



Keine PO-STG-Zuordnung vorhanden Responsible: JMU Würzburg

JMU Würzburg • generated 05-Nov-2024 • exam. reg. data record 88|j10|-|-|H|2025



Learning Outcomes

German contents and learning outcome available but not translated yet.

Der Master-Studiengang Information Systems wird von der Wirtschaftswissenschaftlichen Fakultät der JMU als forschungsorientierter Studiengang mit dem Abschluss "Master of Science" (M. Sc.) im Rahmen eines konsekutiven Bachelor- und Master- Modells angeboten. Der Grad des Master of Science stellt einen weiteren forschungsorientierten und berufsqualifizierenden Abschluss dar; die im Rahmen des Masterstudiums erworbene Qualifikation entspricht der eines Diplom-Wirtschaftsinformatikers bzw. einer Diplom-Wirtschaftsinformatikerin.

Im Masterstudiengang Information Systems erwerben die Studierenden vertiefte Kenntnisse und Fähigkeiten im Bereich der Wirtschaftsinformatik und erlangen so eine hohe wissenschaftliche und an- wendungsbezogene Qualifikation und Selbstständigkeit auf diesem Gebiet. Die Studierenden lernen Aufgabenstellungen und Systeme der Wirtschaftsinformatik zu analysieren, Defizite zu identifizieren und unter Einsatz etablierter sowie neuer Methoden und Techniken systematisch eine konzeptionell neue bzw. verbesserte Lösung zu erarbeiten. Durch die Master-Prüfung weist der Kandidat bzw. die Kandidatin nach, dass er bzw. sie fundierte Fachkenntnisse erworben hat und Aufgaben dieser Themenbereiche selbständig bearbeiten kann.

Die Masterprüfung führt zu einem zweiten berufsqualifizierenden Abschluss, welcher auf einem Bachelorstudiengang im Bereich Wirtschaftsinformatik bzw. auf einem wirtschaftswissenschaftlichen Bachelorstudiengang mit einer Schwerpunktsetzung im Bereich Wirtschaftsinformatik aufbaut. Durch die Masterprüfung wird festgestellt, ob die Studierenden die Zusammenhänge im Bereich Wirtschaftsinformatik so beherrschen, dass sie einen eigenen Forschungsbeitrag darin leisten können.

Durch die Ausbildung und Schulung des analytischen Denkens erwerben die Studierenden die Fähigkeit, sich später in die an sie herangetragenen Aufgabengebiete einzuarbeiten und insbesondere das bereits aus dem Bachelorstudium erworbene Grundwissen in einem Masterstudiengang selbständig anzuwenden sowie auf neue Aufgabenstellungen zu übertragen. Die Absolventinnen und Absolventen sind in der Lage, Informationen im ökonomischen Kontext differenziert zu betrachten und sie mit geeigneten Mo¬ dellen und Methoden zu analysieren und zu bewerten. Unter Berücksichtigung ethischer und ökologischer Fragestellungen können sie Potenziale und Risiken abschätzen sowie nachhaltige Verbesserungen oder Lösungen entwickeln. Ihre Urteile sind wissenschaftlich fundiert und beziehen die Abschätzung ökologischer und gesellschaftlicher Folgen ein. Die Absolventinnen und Absolventen sind in der Lage, ihre Entscheidungen zu erläutern und unter Beachtung wissenschaftlicher Grundsätze zu verteidigen.

Die Absolventinnen und Absolventen können am wissenschaftlichen Diskurs mit Fachvertreterinnen und Fachvertretern teilnehmen. Sie haben die notwendigen unternehmerischen, interkulturellen und Innovationskompetenzen für verantwortungsvolle Positionen in internationalen Teams und Unternehmen erworben. Neben Tätigkeiten in der Praxis sollen die Absolventen bzw. Absolventinnen befähigt werden, in Universitäten und wissenschaftlichen Einrichtungen tätig zu werden.

Zum Erreichen der Ziele ist ein hohes Maß an Eigeninitiative der Studierenden erforderlich. Studieren bedeutet insbesondere auch ein Selbststudium und das Studieren in Arbeitsgruppen. Die wissenschaftliche Literatur ist dabei eine unentbehrliche Hilfe.

Für den Erfolg im Studium und den beruflichen Erfolg nach dem Studium sind die Beherrschung der englischen Sprache und möglichst einer weiteren Fremdsprache in Wort und Schrift sowie Kenntnisse in Rhetorik und Präsentationstechniken besonders förderlich. Die Entwicklung dieser Kenntnisse fordert die eigene Initiative der Studierenden über das Lehrangebot hinaus. Das Studium fördert die Persönlichkeitsentwicklung und Ausbildung interkultureller Kompetenzen durch entsprechende Lehrangebote (auch in englischer Sprache) sowie die Förderung von Auslandsaufenthalten durch zahlreiche Partnerprogramme und die vereinfachte Anerkennung von im Ausland erworbenen Leistungen.

Abbreviations used

Course types: \mathbf{E} = field trip, \mathbf{K} = colloquium, \mathbf{O} = conversatorium, \mathbf{P} = placement/lab course, \mathbf{R} = project, \mathbf{S} = seminar, \mathbf{T} = tutorial, $\ddot{\mathbf{U}}$ = exercise, \mathbf{V} = lecture

Term: **SS** = summer semester, **WS** = winter semester

Methods of grading: **NUM** = numerical grade, **B/NB** = (not) successfully completed

Regulations: **(L)ASPO** = general academic and examination regulations (for teaching-degree programmes), **FSB** = subject-specific provisions, **SFB** = list of modules

Other: **A** = thesis, **LV** = course(s), **PL** = assessment(s), **TN** = participants, **VL** = prerequisite(s)

Conventions

Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

Notes

Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the method of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the customary manner.

