this module, students must pass both partial examinations. The exam will count 80% of the grade, the oral presentation 20%</p>
<p>Gesamtnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p>

Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.
Literatur
Michael Howard & David LeBlanc: Writing Secure Code, Microsoft Press, 2nd edition, 2002
Gary McGraw: Exploiting Software: How to Break Code, Addison-Wesley, February 2004
John Viega & Gary McGraw: Building Secure Software, Addison-Wesley, 2001
Mark G. Graff & Kenneth R. van Wyk: Secure Coding, O.Reilly, 2003
Brian A. La Macchia, Sebastian Lange, Matthew Lyons, Rudi Martin, and Kevin T. Price: .NET Framework Security, Addison-Wesley, 2002
L. Gong, G. Ellison, M. Dageforde: Inside Java 2 Platform Security, Addison-Wesley, 2nd Edition, 2003
Weitere Hinweise
Die bisherigen Teilnehmer an Lehrveranstaltungen aus dem Bereich Wirtschaftsinformatik hoben die Integration der Vermittlung theoretischen Wissens und der praktischen Anwendung immer positiv hervor. Die Teilnehmer fühlen sich durch die Bewertung der Übungsleistungen in ihrer Motivation zur aktiven Teilnahme an der Lehrveranstaltung bestärkt. Sie geben durchweg an, dass sie durch die konsequente, praktische Anwendung während des Semesters einen nachhaltigeren Lernerfolg erzielen und ein tieferes Verständnis für die behandelten Themen entwickeln. Die hierdurch erworbene Routine und Lösungskompetenz wurde auch als Vorteil für die spätere Berufspraxis genannt.

5724V Safety and Security of Critical Infrastructures (ehemalig: Sicherheit in Netzen)

Modulnummer
5724V
Modultitel
Safety and Security of Critical Infrastructures
Modulverantwortliche*r / Prüfer*innen
Prof. Dr. Hermann de Meer

Prüfungsnummer	ECTS	SWS
451006	6	2V + 2Ü
Modulangebot	Zeitdauer des Moduls	Empfohlenes Studiensemester
Unregelmäßig / irregular	1 Semester	

Workload
60 Std. Präsenz + 50 Std. Übungen + 70 Std. Nachbereitung der Vorlesung und Prüfungsvorbereitung 60 contact hours + 50 hrs exercises + 70 hrs independent study and exam preparation
Verwendbarkeit
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Bezug zur LPO I
Empfohlene Voraussetzungen
Grundlagen der IT-Sicherheit, Rechnernetze, Funktionale Sicherheit und Foundation of Energy Systems von Vorteil / Basics of IT Security, Computer Networks, Functional Safety and Foundation of Energy Systems advantageous
Verpflichtende Voraussetzungen
Keine / None
Unterrichtssprache
Deutsch oder Englisch / German or English

Inhalt
Das Modul beinhaltet im Bereich Netzsicherheit die Einführung in die Netzsicherheit und Sicherheitsprotokolle für Netzwerke. Weitere Inhalte sind die sichere drahtlose und mobile Kommunikation und der Bereich Sicherheit in drahtlosen Sensornetzwerken der die Punkte Einführung in die Sicherheit von Sensornetzen und Sicherheitsprotokolle in Sensornetzen umfasst. Zudem beinhaltet das Modul den Bereich Sicherheit im Smart Grid, dem zukünftigen intelligenten Stromnetz. In the network security segment, the module includes an introduction to the network security and security protocols for networks. Other topics include secure wireless and mobile communication. The security in wireless sensor networks area includes an introduction to sensor network security and security protocols in sensor networks. The module also includes the area of security for Smart Grids, the intelligent power grids of the future.

<p>Lernergebnisse Lernziele</p> <p><u>Kenntnisse / Skills/Knowledge</u> Die Studierenden lernen aktuelle und zukünftige Konzepte von Sicherheit in Netzen kennen. Sie erhalten Kenntnisse über die verschiedenen Bedrohungen und Angriffe sowie von der Konzeption und Implementierung von Sicherheitsdiensten zum Schutz des Netzes. Sie erlangen Kenntnisse über Methoden zur Gewährleistung von Sicherheitszielen wie Datenintegrität, Vertraulichkeit, Zurechenbarkeit und Verfügbarkeit. Bedrohungen wie Maskerade, Abhören von Daten, unberechtigter Zugang zu Services, Sabotage und Modifikation von Informationen können durch geeignete Sicherheitsdienste wie Authentifizierungsservice oder Datenintegritätsservice ausgeschaltet werden. Students will learn about current and future concepts of security in networks. They will acquire knowledge of the various threats and attacks, as well as the design and implementation of security services for the protection of the network. They will gain knowledge of methods for ensuring security goals such as data integrity, confidentiality, accountability and availability. Threats such as masquerade, eavesdropping of data, unauthorized access to services, sabotage and modification of information can be turned off by suitable security services such as authentication services and data integrity services.</p> <p><u>Fähigkeiten / Abilities:</u> Die Studierenden entwickeln Fertigkeiten zum Design und Entwurf von Sicherheitsmechanismen bei verdrahteten Netzen, drahtlosen Netzen, mobilen Netzen, Sensornetzen und RFIDbasierten Netzen. Sie erlangen die Fähigkeit aktuelle und künftige Konzepte der Netzsicherheit zu verstehen und zu bewerten. Durch die Analyse von verschiedenen Angriffsmethoden wie z.B. DoS oder Relay-Angriffe lernen sie, wie man geeignete Gegenmaßnahmen entwirft und in welcher Schicht des Protokollstacks welche Dienste auf welche Weise implementiert werden können, um die Angriffe zu verhindern. Students will develop skills to design security mechanisms in wired networks, wireless networks, mobile networks, sensor networks and RFID -based networks. They will gain the ability to understand current and future concepts of network security and evaluate them. By analyzing various attack methods such as DoS or relay attacks they learn how to design appropriate countermeasures and in what layer of the protocol stack which services can be implemented to prevent the attacks.</p> <p><u>Kompetenzen / Competencies:</u> Die Studierenden sind in der Lage, an Hand der Anforderungen selbstständig die erforderlichen Sicherheitsmechanismen wie Authentifizierungsprotokolle oder Datenintegritätsmechanismen zu entwerfen und zu implementieren. Students will be able to understand the requirements for designing the security mechanisms such as authentication protocols and data integrity mechanisms and to implement them independently.</p>
<p>Lehr- und Lernformen</p> <p>Präsentation und Beamer, Tafel (Labor/Rechner) / Presentation and projector, blackboard (laboratory/computer)</p>
<p>Anwesenheitspflicht</p>
<p>Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)</p> <p>90 Minuten Klausur / 90-minute written examination</p>
<p>Gesamtnotenrelevanz</p>
<p>Wiederholungsmöglichkeit</p> <p>Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.</p>
<p>Literatur</p>

Yan Zhang, Security in RFID and sensor networks, Auerbach Publications, 2009, ISBN 9781420068399

G. Schaefer, Netzsicherheit, dpunkt.verlag Claudia Eckert, Christoph Krauß (2011). Sicherheit im Smart Grid: Eckpunkte für ein Energieinformationsnetz, Alcatel-Lucent-Stiftung.
http://www.stiftungaktuell.de/index.php?article_id=21&slice=364

Claudia Eckert, Christoph Krauß (2012). Sicherheit im Smart Grid: Sicherheitsarchitekturen für die Domänen Privatkunde und Verteilnetz unter Berücksichtigung der Elektromobilität, Alcatel-Lucent-Stiftung. http://www.stiftungaktuell.de/index.php?article_id=21&slice=403

Weitere Hinweise

5771V Multimedia Databases

Module number
5771V
Module title
Multimedia-Datenbanken
Module coordinator
Prof. Dr. Harald Kosch

Examination number	Credit points (ECTS)	Hours per week (SWS)
405031	7	3V + 2Ü
Availability	Duration	Recommended semester
Every summer semester	1 Semester	

Workload
75 contact hours + 50 hrs exercises + 85 hrs independent study and exam preparation
Module applicability
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
None
Requirements
None
Language of instruction
English

Content
<p>New media standards (here especially MPEG - MPEG-4 AVC or derived from MPEG DivX, mp3) and better recording devices in the media processing industry have been developed in recent years. New methods and tools are developed, which can manage the mass of recorded and transmitted data. The value of information largely depends on how easily the data can be searched and managed according to their content. These multimedia databases are used exclusively. The multimedia search here differs substantially from textual search. We distinguish content-based search, which for example is to enable color, contour, and texture based distributions for visual media and image-to- image comparisons. More accurate methods are based on a region -based search, which tries to identify parts of an image or video. The semantic search allows you to find media based on the fellow in the media persons, or places/events portrayed. A multimedia database system provides here the necessary functions for media manipulation and at the same time enables the content-based and semantic search and that too in large amounts of data, which is made possible due to intelligent index structures.</p> <p>Content structure: Content -Based Indexing and Retrieval (visual media): color theory and presentation, brief overview of description of features such as texture, edges, extraction of features, retrieval systems and demos of multimedia data modeling (in XML: MPEG -7) Multimedia DBMS: Multimedia access structures, especially the family of R-trees, SS-trees and SR- Trees Multimedia</p>

Anfrageverarbeitung and optimization Programming of multimedia DBMS Overview of common MMDB products and research prototypes
Intended learning outcomes (ILOs)
<p>Skills/Knowledge Students will acquire knowledge of techniques for multimedia processing and extraction of descriptive multimedia features and the development of multimedia database management systems and programming of multimedia databases.</p> <p>Abilities Students will acquire the ability to perform practical specification of multimedia requests, implementation and optimization of multimedia queries and the use of multimedia standards.</p> <p>Competencies Students will acquire the competence to transfer the database knowledge on multimedia data, extensions of SQL and mastery of object-relational constructs for multimedia, technical dealing with the media, management of multimedia data in general.</p>
Teaching methods
<p>Slides-oriented lecture, panel use with examples, additional explanations and explanatory facts: Weekly tutorials in small groups. The presence tasks and the sample solutions are precalculated to the exercises</p> <p>Expected activities of students: Participation in compulsory and voluntary tutorials, independent study of secondary literature</p> <p>Slide script is accessible and available through Stud.IP</p>
Required attendance
Examination (type of examination, scope)
90-minute written examination
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
<p>Harald Kosch: "Distributed Multimedia Database Technology supported by MPEG-7 and MPEG-21", CRC Press, November 2003, ISBN 0-8493-1854-8</p> <p>Klaus Meyer-Wegener: „Multimediale Datenbanken- Einsatz von Datenbanktechnik in Multimedia-Systemen“, 2. Auflage 2004, Teubner Verlag, ISBN 3-519-12419-X.</p>
Additional notes

5772 Data Modelling and Data Processing in the Internet of Things

Module number
5772
Module title
Data Modelling and Data Processing in the Internet of Things
Module coordinator
Prof. Dr. Kosch

Examination number	Credit points (ECTS)	Hours per week (SWS)
455386	5	2V + 1Ü
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
30 + 15 contact hours + 105 hrs exercises, independent study and exam preparation
Module applicability
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
None
Requirements
None
Language of instruction
English

Content
<p>Internet-of-Things(IoT) systems collect and aggregate sensor data from physical products. This enables control systems to be optimised, innovative services to be offered and new business models to be developed. IoT systems require an intelligent data concept and management that takes into account not only the collection and aggregation but also the evaluation of sensor data.</p> <p>The lecture is divided into 3 parts:</p> <ol style="list-style-type: none"> 1. Introduction to IoT and different web technologies relevant for IoT systems <ol style="list-style-type: none"> a. IoT Systems, such as, microcontroller b. IoT Frameworks and Architectures (e.g., Vorto) c. JSON, JSON Schema, RDF, JSON-LD 1.1 d. IoT Datastores, such as from IoT Cloud Systems 2. Data Modeling technologies for IoT <ol style="list-style-type: none"> a. WoT Building Blocks: Thing Model, Thing Description and Binding Templates b. Semantic Modeling (Context Extension) 3. Data processing mechanisms in IoT <ol style="list-style-type: none"> a. WoT API