Should the module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below.

Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all individual assessments.

In accordance with

the general regulations governing the degree subject described in this module catalogue:

ASPO2015

associated official publications (FSB (subject-specific provisions)/SFB (list of modules)):

??-???-2024 (2024-??)

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.

The subject is divided into

Abbreviation		Module title	ECTS Meth		of	nago	
		module title	credits	gradin	g	page	
Compulsory Courses (20 E	Compulsory Courses (20 ECTS credits)						
12-M-IS-242-m01	Information	n Systems	5	NUM		85	
12-M-PSI-242-m01	Project Ser	ninar	15	NUM		95	
Compulsory Electives I: Fu	ndamentals	Computer Science (20 ECTS credits)					
10-l=lR-242-m01	Information	n Retrieval	5	NUM		13	
10-l=SSS-232-m01	Security of	Software Systems	5	NUM		33	
10-I=SAR-161-m01	Software A	rchitecture	5	NUM		28	
10-l=Kl1-212-m01	Artificial In	telligence 1	5	NUM		14	
10-l=ST-232-m01	Discrete Ev	ent Simulation	5	NUM		35	
10-I=APR-252-m01	Advanced I	Programming	5	NUM		9	
10-I=NLP-212-m01	Machine Le	earning for Natural Language Processing	5	NUM		21	
10-l=Kl2-212-m01	Artificial In	telligence 2	5	NUM		16	
10-I=PNN-252-m01	Programmi	ng with neural nets	5	NUM		26	
10-l=SB-252-m01	Systems Be	enchmarking	5	NUM		30	
10-AI=CV1-242-m01	Computer \	/ision 1	5	NUM		7	
10-l=IP-222-m01	Image Proc	essing and Computational Photography	5	NUM		11	
10-I=MNLP-232-m01	Multilingua	IL NLP	5	NUM		19	
10-I=SNA-232-m01	Statistical	Network Analysis	5	NUM		31	
10-l=OR-232-m01	Operations	Research	5	NUM		23	
10-I=MLN1-232-m01	Machine Le	earning for Networks 1	5	NUM		17	
10-I=DM-232-m01	Data Scien	ce	5	NUM		10	
Compulsory Electives II: Tr	acks (40 EC	TS credits)					
Out of the four tracks, stud	ents may se	elect two.		-			
Frack 1: Enterprise System	ms (20 ECTS	credits)					
Core (10 ECTS credits)			1				
12-M-GPU-242-m01	Business S	oftware 1: Management and Implementation of In-	5	NUM		78	
	formation s	n Systems					
12-M-ERP-242-m01	Business S	iness Software 2: Data-driven Business Process Manage-		NUM		70	
Core Flortings (10 FCTE							
10-I=PM-252-M01	Profession	al Project Management	5		-+	25	
10-I=PRJAK-252-M01	Project - CL	Irrent Topics in Computer Science	5	NUM	-+	27	
12-M-HRM-242-m01	Human Res	Source Management and Industrial Relations	5	NUM		80	
10-I=SAR-161-m01	Software A		5	NUM		28	
12-M-ESE-242-m01	Entreprene	urship in Software-Ecosystems: Start & Scale Up,	5	NUM		74	
	venture Ca	pital, Private Equity, EXIT					
12-M-APW1-161-M01		ppics in Business Management and Economics 1	5	NUM		41	
12-M-AWI1-242-m01		Selected Topics in Business Information Systems 1		NUM		56	
12-M-IES-242-m01	lopics in E		5	NUM		120	
Track 2: Business Analyti	CS (20 EC IS	credits)					
Core (10 ECTS credits)	b · · · c		1				
12-M-DSS-242-mo1 Decision Support Systems			5	NUM		63	
12-M-AULM-182-mo1 Advanced Operations & Logistics Management 5 NUM 5					38		
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12-M-BI-242-m01	Analytical Information Systems	5	NUM	60			
Core Electives (10 ECTS credits)							
12-M-BI-242-m01	5	NUM	60				
12-M-EAI-252-m01	Enterprise Al	5	NUM	64			
10-l=0R-232-m01	Operations Research	5	NUM	23			
12-M-GLSC-182-m01	Global Logistics & Supply Chain Management	5	NUM	76			
12-M-ATDS-252-m01	Practical Data Science	5	NUM	50			
12-M-TE-252-m01	Applied Topics in Data Science in Business and Economics	5	NUM	116			
12-M-TDS-242-m01	Applied Data Analysis and Machine Learning	5	NUM	115			
12-M-OEDT-252-m01	Organizational Economics and Digital Transformation	5	NUM	93			
12-M-AOLM-182-mo1	Advanced Operations & Logistics Management	5	NUM	38			
12-M-DSS-242-m01	Decision Support Systems	5	NUM	63			
12-M-OIP-252-m01	Optimization in Practice	5	NUM	94			
12-M-EE-252-m01	Experimental Economics	5	NUM	68			
12-M-APW2-161-m01	Selected Topics in Business Management and Economics a	2 5	NUM	43			
12-M-AWI2-242-m01	Selected Topics in Business Information Systems 2	5	NUM	57			
12-M-TBA-242-m01	Topics in Business Analytics	5	NUM	114			
Track 3: Electronic Busin	ess (20 ECTS credits)						