<ul style="list-style-type: none"> b. Discovery c. Security d. Data coding e. Data processing
Intended learning outcomes (ILOs)
<p><u>Skills/Knowledge</u> Students gain an understanding of the basics of current data modeling approaches and their processing in the context of the Internet of Things (IoT) domain. They are able to describe data models of participating IoT systems and apply techniques to process and interpret them, for example, to enable interaction with other IoT systems (Plug&Play). They will be familiarized with the use of standardized (semantic) web technologies in the context of the W3C Web of Things (WoT) and can describe current applications in various areas of industry, including automation, energy and transport systems through their services.</p> <p><u>Abilities</u> Participants will be equipped to implement fundamental approaches to data modeling for Internet of Things systems. They will be able to write service descriptions for concrete questions and applications in the Web of Things.</p> <p><u>Competencies</u> Students learn basic and practical skills in the design of IoT systems, the technology blocks of the W3C Web of Things, as well as in the application of semantic web technologies.</p>
Teaching methods
Projector presentation
Required attendance
Examination (type of examination, scope)
90-minute written or 20-minutes oral examination; the precise mode of assessment will be announced at the start of the semester.
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
To be announced by the lecturer. The literature will be announced by the lecturer at the beginning of the lecture
Additional notes

5777 Technologien zur Wahrung der Privatsphäre in Informationssystemen / Privacy-Preservation Technologies in Information Systems

Module number
5777
Module title
Technologien zur Wahrung der Privatsphäre in Informationssystemen / Privacy-Preservation Technologies in Information Systems
Module coordinator
Prof. Dr. Kosch

Examination number	Credit points (ECTS)	Hours per week (SWS)
472215	5	2V + 1Ü
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
30 + 15 contact hours, 105 hours of exercises, independent study and exam preparation
Module applicability
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
None
Requirements
None
Language of instruction
English

Content
<p>Preserving privacy and anonymity is a topic area that is influenced by both technical and legal conditions. The lecture discusses these conditions in the context of information systems. In the first part of the lecture the basic concepts and methods are conveyed. In the second part of the lecture, different use cases in information systems with specific anonymity and privacy frameworks are detailed.</p> <ol style="list-style-type: none"> 1. Basics of privacy preservation <ul style="list-style-type: none"> • Legal basis in Europe (GDPR) • Anonymity and privacy • Basics of data management in information systems • Privacy-preserving methods (anonymization, privacy models) • Tradeoff between privacy and utility 2. Use Cases <ul style="list-style-type: none"> • Medical research data <ul style="list-style-type: none"> – Hippocratic databases and purpose-based access control

<ul style="list-style-type: none"> – Pseudonymization • Data warehouse <ul style="list-style-type: none"> – Anonymization strategies – Query-based anonymization • Social networks <ul style="list-style-type: none"> – Data protection requirements for social networks – Privacy preservation for graph data
<p>Intended learning outcomes (ILOs)</p>
<p><u>Skills/Knowledge</u> The students know the core concepts of technologies used for the protection of privacy in information systems. The students also know the legal basis of data protection in Europe (GDPR), which is contrasted to the technical possibilities. The students know the differences between privacy and anonymity, know principles for attacks on privacy and anonymity and methods to protect them. The students know the special requirements in relevant use cases for information systems, such as medical information systems or data warehouses.</p> <p><u>Abilities</u> The students of the course master the selection and application of suitable methods for the protection of privacy and anonymity in information systems, taking into account the specifics of the information system and legal requirements. The students are able to determine and evaluate data protection risks in information systems.</p> <p><u>Competencies</u> The participants understand the basics of technical data protection, in particular methods of anonymization, pseudonymization and privacy models. The participants also understand the legal basis for data protection in Europe - the General Data Protection Regulation (GDPR). The participants can select suitable methods for different information systems and apply them taking into account the specific framework conditions.</p>
<p>Teaching methods</p>
<p>Presentation with projector</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>90-minute written or 20-minutes oral examination; the precise mode of assessment will be announced at the start of the semester</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>The literature will be announced by the lecturer at the beginning of the lecture.</p>
<p>Additional notes</p>

5845 Search-Based Software Engineering

Module number
5845
Module title
Search-Based Software Engineering
Module coordinator
Prof. Dr. Fraser

Examination number	Credit points (ECTS)	Hours per week (SWS)
455378	6	2V + 2Ü
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
60 contact hours + 120 hours exercises, independent study and exam preparation
Module applicability
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
Software Engineering, Programmierung I + II, SEP
Requirements
None
Language of instruction
English

Content
<ul style="list-style-type: none"> • Local Search • Evolutionary Algorithms • Multi-Objective Optimisation • Memetic Algorithms • Novelty Search • Parallel Search • Search-based Testing • Genetic Programming • Genetic Improvement • Program Repair
Intended learning outcomes (ILOs)
<p><u>Skills/Knowledge</u> Search-based software engineering (SBSE) applies metaheuristic search techniques such as genetic algorithms, simulated annealing and tabu search to software engineering problems. This course covers the theory of major classes of metaheuristic optimisation algorithms, including local</p>

<p>search algorithms and population based optimisation (such as genetic algorithms and particle swarm optimisation) and their application to software engineering problems across the software development lifecycle (requirements, design, planning, testing, maintenance, etc). Participants will learn the fundamental basics of metaheuristic search, as well as essential local and population-based search algorithms and their application areas in software engineering.</p> <p><u>Abilities</u> Participants know the most important meta-heuristic search algorithms and their application areas in software engineering. They will be able to implement, explain and compare relevant algorithms.</p> <p><u>Competencies</u> Participants learn theoretical and practical competencies for the conception, implementation, and evaluation of search algorithms and their application to problems in software engineering. In particular, participants will be able to implement these algorithms and apply them to new problems.</p>
<p>Teaching methods</p>
<p>Presentation, projector, exercises</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>90-minute exam or portfolio-exam. The exact mode of assessment will be announced at the start of the semester</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Will be announced in the lectures. Further reading will be announced for the individual assignments.</p>
<p>Additional notes</p>
<p></p>

5874V IT-Sicherheitsrecht

Modulnummer
5874V
Modultitel
IT-Sicherheitsrecht
Modulverantwortliche*r / Prüfer*innen
Prof. Schröder / Dr. Hartl