Core (10 ECTS credits)							
12-M-IBS-242-m01	E-Business Strategies	5	NUM	82			
12-M-MUS-242-m01	Mobile and Ubiquitous Business	5	NUM	92			
Core Electives (10 ECTS	credits)						
12-M-UGF1-242-m01	Corporate Entrepreneurship and Innovation	5	NUM	122			
12-M-UGF2-182-m01	Corporate Strategy	5	NUM	124			
12-M-UGF3-242-m01	Digital Entrepreneurship and Digital Transformation	5	NUM	126			
12-M-MA-242-m01	Marketing Analytics	5	NUM	88			
12-M-EC1-252-m01	E-Commerce	5	NUM	66			
12-M-SMGS-242-m01	Strategic Management of Global Supply Chains	5	NUM	106			
12-M-INST-242-m01	Strategic Managerial Accounting	5	NUM	84			
12-M-APW3-161-m01	Selected Topics in Business Management and Economics	3 5	NUM	45			
12-M-AWI3-242-m01	Selected Topics in Business Information Systems 3	5	NUM	58			
12-M-TEB-242-m01	Topics in Electronic Business	5	NUM	117			
Track 4: Artifical Intellige	nce (20 ECTS credits)						
Core (10 ECTS credits)		2					
12-M-EAI-252-m01	Enterprise Al	5	NUM	64			
12-M-BI-242-m01	Analytical Information Systems	5	NUM	60			
12-M-ATDS-252-m01	Practical Data Science	5	NUM	50			
Core Electives (10 ECTS	credits)						
10-AI=CV1-242-m01	Computer Vision 1	5	NUM	7			
12-M-EAI-252-m01	Enterprise Al		NUM	64			
12-M-BI-242-m01	Analytical Information Systems		NUM	60			
12-M-ATDS-252-m01	Practical Data Science		NUM	50			
12-M-MA-242-m01	Marketing Analytics		NUM	88			
12-M-TE-252-m01	Applied Topics in Data Science in Business and Economics	5	NUM	116			
10-I=SNA-232-m01	Statistical Network Analysis	5	NUM	31			
10-I=NLP-212-m01	Machine Learning for Natural Language Processing	5	NUM	21			
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10-I=MNLP-232-m01	Multilingual NLP	5	NUM	19
12-M-APW4-161-m01	Selected Topics in Business Management and Economics 4	5	NUM	47
12-M-AWI4-242-m01	Selected Topics in Business Information Systems 4	5	NUM	59
12-M-TAI-242-m01	Topics in Artificial Intelligence	5	NUM	113
Compulsory Electives III:	Seminar (10 ECTS credits)			
12-M-MSS-242-m01	Advanced Seminar: Marketing Strategy	10	NUM	91
12-M-SER-242-m01	Advanced Seminar: Financial Accounting	10	NUM	103
12-M-SBL-242-m01	Advanced Seminar: Corporate Finance	10	NUM	101
12-M-SSL-242-m01	Advanced Seminar: Analytical Tax Research	10	NUM	109
12-M-ES-242-m01	Advanced Seminar: Enterprise Systems	10	NUM	72
12-M-SPO-242-m01	Advanced Seminar: Topics in Personnel Economics and Orga- nizational Theory	10	NUM	108
12-M-SAS-242-m01	Advanced Seminar: Entrepreneurship and Management	10	NUM	98
12-M-AUAS-252-m01	Advanced Seminar: Managerial Accounting	10	NUM	55
12-M-BUA-242-m01	Business Analytics	10	NUM	61
12-M-LSCM-242-m01	Seminar: Applied Analytics in Logistics & Supply Chain Mana- gement	10	NUM	86
12-M-WUE-242-m01	Economic and Business Ethics	10	NUM	130
12-M-SWJ-242-m01	Practical Seminar: Economic Journalism	10	NUM	111
12-M-WPJ-242-m01	Project Modul: Journalism in Economic Policy	10	NUM	128
12-M-APS-252-m01	Project: Selected Topics in Business Management and Econo- mics	10	NUM	40
12-M-ATIÖ1-242-m01	International Economics 1	10	NUM	52
12-M-ATIÖ2-242-m01	International Economics 2	10	NUM	53
12-M-ATIÖ3-242-m01	International Economics 3	10	NUM	54
12-M-AMTIÖ-242-m01	Seminar: International Economics	10	NUM	37
12-M-SIO-252-m01	Advanced Seminar: Industrial Organization	10	NUM	105
12-M-SWOSP-252-m01	Seminar: Behavioral, Organizational, and Labor Economics	10	NUM	112
12-M-SV5-242-m01	Advanced Seminar: Public Finance	10	NUM	110
12-M-SOE-242-m01	Advanced Seminar: Econometrics	10	NUM	107
12-M-MEW-242-mo1	Seminar: Macroeconomics and Quantitative Economic Research	10	NUM	90
12-M-ATC-242-m01	Seminar: Strategic Incentive Design	10	NUM	49
12-M-SEBS-252-m01	Seminar: E-Business	10	NUM	102
12-M-TEE-252-m01	Seminar: Applied Topics in Economics and Ethics of Artificial Intelligence	10	NUM	118
12-M-RS-252-m01	Research Seminar in Applied Data Science	10	NUM	97
12-M-UAAI-242-m01	Enterprise AI and Urban Analytics	10	NUM	121
12-M-ICP-242-m01	Seminar: International Climate Policy	10	NUM	83
12-M-SBB-252-m01	Seminar: Beliefs and Biases	10	NUM	100
Thesis (30 ECTS credits)	·			
12-WI-MA-192-m01	Master Thesis Information Systems	30	NUM	131