Prüfungsnummer	ECTS	SWS
222431	5	2
Modulangebot	Zeitdauer des Moduls	SWS
Jedes Wintersemester	1 Semester	

Workload
30 Std. Präsenz + 120 Std. Nachbereitung und Prüfungsvorbereitung
Verwendbarkeit
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
Bezug zur LPO I
Empfohlene Voraussetzungen
Keine
Verpflichtende Voraussetzungen
Keine
Unterrichtssprache
Deutsch

Inhalt
Zunächst erfolgt eine grundlegende Einführung in die Thematik des IT-Sicherheitsrechts. Dabei werden Grundfragen an den Schnittstellen von Technik und Recht sowie rechtliche Grundprinzipien vorgestellt und ergänzend die relevanten Normen und die Arbeit mit zentralen rechtlichen Konzepten (allgemeine Grundlagen des Zivilrechts und öffentlichen Rechts wie Haftung, Anspruchsgrundlagen, Verschulden und Verschuldentypen, auslegungsbedürftige Tatbestandmerkmale, Ermessen oder Formen des Verwaltungshandeln) eingeführt.
Es folgen themenspezifische Blöcke immer unter Rückgriff auf eingeführten Grundlagen. Dabei werden – unter Berücksichtigung aktueller Entwicklungen und Schwerpunkte – Grundrechte und staatliches Eingriffshandeln sowie Schutzpflichten, Grundlagen des Datenschutzrechts, des technischen Datenschutzes, IT-Sicherheit im arbeitsrechtlichen Kontext, Haftungs- und Produkthaftungsfragen (einschließlich Vertragsgrundlagen und Providerhaftung), strafrechtliche Flankierung sowie Frage nach der rechtskonformen Modellierung der Organisation der IT-Sicherheit im Unternehmen behandelt. Schließlich sind öffentlich-rechtliche Regularien und Vorgaben an den Schutz (kritischer) technischer Infrastruktur Teil der Veranstaltung.
Schwerpunkt der Veranstaltung sind insgesamt, vor dem Hintergrund der genannten Themen, die mehrdimensionalen rechtlichen Anforderungen an Akteure unter dem Aspekt der IT-Sicherheit,

dabei vor allem die Vermeidung rechtlicher Risiken und der Umfang rechtlicher Verantwortung auf privater Ebene sowie Auftreten und (mögliche) Regulieransätze der öffentlichen Hand.
Lernergebnisse Lernziele
<p><u>Kenntnisse</u> Die Studierenden erwerben Kenntnisse der Rechtsgrundlagen des IT-Sicherheitsrechts (verfassungsrechtliche Grundlagen und öffentlich sowie zivilrechtliche Bezüge einschließlich des Datenschutzrechts und weiterer spezialgesetzlicher Regelungen) sowie des Themenkomplexes IT-Sicherheitsrecht insgesamt aus politischer, wirtschaftlicher und technischer Perspektive; dies schließt die Kenntnis der wichtigsten höchstrichterlichen Rechtsprechung mit ein. Zudem erlangen die Studierenden Kenntnis von Fallkonstellationen, in denen technische Systeme und ihr Einsatz in der Praxis typischerweise IT-sicherheitsrechtliche Fragen aufwerfen.</p> <p><u>Fähigkeiten</u> Die Studierenden beherrschen die Erfassung juristischer Probleme technischer Sachverhalte auf Basis der relevanten rechtlichen Grundlagen im IT-Sicherheitsrecht. Die Studierenden beherrschen die Erarbeitung von Lösungsvorschlägen für die jeweiligen rechtlichen Probleme im Themenbereich IT-Sicherheit.</p> <p><u>Kompetenzen</u> Die Studierenden besitzen die Kompetenz zur Anwendung spezifisch juristischer Methoden der Fallbearbeitung und -lösung sowie Transferkompetenz zur Anwendung des erworbenen Wissens und der erworbenen Fähigkeiten auf die typischerweise sehr schnell auftretenden neuen Probleme des IT-Sicherheitsrechts. Sie beherrschen die Interaktion zwischen technisch und juristisch ausgebildeten Personen im beruflichen Umfeld (gegenseitige Wissensvermittlung, gemeinsame Problemlösungsstrategien).</p>
Lehr- und Lernformen
Anwesenheitspflicht
Prüfungsleistung (Prüfungsform, Umfang, Gewichtung)
90 Minuten Klausur oder ca. 20 Minuten mündliche Prüfung, je nach Anzahl der Hörer. Die genaue Prüfungsart wird zu Beginn des Semesters bekannt gegeben.
Gesamtnotenrelevanz
Wiederholungsmöglichkeit
Bei Nichtbestehen können alle Veranstaltungen gemäß § 6 der Fachstudien- und -prüfungsordnung wiederholt werden.
Literatur
Hinweise in der Vorlesung
Weitere Hinweise

5881 Privacy Enhancing Techniques

Module number
5881
Module title
Privacy Enhancing Techniques
Module coordinator
Posegga

Examination number	Credit points (ECTS)	Hours per week (SWS)
405223	3	2V
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
30 contact hours + 60 hours Follow-up, preparing a presentation, and exam preparation
Module applicability
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
Advanced IT Security, Security Insider Lab I or II, System Security
Requirements
None
Language of instruction
English

Content
The course covers the following topics: <ul style="list-style-type: none"> • Attacks against privacy, including traffic analysis, deanonymization, and side-channel attacks • Systematic privacy risk assessment (for instance, using LINDDUN) • Privacy issues and privacy enhancing technologies in particular environments, like clouds or mobile devices, and for particular applications, including location-based services • Special PETs, including Trusted-computing-based PETs, privacy preserving data mining and data release • Differential privacy • Privacy-preserving software systems and applications • Relation between cryptography and privacy • Anonymous credentials • Anonymous routing and anonymity systems

<ul style="list-style-type: none"> • Lightweight privacy-enhancing technologies for constrained environments, to provide user consent.
Intended learning outcomes (ILOs)
<p><u>Skills/Knowledge</u> Students learn key technical concepts related to privacy, both regarding the associated issues in current and emerging technologies, and the possibilities of protecting the privacy in those applications. Students learn generic principles, methods, and tools of privacy-by-design (PbD) and of privacy enhancing technologies (PETs), including data anonymization and perturbation techniques. They also learn which methods are adequate for particular situations, for data release, for big data applications (in clouds, for instance), and for applications based on sensors and actuators in constrained environments. On the other hand students will learn the basic limitations of PETs.</p> <p><u>Abilities</u> Students will develop skills in the early detection, identification, and evaluation of privacy threats and risks in existing or planned applications. In addition, they will be able to manage and respond to the risks, either suggesting modifications in the functionality of the application, or selecting or developing adequate privacy-friendly solutions, and implementing and instantiating them.</p> <p><u>Competencies</u> Students will know how to apply best practices and established technologies, such as Privacy by Design, LINDDUN. The students can explain the tradeoffs between privacy protection, security and functionality and to find compromises between these competing goals. They can compare the strengths and weaknesses of different PETs. The students can read and discuss the current research literature in this area.</p>
Teaching methods
Projector, presentation and blackboard
Required attendance
Examination (type of examination, scope)
<p>This module is assessed in partial examinations:</p> <ul style="list-style-type: none"> • Oral presentation: approx 20 min. Students in small groups will present selected topics chosen during the semester. • 60-minute written or 20-minute oral examination. The specific mode of assessment will be announced by the lecturer at the start of the semester. <p>Registration for the presentation automatically implies a registration for any of the dates offered for written/oral examination following the same course of lectures. In order to pass this module, students must pass both partial examinations. The exam will count 80% of the grade, the oral presentation 20%.</p>
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
To be announced in the lecture
Additional notes

5942 Network Science

Module number
5942
Module title
Network Science
Module coordinator
Prof. Dr. Granitzer

Examination number	Credit points (ECTS)	Hours per week (SWS)
482601	5	2V +1Ü
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
45 contact hours + 105 hours exercises, preparation and follow-up
Module applicability
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
Data Science
Requirements
None
Language of instruction
English

Content
In particular, the following topics are covered: <ul style="list-style-type: none"> • Basic Network Theory (Graph Types, Connectivity, Graph Traversal) • Networks (Small World Phenomenon, Strong and Weak Ties, Information Flow, Community Detection) • Analysing the context of social networks (Homophily and Segregation) • Positive and Negative Relationships in Networks • Information Networks (Structure of the Web, Link Analysis and Web Search) • Network Dynamics (Population Models, Information Cascades, Rich-get-richer, Cascading Behavior in Networks, Network Epidemics)
Intended learning outcomes (ILOs)
<u>Skills/Knowledge</u> The students gain insights into Modeling and analysing complex real-world networks with a special emphasis on social networks. In particular knowledge on the following topics will be gained: <ul style="list-style-type: none"> • Basic Graph Theory (Undirected/Directed/Bipartite Graphs, Connectivity, Graph Traversal)

<ul style="list-style-type: none"> • Properties of Social Networks (Strong and Weak ties, Structural Balance, Context in Social Networks, Small World Networks) • Properties of Information Networks (Structure of the Web, Decentralized Search, Navigability of the Networks) • Network Dynamics and Evolution <p><u>Abilities</u> The students will be able to analyse complex real-world networks and draw conclusions on their structural properties and dynamics. They will be able to develop and apply different algorithms for analysing networks, like for example clustering algorithms for detecting sub-structures and traversal algorithms for estimating statistical properties (e.g. centrality, clustering coefficient). Furthermore, students will be able to interpret the outcome of the algorithms in terms of underlying social theories, like for example Triadic Closure or Structural Balance Theory.</p> <p><u>Competencies</u> Students acquire the competencies to analyse network data especially in web-based information systems and use this analysis to understand and refine those information systems.</p>
Teaching methods
Blackboard, projector
Required attendance
Examination (type of examination, scope)
90-minute written or 20-minute oral examination. The mode of assessment will be announced at the start of the semester.
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
<ul style="list-style-type: none"> • Networks, Crowds, and Markets: Reasoning About a Highly Connected World von David Easley und Jon Kleinberg von Cambridge University Press • Barabási, Albert-László. Network science. Cambridge University Press, 2016. • Mark Newman, Networks: An Introduction. Oxford University Press, 2010
Additional notes

5970V Scaling Database Systems

Module number
5970
Module title
Scaling Database Systems
Module coordinator
Prof. Dr. Scherzinger

Examination number	Credit points (ECTS)	Hours per week (SWS)
451016	6	2V + 2Ü
Availability	Duration	Recommended semester
Every winter semester	1 Semester	

Workload
60 contact hours + 45 hrs exercises + 75 hrs independent study and exam preparation
Module applicability
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
reference to the LPO I
Recommended prerequisites
Programming skills, fundamentals of databases and information systems (DBIS I + II)
Requirements
None
Language of instruction
English

Content
<ul style="list-style-type: none"> Managing large amounts of data in BigTable-based systems such as Hadoop File System (HDFS). Processing large amounts of data in MapReduce-based systems such as Hadoop. Optimized evaluation of SQL queries on large volumes of data (as done in Hive and Spark).
Intended learning outcomes (ILOs)
<p><u>Skills / Knowledge</u></p> <p>The students understand the importance of scalability when managing large amounts of data. They understand about strengths and limitations of NoSQL data stores and how database systems architecture enables performance.</p> <p><u>Abilities</u></p> <p>The students are able to map a specific data management problem to a suitable NoSQL database management system.</p>

<p>Competencies</p> <p>The students have the competence to design their own optimizations for data management systems and implement them.</p>
<p>Teaching methods</p> <p>Flipped classroom (videos for self-study, in-class exercises), programming project (Python)</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <p>Part 1: Individual Programming project “miniHive” in Python Part 2: 60-minute written examination</p>
<p>Overall grade relevance</p> <p>The points for the final grade are computed as follows: 30% from part 1, 70% from part 2.</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p> <p>Peter Bailis, Joseph M. Hellerstein, Michael Stonebraker, (editors), <i>Readings in Database Systems</i>, 5th edition. Anand Rajaraman, Jeffrey Ullman: <i>Mining of Massive Datasets</i>, Cambridge University Press, 2020. Martin Kleppmann: <i>Designing Data-Intensive Applications</i>, O'Reilly, 2017. Stefanie Scherzinger, <i>Build your own SQL-on-Hadoop Query Engine: A Report on a Term Project in a Master-level Database Course</i>, SIGMOD Record, June 2019.</p>
<p>Additional notes</p>