Module	title			-	Abbreviation	
Computer Vision 1 10-Al=CV1-242-mod				1		
Module coordinator Module offered by						
holder	of the C	Chair of Computer Scie	nce IV	Institute of Comput	er Science	
ECTS	Metho	od of grading	Only after succ. cor	npl. of module(s)		
5	nume	rical grade				
Duratio	n	Module level	Other prerequisites	5		
1 series		graduale				
The lect basics a taught. Topics i image a	ture pro as well include and vid	ovides knowledge abo as the most recent ap e data representation, eo understanding, dee	ut current methods and proaches to image rep mage acquisition, rest p learning and genera	d algorithms in the fig resentation, image p oration and enhance tive methods and ap	eld of computer visio rocessing and image ment, features, obje plications.	on. Important e analysis are ect modeling,
respect	ive app	plications in Computer	Vision are shown.		grounds are present	
Intende	ed learr	ning outcomes				
Student to inder • O a • G • P	ts have pender verviev lgorith aining rovidin	e fundamental knowled htly identify and apply w of the most importan ms from Computer Visi experience through ho g a sound solid backg	lge of problems and te suitable methods for c t concepts of image rep on me assignments, prac round knowledge for th	chniques in the field oncrete problems. presentation, image a tical computer and p ne advanced Comput	of computer vision a analysis, machine lea rogramming exercise er Vision 2 course	and are able arning and es
Courses	s (type,	, number of weekly cor	itact hours, language -	– if other than Germa	ın)	
V (2) + I Module	Ü (2) e taugh	t in: English				
Method ster, inf	l of ass formati	essment (type, scope, on on whether module	language — if other th can be chosen to earr	an German, examina 1 a bonus)	tion offered — if not	every seme-
Written If annou examin prox. 15 Langua credital	examin unced l ation o minut ge of a ble for	nation (approx. 60 to a by the lecturer at the b f one candidate each es per candidate). ssessment: English bonus	20 minutes) eginning of the course approx. 20 minutes) o	, the written examina r an oral examinatior	tion may be replace in groups of 2 cand	d by an oral idates (ap-
Allocati	ion of p	olaces				
Additio	nal info	ormation				
Worklo	ad					
150 h						
Teachir	ng cycl	e				
Teachir	ng cycle	e: every year, summer	semester			
Referre	d to in	LPOI (examination re	gulations for teaching-	degree programmes)		
Module	e appea	rs in				
Master' Master' Master'	s degre s degre s degre	ee (1 major) Artificial Ir ee (1 major) Artificial Ir ee (1 major) Managem	telligence & Extended telligence (2024) ent (2024)	Reality (2024)		
Master's wi	th 1 major	Information Systems (2025)	JMU Würzburg ta record Mast	• generated 05-Nov-2024 • ex er (120 ECTS) Information Syst	am. reg. da- ems - 2025	page 7 / 131



Master's degree (1 major) Information Systems (2024) Master's degree (1 major) Economathematics (2024)

Module title	Abbreviation
Advanced Programming	10-I=APR-252-m01
Module coordinator	Module offered by
holder of the Chair of Computer Science II	Institute of Computer Science
ECTS Method of grading Only after su	ucc. compl. of module(s)
5 numerical grade	
Duration Module level Other prereq	quisites
1 semester graduate	
Contents	
with the knowledge of basic programming, taught in grams. If more complex problems are to be tackled, s and code duplicates occur. In this lecture, further kn de a sensible structure. Also, further topics in the are cussed.	suboptimal results like long, incomprehensible functions owledge is to be conveyed on how to give programs and co- eas of software security and parallel programming are dis-
Intended learning outcomes	
Students learn advanced programming paradigms. I ges and their efficiency measured using standard me ced culminating in the use of GPU architectures for e	Different patterns are then implemented in multiple langua- etrics. In addition, parallel processing concepts are introdu- extremely quick processing.
Courses (type, number of weekly contact hours, lang	guage — if other than German)
V (2) + Ü (2)	
Method of assessment (type, scope, language — if o ster, information on whether module can be chosen	other than German, examination offered — if not every seme- to earn a bonus)
written examination (approx. 60 to 120 minutes) If announced by the lecturer at the beginning of the of examination of one candidate each (approx. 20 minu- prox. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus	course, the written examination may be replaced by an oral utes) or an oral examination in groups of 2 candidates (ap-
Allocation of places	
Additional information	
Focuses available for students of the Master's progra KI, LR, HCI, ES, GE, SEC, IN	amme Informatik (Computer Science, 120 ECTS credits): SE,
Workload	
150 h	
Teaching cycle	
Teaching cycle: every year, winter semester	
Referred to in LPO I (examination regulations for tea	aching-degree programmes)
Module appears in	
keinem Studiengang zugeordnet	