6061 Introduction to Deep Learning

Module number
6061
Module title
Introduction to Deep Learning
Module coordinator
Prof. Dr. Lemmerich

Examination number	Credit points (ECTS)	Hours per week (SWS)
471616	6	2V + 2Ü
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
60 contact hours + 120 hrs independent study and implementation.
Module applicability
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
Advanced Topics in Data Science or Introduction to AI Engineering, Python Programming Language
Requirements
None
Language of instruction
English

Content
<p>The course will give an overview on the fundamentals and current approaches for deep learning and its main applications fields. In particular, it will cover:</p> <ul style="list-style-type: none"> • Basics of Representation Learning • Perceptron Learning • Feedforward Neural Networks • Gradient Descent and Backpropagation • Regularization in Deep Learning • Convolutional Neural Networks • Recurrent Neural Networks • Autoencoders • Adversarial Training • Graph Neural Networks • Applications of Deep Learning for Text, Sequences, and Images • Explainability and Deep Learning

Intended learning outcomes (ILOs)
<p><u>Skills/Knowledge</u> Students will get to know about fundamentals of artificial neural networks, gain an overview on standard algorithms in the field as well as examples of recently proposed state-of-the-art techniques. Furthermore, students will get to know some standard tools to develop and apply deep learning techniques to machine learning problems.</p> <p><u>Abilities</u> The students will be able to implement deep learning approaches to practical machine learning problems. They obtain the ability to choose and improve neural network architectures suitable for specific machine learning tasks.</p> <p><u>Competencies</u> Students will strengthen their competence to analyze and assess algorithms for machine learning. Participants will learn to develop problem-oriented solutions with deep learning approaches independently.</p>
Teaching methods
Presentation with beamer, whiteboard
Required attendance
Examination (type of examination, scope)
<ul style="list-style-type: none"> • 90 minutes written or 20 minutes oral exam depending on the number of participants. • The students will be informed about the exact type of exam by the beginning of the semester
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
<ul style="list-style-type: none"> • Goodfellow, Ian, Yoshua Bengio, and Aaron Courville: Deep Recommended reading learning. MIT press, 2016 • Aggarwal, Charu C.: Neural networks and deep learning. Springer 10 (2018): 978-3 • Additional literature will be announced at the beginning of the semester
Additional notes
Notice: Replacing Deep Learning, cannot be credited twice

6090 Security of Computer and Embedded Systems / Sicherheit von Rechnern und eingebetteten Systemen

Module number
6090
Module title
Security of Computer and Embedded Systems / Sicherheit von Rechnern und eingebetteten Systemen
Module coordinator
Prof. Dr. Kavun

Examination number	Credit points (ECTS)	Hours per week (SWS)
455385	5	2V + 1Ü
Availability	Duration	Recommended semester
Every winter semester	1 semester	

Workload
45 contact hours + 50 hrs exercises + 55 hrs independent study and exam preparation
Module applicability
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
None
Requirements
None
Language of instruction
English

Content
<p>This module provides an introduction into computer security and embedded security. In particular, this module focuses on approaches and techniques for building secure systems and for the secure operation of systems.</p> <p>The module requires an understanding of mathematical concepts (e.g., modulo-arithmetic, complex numbers, group theory) and logic (set theory, predicate logic, natural deduction). Moreover, the module requires an understanding of a programming language (e.g., Python, C) and basic software engineering knowledge. Some exercises require a basic command of Linux in general and the command line (shell) in particular.</p> <p>The module includes the topics:</p> <ul style="list-style-type: none"> • Computer Security Fundamentals • Access Control • Embedded Systems • Need for Security in Embedded Systems • Cryptographic Foundations

<ul style="list-style-type: none"> • Attacking Crypto • Public Key Infrastructures (PKIs) • Digital Signatures • Security Protocols • Formal Analysis of Security Protocols • Secure Software Development Lifecycle (SSDL) • Threat Modelling • Common Vulnerability Scoring System (CVSS) • Software Vulnerabilities • Secure Programming • Security Testing: Basics, Fuzzing, Static Analysis • Security of Third-Party Components • RFID Security • Hardware Fingerprinting & IC Security
<p>Intended learning outcomes (ILOs)</p>
<p><u>Skills/Knowledge</u> Students get to know</p> <ul style="list-style-type: none"> • the complexity of the security landscape, • the potential vulnerabilities associated, e.g., authentication, data integrity, • the advantages and disadvantages different information security principles, • understand the risks of security vulnerabilities. <p><u>Abilities</u> Students practice a detailed understanding of industrially relevant issues relating to computer security and embedded security as well as the ability to present material in a concise yet comprehensive manner and to target that material appropriately to the audience in question.</p> <p><u>Competencies</u> The students gain awareness on the different types of computer attacks and their effect on data security and privacy, get an understanding of the fundamental principles of information security and get some practical knowledge of how these principles and implementing technologies can be used to ensure better data and system security.</p>
<p>Teaching methods</p>
<p>Presentation and projector, blackboard</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Written exam (90 minutes) or oral exam in English according to the number of participants (about 20 minutes); the precise mode of assessment will be announced at the start of the semester.</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<ul style="list-style-type: none"> • J. Gersting. Mathematical Structures for Computer Science. WH Freeman, 7th edition, 2016. • R. J. Anderson. Security Engineering: A Guide to Building Dependable Distributed Systems. John Wiley & Sons Inc., 1st edition, 2001. • A. J. Menezes, S. A. Vanstone, and P. C. V. Oorschot. Handbook of Applied Cryptography. CRC Press Inc., 5th edition, 2001.

- M. Howard, D. LeBlanc, and J. Viega. 24 Deadly Sins of Software Security: Programming Flaws and How to Fix Them. McGraw-Hill Inc., 1st edition, 2010.

AND

- Online resources will be provided and specific readings will be announced during the lectures and exercise sessions.

Additional notes

6123 Deep Learning for Natural Language and Code

Module number
6123
Module title
Deep Learning for Natural Language and Code
Module coordinator
Prof. Dr. Herbold

Examination number	Credit points (ECTS)	Hours per week (SWS)
472700	6	2V + 2Ü
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
60 contact hours + 45 hrs exercises + 75 hrs independent study and exam preparation
Module applicability
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
Introduction to Deep Learning
Requirements
None
Language of instruction
English

Content
This module covers the following topics: <ul style="list-style-type: none"> • Typical tasks for language and code processing • Word embeddings and recurrent neural networks • Transformers and pre-training • Encoder-only models • Decoder-only models • Encoder-decoder models • Encoder-decoder models • Domain-specific models • Embeddings for code • Transformers for code • Multimodal models
Intended learning outcomes (ILOs)
<u>Skills/Knowledge:</u> The students know the typical tasks that can be solved through natural language and code

processing. They know modern deep learning approaches to address these tasks and know how to implement them in practice. They know how select suitable methods for a given problem. They know the limitations of the models and can evaluate their performance.
Teaching methods
Presentation with a projector, blackboard
Required attendance
Examination (type of examination, scope)
90-minute written or 20-minutes oral examination; the precise mode of assessment will be announced at the start of the semester.
Overall grade relevance
Exam resit opportunities
Exam resits are detailed in § 6 of the subject-specific study and examination regulation.
Recommended reading
Will be announced at the beginning of the lecture
Additional notes

6206 Data on the Web

Module number
6206
Module title
Data on the Web
Module coordinator
Prof. Dr. Scherzinger

Examination number	Credit points (ECTS)	Hours per week (SWS)
455417	6	2V + 2Ü
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
60 contact hours + 60 hrs exercises + 60 hrs independent study and exam preparation
Module applicability
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
Databases and Information Systems, Algorithms and Data Structures, Web and Data Engineering
Requirements
None
Language of instruction
English

Content
This module focuses on the principles of sharing data on the web through REST and Linked Open Data APIs. It shows suitable data formats for publishing data on the web, explains the role of ontologies and data vocabularies in improving data interoperability, and presents how to consume data using the SPARQL query language.
Intended learning outcomes (ILOs)
<u>Skills/Knowledge</u> The students acquire a systematic understanding of publishing and sharing data on the web. They know basic and advanced models and formats for representing data on the web as knowledge graphs, the principles for achieving data interoperability through ontologies, and advanced technologies for querying the data.
<u>Abilities</u> The students can identify, understand, and access/query data published on the web (REST, SPARQL). They can also publish their data in an interoperable way exploiting existing and designing their ontologies to describe the data. They can combine data from different data sources into a single knowledge graph and query it.

<p>Competencies</p> <p>The students have the competence to select appropriate technologies for publishing and consuming data on the web, design ontologies to describe the data, and design and execute queries (SPARQL) on top of the data.</p>
<p>Teaching methods</p> <p>Lectures, presentation and demonstrations with a projector, blackboard, practical seminar, demonstrations with a projector, students work on exercises using their own laptops</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p> <ul style="list-style-type: none"> • Part 1: At least 50% of points from small practical assignments from the labs, i.e., work with the particular systems. Can be done during the exercises or as homework. Not a part of the final grading. • Part 2: A graded 60-minute written examination of terminology and theoretical principles. • The points for the final grade are computed as follows: Part 1 is pass/fail, and must be passed. Part 2 is graded.
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p> <p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p> <ul style="list-style-type: none"> • Tom Heath and Christian Bizer. Linked Data: Evolving the Web into a Global Data Space. Synthesis Lectures on the Semantic Web: Theory and Technology, Morgan & Claypool. 2011 • Bob DuCharme. Learning SPARQL: Querying and Updating with SPARQL 1.1. O'Reilly Media, Inc. 2013 • Panos Alexopoulos. Semantic Modeling for Data. O'Reilly Media, Inc. 2020 • Mayank Kejriwal, Craig A. Knoblock, Pedro Szekely. Knowledge Graphs (Adaptive Computation and Machine Learning series). MIT Press. 2021
<p>Additional notes</p>

6210 Semantic Data Integration

Module number
6210
Module title
Semantic Data Integration
Module coordinator
Prof. Dr. Algergawy

Examination number	Credit points (ECTS)	Hours per week (SWS)
473270	6	2V+2Ü
Availability	Duration	Recommended semester
Irregular	1 semester	

Workload
60 contact hours + 60 hrs exercises + 60 hrs independent study and exam preparation.
Module applicability
BA Version 1: Wirtschaftsinformatik/ Information Systems – Vertiefung
Reference to the LPO I
Recommended prerequisites
Databases and Information Systems, Algorithms and Data Structures, Web and Data Engineering
Requirements
None
Language of instruction
English

Content
This module focuses on the principles of data integration describing the importance of data integration in different applications and use cases. Different schemes of integration such virtual and physical data integration will be covered. The course will further focus on virtual and web data integration. Further topics covered are various aspects of data integration, such as data and semantic heterogeneities, schema and ontology matching, and the role of semantics and ontologies in improving data integration and data interoperability.
Intended learning outcomes (ILOs)
<u>Skills/Knowledge</u> The students acquire a systematic understanding how to combine and integrate different data sources using a broad range of techniques for data integration. During the integration process, the students will know basic and advanced models and formats for representing data, how to identify and discover data and semantic heterogeneities across different data sources, the principles for achieving data interoperability through ontologies, and advanced technologies for querying the data.
<u>Abilities</u> The students can identify, understand, and access/query different data sources (conjunctive queries,