Modul	e title				Abbreviation	
Data Science 10-I=DM-232-m01						
Modul	e coord	inator		Module offered by	<u> </u>	
holder	of the (Chair of Computer Scie	nce X	Institute of Comput	er Science	
ECTS	Metho	od of grading	Only after succ. cor	npl. of module(s)		
5	nume	rical grade				
Durati	on	Module level	Other prerequisites			
1 seme	ester	graduate				
Conter	nts	0				
Founda model metho	ations i , relatio ds (clus	n the following areas: on the following areas: on the second state warehou ster- and association m	lefinition of data minin se and OLAP data prep ethods), supervised le	g and knowledge, di rocessing, data visu arning (e. g. Bayes cl	scovery in database alisation, unsupervis assification, KNN, d	s, process sed learning ecision trees,
SVM),	learning	g methods for special o	lata types, further learn	ning paradigms.		
Intend	ed lear	ning outcomes				
The stu ta min the kn or imp	udents ing and owledge lementa	possess a theoretical a machine learning. The e acquired in this cours ation of data mining alg	nd practical knowledg y are able to solve prac se and by using the KD gorithms.	e of typical methods ctical knowledge disc D process. They have	and algorithms in th covery problems with acquired experienc	e area of da- n the help of e in the use
Course	es (type	, number of weekly cor	ntact hours, language –	- if other than Germa	ın)	
V (2) +	Ü (2)					
Metho ster, ir	d of ass formati	essment (type, scope, on on whether module	language — if other th can be chosen to earn	an German, examina a bonus)	ition offered — if not	every seme-
lf anno examin prox. 1 Langua credita	ounced nation c 5 minut age of a able for	by the lecturer at the b of one candidate each (ces per candidate). ssessment: German ar bonus	eginning of the course, approx. 20 minutes) of nd/or English	the written examina an oral examinatior	tion may be replace in groups of 2 cand	d by an oral idates (ap-
Alloca	tion of p	olaces				
Additi	onal inf	ormation				
Focuse KI, HCI	es availa , GE, SE	able for students of the C, IN	Master's programme I	nformatik (Compute	r Science, 120 ECTS (credits): IT,
Workle	oad					
150 h						
Teachi	ing cvcl	e				
	0 . 7	-				
Poforr	ed to in	IPOL (examination re	gulations for teaching	degree programmes)		
Modul	e annea	urs in				
Master	r's degr	ee (1 major) Informatio	n Systems (2010)			
Master	Master's degree (1 major) Information Systems (2019) Master's degree (1 major) Information Systems (2022)					
Master	r's degr	ee (1 major) Computer	Science (2023)			
Master	r's degr	ee (1 major) Aerospace	Computer Science (20	23)		
Maste	Master's degree (1 major) Management (2024)					
Maste	r's degr	ee (1 major) Informatio	n Systems (2024)			
Maste	r's degr	ee (1 major) Economatl	nematics (2024)			
Master's w	vith 1 majo	r Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • ex r (120 ECTS) Information Syst	am. reg. da- tems - 2025	page 10 / 131

Module title			Abbreviation		
Image Processing and Computational Photography			10-I=IP-222-m01		
Module	e coordinator		Module offered by		
holder	of the Chair of Computer Scien	ce IV	Institute of Comput	er Science	
ECTS	Method of grading	Only after succ. con	npl. of module(s)		
5	numerical grade				
Duratio	on Module level	Other prerequisites			
1 seme	ster graduate				
Conten	Its				
This co its und its und is i i i i i i i i i i s i i i s s i i i s s i i i s s i i i i i i s s i	This course aims at offering a self-contained account of image processing and computational photography and its underlying concepts, including the recent use of deep learning. The topics that will be covered are: introduction to image processing and computational photography sampling and quantization light and color image acquisition deep learning generative methods image signal processing image restoration sensor and image quality assessment image compression applications Intended learning outcomes Students have fundamental knowledge of problems and techniques in the field of image processing and compu- tational photography and are able to independently identify and apply suitable methods for concrete problems. Overview of the most important concepts of image formation, perception and analysis, and Computatio- nal Photography				
• F	Providing a sound solid backgro	und knowledge for th	e Computer Vision co	ourses	
V (2) + Module	is (type, number of weekly cont Ü (2) e taught in: English	act nours, language –	- If other than Germa	n)	
Metho	d of assessment (type, scope, l	anguage — if other th	an German, examina	tion offered — if not every seme-	
ster, in written If anno examir prox. 1 Langua credita	ster, information on whether module can be chosen to earn a bonus) written examination (approx. 60 to 120 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (ap- prox. 15 minutes per candidate). Language of assessment: English				
Allocat	tion of places				
Additio	onal information				
Worklo	ad				
150 h		-			
Teachi	ng cycle				
Teachi	ng cycle: every year. winter sem	ester			
	<u> </u>				

Referred to in LPO I (examination regulations for teaching-degree programmes)

Module appears in

Master's degree (1 major) Information Systems (2019) Master's degree (1 major) eXtended Artificial Intelligence (xtAI) (2020) Master's degree (1 major) Information Systems (2022) Master's degree (1 major) Computer Science (2023) Master's degree (1 major) Aerospace Computer Science (2023) Master's degree (1 major) Artificial Intelligence & Extended Reality (2024) Master's degree (1 major) Artificial Intelligence (2024) Master's degree (1 major) Information Systems (2024)