<p>XQuery, and SPARQL). They can also identify and discover different heterogeneities across data sources, how to resolve these kinds of heterogeneities through schema and ontology matching. They can combine data from different data sources into a mediated schema making use of discovered matches and query it.</p>
<p><u>Competencies</u> The students obtain the competency to select appropriate technologies for identifying and discovering data and semantic heterogeneities through schema and ontology matching, design ontologies to describe the data, and design and execute queries on top of the data.</p>
<p>Teaching methods</p>
<p>Lectures, presentation and demonstrations with a projector, blackboard, practical seminar, demonstrations with a projector, students work on exercises using their own laptops</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>90-minute written examination</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<ul style="list-style-type: none"> • AnHai Doan, Alon Halevy, Zachary Ives: Principles of Data Integration. Morgan Kaufmann, 2012. • Barbella, Marcello, and Genoveffa Tortora. "Semi-automatic Data Integration Process of heterogeneous databases." Pattern Recognition Letters (2023). • Ulf Leser, Felix Naumann: Informationsintegration. Dpunkt Verlag, 2007. • Luna Dong, Divesh Srivastava: Big Data Integration. Morgan & Claypool, 2015. • Serge Abiteboul, et al: Web Data Management. Cambridge University Press, 2012. • Mountantonakis, Michalis, and Yannis Tzitzikas. "Large-scale semantic integration of linked data: A survey." ACM Computing Surveys (CSUR) 52.5 (2019): 1-40. • Jérôme Euzenat, Pavel Shvaiko: Ontology Matching. Springer, 2007. • Felix Naumann: An Introduction to Duplicate Detection. Morgan & Claypool, 2012.
<p>Additional notes</p>
<p></p>

5973 SQL for Data Science

Module number
5973
Course name
SQL for Data Science
Module coordinator
Prof. Dr. Stefanie Scherzinger

Examination number	Credit points (ECTS)	Hours per week (SWS)
451016	6	2V + 2Ü
Availability	Duration	Recommended semester
Irregular	1 Semester	

Workload
60 contact hours + 60 hrs exercises + 60 hrs independent study and exam preparation
Module applicability
BA Version 1: Wirtschaftsinformatik/Information Systems - Vertiefung
reference to the LPO I
Recommended prerequisites
Programming skills, fundamentals of databases and information systems (DBIS I + II)
Requirements
None
Language of instruction
English

Content
This advanced database class offers a comprehensive understanding of the data life cycle and the potential of SQL in various data analysis tasks. Students explore topics ranging from data loading and cleaning to pre-processing, while mastering relational databases and handling non-traditional data formats such as XML and text. Integration with programming languages like R and Python further enriches students' abilities, enabling seamless interaction with databases and enhancing data analysis workflows. Practical exercises and hands-on experience with MySQL and Postgres databases solidify students' competencies, equipping them with the essential skills to excel in data science and database management roles
Intended learning outcomes (ILOs)
<u>Skills / Knowledge</u> SQL proficiency within the context of data science; Understanding of the data life cycle; Handling non-traditional data formats like XML and text; Integration of SQL with programming languages
<u>Abilities</u>

<p>Perform data analysis tasks using SQL; Write efficient SQL queries, avoid SQL anti-patterns; Understand and navigate the data life cycle; Handle diverse data formats for analysis; Utilize SQL in conjunction with R and Python for enhanced data analysis capabilities</p> <p><u>Competencies</u></p> <p>Proficiency in SQL for data science applications; Competence in data loading, cleaning, and pre-processing; Ability to apply SQL queries for data exploration, cleaning, and transformation; Capability to integrate SQL with programming languages for enhanced data analysis workflows</p>
<p>Teaching methods</p>
<p>Presentation and projector, worksheets</p>
<p>Required attendance</p>
<p></p>
<p>Examination (type of examination, scope)</p>
<p>60-minute written examination</p>
<p>Overall grade relevance</p>
<p></p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Antonio Badia: SQL for Data Science - Data Cleaning, Wrangling and Analytics with Relational Databases. Springer 2020</p> <p>Bill Karwin: SQL Antipatterns. Pragmatic Programmers, LLC, 2017</p> <p>Raghu Ramakrishnan, Johannes Gehrke: Database Management Systems. McGraw-Hill, 3rd edition, 2020</p>
<p>Additional notes</p>
<p></p>

Seminar in Development Economics

Module number
32400
Module title
Seminar in Development Economics
Module coordinator
Prof. Dr. Michael Grimm

Examination number	Credit points (ECTS)	Hours per week (SWS)
272110	7	2
Availability	Duration	Recommended semester
Every summer semester	1 semester	

Workload
30 h Contact hours and 180 h Self-study
We are calculating with 15 semester weeks (14 lecture + 1 examination week). Each SWS is included in the calculation with 60 minutes.
Module applicability
BA Version 1: Lehrveranstaltungen aus anderen Masterprogrammen
Reference to the LPO I
Recommended prerequisites
Basic knowledge in econometrics as well as micro- and macroeconomics is required. While a strong mathematical or statistical background is not necessary to follow the course, students will be expected to engage with several papers using regression analysis and data science. Prior knowledge in development economics and/or political economy is an advantage but not necessary..
Requirements
Language of instruction
English

Content
The seminar focuses on fundamental problems of socio-economic development at an advanced level. It offers an integrated mix of theories, empirical testing, policy evaluations and political debate. The topics change from year to year.
Intended learning outcomes (ILOs)
Students who have successfully participated in the Module "Seminar: Development Economics":
<ul style="list-style-type: none"> • developed a basic understanding in a certain field of development economics. • identified, reviewed and synthesized relevant scientific literature. • explain the basics of the theoretical and theoretical approaches used in the literature.

<ul style="list-style-type: none"> • wrote and presented a scientific research paper based on the reviewed literature. • assess own empirical material to complement their literature review. • identified research gaps in the literature. • engaged in scientific debates with other students. • critically reflect on the seminar papers by other students.
<p>Teaching methods</p>
<p>The seminar can be organized as a block seminar during the lecture period or as a series of introductory lectures and discussions, followed by students' presentations of one of the research articles from the course and a prepared referee report on this article.</p> <p>Please see syllabus and course book.</p>
<p>Required attendance</p>
<p>Examination (type of examination, scope)</p>
<p>Students are expected to choose one of the research articles from the list, write a three-to-five page referee report or research proposal based on the paper chosen, and present both the summary of the research paper and referee report/research proposal in the class.</p> <p>The grade will consist of a Presentation (30%) + Referee report (50%) + Discussion and participation in class (20%).</p>
<p>Overall grade relevance</p>
<p>Exam resit opportunities</p>
<p>Exam resits are detailed in § 6 of the subject-specific study and examination regulation.</p>
<p>Recommended reading</p>
<p>Materials from the course (i.e. academic papers, published in international journals and referee reports)</p>
<p>Additional notes</p>