Module	e title				Abbreviation
Information Retrieval 10-I=IR-242-mo1					10-I=IR-242-m01
Module	e coord	inator		Module offered by	
holder	of the (Chair of Computer Scienc	e XII	Institute of Comput	er Science
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
5	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts				
IR mod data st ges and thods t	els (e. ; ructure d parac to supp	g. Boolean and vector sp. s (e. g. inverted index), q ligms, structured queries ort IR (e. g. recommenda	ace model, evaluatio uery elements (e. g. c), search engine (e. g tion systems, text clu	n), processing of tex query operations, rel . architecture, crawli stering and classific	t (tokenising, text properties), levance feedback, query langua- ing, interfaces, link analysis), me- ation, information extraction).
Intende	ed lear	ning outcomes			
Studen how to	its acqu build a	uire theoretical and pract search engine.	ical knowledge in the	field of information	retrieval and the technical know-
Course	s (type	, number of weekly conta	ict hours, language –	- if other than Germa	in)
V (2) +	Ü (2)				
Module	e taugh	t in: German and/or Engl	ish		
Methor ster, in	d of ass formati	essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
lf anno examin prox. 19 Langua credita	n exami unced nation c 5 minut age of a ble for	nation (approx. 60 to 120 by the lecturer at the beg of one candidate each (ap res per candidate). ssessment: German and bonus	o minutes) inning of the course, oprox. 20 minutes) or /or English	the written examina an oral examination	tion may be replaced by an oral in groups of 2 candidates (ap-
Allocat	ion of _l	olaces			
Additio	onal inf	ormation			
Focuse IT, KI, ⊦	s availa ICI, GE	able for students of the N	laster's programme l	nformatik (Computer	r Science, 120 ECTS credits):
Worklo	ad				
150 h					
Teachi	ng cycl	e			
Teachi	Teaching cycle: every year, summer semester				
Referre	ed to in	LPOI (examination regu	lations for teaching-o	legree programmes)	
Module	e appea	urs in			
Master	's degr	ee (1 major) Artificial Inte	lligence (2024)		

Modul	le title			-	Abbreviation	
Artific	ial Intel	ligence 1			10-l=Kl1-212-m01	
Modul	le coord	inator		Module offered by		
holder	r of the (Chair of Computer Scie	nce VI	Institute of Comput	er Science	
ECTS	Metho	od of grading	Only after succ. cor	npl. of module(s)		
5	nume	rical grade		1		
Durati	on	Module level	Other prerequisites			
1 seme	ester	graduate				
Conte	nts					
Intellig	gent age sitional	ents, uninformed and h and predicate logic and	euristic search, constra d inference, knowledge	aint problem solving e representation.	, search with partial	information,
Intend	led lear	ning outcomes				
The st	udents	nossess theoretical and	d practical knowledge	about artificial intelli	gence in the area of	agents
search	n and log	gic and are able to asse	ess possible applicatio	ns.		agents,
Course	es (type	, number of weekly con	tact hours, language –	- if other than Germa	n)	
V (2) +	- Ü (2)					
Metho ster, ir	od of ass nformati	sessment (type, scope, on on whether module	language — if other th can be chosen to earn	an German, examina a bonus)	ition offered — if not	every seme-
writter	n examii	nation (approx. 60 to 1	20 minutes)	,		
If anno	ounced	by the lecturer at the b	eginning of the course,	the written examina	tion may be replace	d by an oral
exami	nation c	of one candidate each (approx. 20 minutes) oi	an oral examinatior	n in groups of 2 cand	idates (ap-
prox. 1	15 minut	es per candidate).				
Langu	age of a able for	ssessment: German ar	id/or English			
		Donus				
Alloca	tion of p	Diaces				
Additi	onal inf	ormation				
Focuse AT,SE,	es availa KI,HCI	able for students of the	Master's programme I	nformatik (Compute	r Science, 120 ECTS (credits):
Workl	oad					
150 h						
Teach	ing cycl	e				
Referr	ed to in	LPOI (examination reg	gulations for teaching-	degree programmes)		
Modul	le appea	ars in				
Maste	r's degr	ee (1 major) Computer :	Science (2021)			
Maste	r's degr	ee (1 major) Aerospace	Computer Science (20	21)		
Maste	Master's degree (1 major) Computational Mathematics (2022)					
Master's degree (1 major) Information Systems (2022)						
Maste	Master's degree (1 major) Mathematics (2022)					
Maste	Master's degree (1 major) Computer Science (2023)					
Maste	r's degr	ee (1 major) Aerospace	Computer Science (20	23)		
Maste	r's degr	ee (1 major) Quantum E	ngineering (2024)			
Maste	r's degr	ee (1 major) Physics Int	ernational (2024)			
Maste	r's degr	ee (1 major) Computati	onal Mathematics (202	24)		
Inaste	r s aegr	ee (1 major) Mathemati	cs (2024)			
Master's v	with 1 majo	r Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • ex er (120 ECTS) Information Syst	am. reg. da- tems - 2025	page 14 / 131



Master's degree (1 major) Information Systems (2024)

Module title			Abbreviation			
Artificial Intelligence 2 10-I=KI2-212-m01						
Module	Module coordinator Module offered by					
holder	of the (hair of Computer Scier	nce VI	Institute of Comput	er Science	
FCTS	Metho	od of grading	Only after succ. con	nnl. of module(s)		
5	nume	rical grade				
Duratio	n		Other prerequisites			
1 seme	ster	graduate				
Conten	its	0				
Plannir observ ning, p	ng, prob ations, rocessi	babilistic closure and B knowledge while learn ng of natural language	ayesian networks, utili ing, neural networks a	ty theory and decida nd statistical learnin	bility problems, lear g methods, reinforce	rning from ement lear-
Intende	ed learı	ning outcomes				
The stu closure	ıdents ı e, learni	oossess theoretical and ng and language proce	d practical knowledge a essing and are able to a	about artificial intelli assess possible appl	gence in the area of ications.	probabilistic
Course	s (type	, number of weekly con	tact hours, language –	- if other than Germa	ın)	
V (2) +	Ü (2)					
Metho ster, in	d of ass formati	essment (type, scope, on on whether module	language — if other th can be chosen to earn	an German, examina a bonus)	tion offered — if not	every seme-
If anno examin prox. 19 Langua credita	unced l nation o 5 minut age of a ble for	by the lecturer at the be f one candidate each (es per candidate). ssessment: German an bonus	eginning of the course, approx. 20 minutes) or d/or English	the written examina an oral examination	tion may be replace in groups of 2 cand	d by an oral idates (ap-
Allocat	ion of r	laces				
Additio	onal inf	ormation				
Focuse AT,SE,F	s availa	able for students of the	Master's programme l	nformatik (Compute	r Science, 120 ECTS (credits):
Worklo	ad					
150 h						
Teachi		•				
Teacini	ing cycl	5				
Referre	a to in	LPO I (examination reg	gulations for teaching-	degree programmes)		
Module	e appea	irs in				
Master	's degr	ee (1 major) Computer S	Science (2021)	,		
Master	's degro	ee (1 major) Aerospace	Computer Science (20	21)		
Master's degree (1 major) Computational Mathematics (2022)						
Master's degree (1 major) Information Systems (2022)						
Master	's degr	ee (1 major) Mathemati	cs (2022)			
Master	's degr	ee (1 major) Computer S	Science (2023)			
Master	's degr	ee (1 major) Aerospace	Computer Science (20	23)		
Master	's degr	ee (1 major) Computatio	onal Mathematics (202	24)		
Master	's degr	ee (1 major) Mathemati	cs (2024)			
Master	's degr	ee (1 major) Information	n Systems (2024)			
Master's w	ith 1 majoı	Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • ex r (120 ECTS) Information Syst	am. reg. da- ems - 2025	page 16 / 131

Modul	e title			Abbreviation		
Machi	ne Learning for Networks 1			10-l=MLN1-232-m01		
Modul	e coordinator		Module offered by			
holder	of the Chair of Computer Science	e XV	Institute of Comput	er Science		
ECTS	Method of grading	Only after succ. con	npl. of module(s)			
5	numerical grade					
Durati	on Module level	Other prerequisites				
1 seme	ester graduate					
Conter	nts					
format cal sys is the r these s influen work to Addres for the practic ty mea of com stic dy terial c which their k	Networks matter! This holds for technical infrastructures like communication or transportation networks, for in- formation systems and social media in the World Wide Web, but also for various social, economic and biologi- cal systems. What can we learn from data that capture the interaction topology of such complex systems? What is the role of individual nodes and how can we discover significant patterns in the structure of networks? How do these structures influence dynamical process like diffusion or the spreading of epidemics? Which are the most influential actors in a social network? And how can we analyze time series data on systems with dynamic net- work topologies? Addressing those questions, the course combines a series of lectures which introduce fundamental concepts for the statistical modelling of complex networks with weekly exercises that show how we can apply them to practical network analysis tasks. Topics covered include foundations of graph theory, centrality and modulari- ty measures, aggregate statistical characteristics of large networks, random graphs and statistical ensembles of complex networks, generating function analysis of expected graph properties, scale-free networks, stocha- stic dynamics in networks, spectral analysis, as well as the modelling of time-varying networks. The course ma- terial consists of annotated slides for lectures as well as a accompanying git-Repository of jupyter notebooks, which implement and validate the theoretical concepts covered in the lectures. Students can test and deepen					
written Intend	exam. ed learning outcomes					
The co ven mo titative terns. I very la dersta distrib dom p	The course will equip participants with statistical network analysis techniques that are needed for the data-driven modelling of complex technical, social, and biological systems. Students will understand how we can quantitatively model the topology of networked systems and how we can detect and characterize topological patterns. Participants will learn how to use analytical methods to make statements about the expected properties of very large networks that are generated based on different stochastic models. They further gain an analytical understanding of how the structure of networks shapes dynamical processes, how statistical fluctuations in degree distributions influence the robustness of systems, and how emergent network features emerge from simple ran-					
Course	es (type, number of weekly conta	ict hours, language –	- if other than Germa	n)		
V (2) + Modul	Ü (2) e taught in: English					
Metho ster, in	d of assessment (type, scope, la formation on whether module c	inguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-		
written If anno examir prox. 1 Langua credita	examination (approx. 60 to 120 bunced by the lecturer at the beg nation of one candidate each (ap 5 minutes per candidate). age of assessment: English uble for bonus	o minutes) inning of the course, oprox. 20 minutes) or	the written examina an oral examination	tion may be replaced by an oral in groups of 2 candidates (ap-		
Allocat	tion of places					

Additional information

Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,IT,SE,KI,HCI,IN

Workload

150 h

Teaching cycle

Teaching cycle: every year, summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Information Systems (2019) Master's degree (1 major) Information Systems (2022)

Master's degree (1 major) Computer Science (2023)

Master's degree (1 major) Artificial Intelligence & Extended Reality (2024)

Master's degree (1 major) Artificial Intelligence (2024)

Master's degree (1 major) Computational Mathematics (2024)

Master's degree (1 major) Mathematics (2024)

Master's degree (1 major) Information Systems (2024)

Modul	e title				Abbreviation		
Multili	ngual N	LP			10-I=MNLP-232-mo	1	
Module coordinator Module offered by							
holder	of the (Chair of Computer Scien	ce XII	Institute of Comput	er Science		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)			
5	nume	rical grade					
Durati	on	Module level	Other prerequisites				
1 seme	ester	graduate					
Conter	nts						
Langua of-spe on spa ge Moo transla transfe pics: c tual pa	Languages of the world: language families, typology, etymology. Linguistic universals: words, morphology, parts- of-speech, syntax. Alphabets (scripts), encoding, and language identification. Multilingual word representati- on spaces (aka cross-lingual word embeddings). Transformer architecture and Pretrained (multilingual) Langua- ge Models. Machine translation. Multilingual resources: unlabeled corpora, lexico-semantic networks and word translations, parallel corpora. Cross-lingual transfer: from word alignment and label projection, over MT-based transfer to zero-shot and few-shot transfer with multilingual Transformer-based language models. Advanced to- pics: curse of multilinguality, modularization and language adaptation, multilingual sentence encoders, contex- tual parameter generation.						
Intend	ed learı	ning outcomes					
Studer and als from d transfe solve p to obta	Students will acquire theoretical and practical knowledge on modern multilingual natural language processing and also get an insight into cutting edge research in (multilingual) NLP. They will learn how to represent texts from different languages in shared representation spaces that enable semantic comparison and cross-lingual transfer for various NLP tasks. Upon successful completion of the course, the students will be well-equipped to solve practical NLP problems regardless of the language of the text data, and to determine the optimal strategy						
Course	es (type	, number of weekly cont	act hours, language –	- if other than Germa	n)		
V (2) + Modul	Ü (2) e taugh	t in: German and/or Eng	lish				
Metho	d of ass	essment (type, scope, l	anguage — if other th	an German. examina	tion offered — if not	everv seme-	
ster, in	ıformati	on on whether module	can be chosen to earn	a bonus)		,	
written If anno examin prox. 1 Langua credita	n examin ounced l nation o 5 minut age of a able for	nation (approx. 60 to 12 by the lecturer at the be f one candidate each (a es per candidate). ssessment: German and bonus	o minutes) ginning of the course, pprox. 20 minutes) or d/or English	the written examina an oral examination	tion may be replaced in groups of 2 cand	d by an oral idates (ap-	
Alloca	tion of p	olaces					
	•						
Additio	onal inf	ormation					
Worklo	oad						
150 h							
Teachi	ng cycl	a					
Teachi	ng cycle	everv vear summer se	 emester				
Referre	ed to in	IPOI (examination reg	ulations for teaching.	legree programmes)			
Modul	e annes	in and the second se					
Master	r's dear	e (1 major) Information	Systems (2010)				
Master	r's degre	ee (1 major) Information	Systems (2022)				
Master's w	/ith 1 majoı	Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • ex r (120 ECTS) Information Syst	am. reg. da- ems - 2025	page 19 / 131	

Julius-Maximilians-UNIVERSITÄT WÜRZBURG

Master's degree (1 major) Computer Science (2023) Master's degree (1 major) Artificial Intelligence (2024) Master's degree (1 major) Computational Mathematics (2024) Master's degree (1 major) Management (2024) Master's degree (1 major) Mathematics (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) Economathematics (2024)

Machine Learning for Natural Language Processing In-II-NLP-212:m01 Module coordinator Module offered by Indict of the Chair of Computer Science X Institute of Computer Science Construction Module offered by Jammerical grade - Duration Module level Other prerequisites Isemester graduate - Contents Contents Contents The lecture conveys advanced knowledge about methods in computational text processing. As one important building block of almost all modern NLP-models, different technicules for learning representations of words, so called Word Embeddings, are presented. Starting from this we cover, among others, models from the area of Deep Learning, like CNNs, RNNs and Sequence-to-Sequence architectures. The theoretical foundations of these models, like their training with Backpropagation, are also covered in depth. For all models presented in the lecture, we show their application to problems like sentiment analysis, text generation and machine translation in practice. Intended learning outcomes Courses (type, number of weekly contact hours, language – if other than German) V(2) + 0 (2) Methods of assessment (type, scope, language – if other than German) V(2) + 0 (2) Methods of assessment (type, scope, language – if other than German) V(2) + 0 (2) Method of pascalin (theoret as a bonus) Courses (type,	Module title					Abbreviation	
Module coordinator Module offered by holder of the Chair of Computer Science X Institute of Computer Science ECTS Method of grading Only after succ. compl. of module(s) 5 numerical grade - Duration Module level Other prerequisites 1 semester graduale - Contents - - The lecture conveys advanced knowledge about methods in computational text processing. As one important building block of almost all moder NLP-models, different techniques for learning, respensented. The theoretical form the area of Deep Learning, like their respective applications in Natural Language Processing. As one important building block of almost all models presented in the lecture, we show their application to problems like sentiment analysis, text generation and machine translation in practice. Intended learning outcomes	Machine Learning for Natural Language Processing					10-I=NLP-212-m01	
Include of the Chair of Computer Science X Institute of Computer Science ECTS Method of grading Only after succ. compl. of module(s) 5 numerical grade Duration Module level Other prerequisites 1 semester graduate Contents The lecture conveys advanced knowledge about methods in computational text processing. To this end, it presents state of the art models and techniques in the area of machine learning, as well as their technical back-ground, and their respective applications in Natural Language Processing. As one important building block of almost all models presented on these models, like their taining with Backpropagation, are also covered in depth. For all models presented in the lecture, we show their application to problems like sentiment analysis, text generation and machine translation in practice. Intended learning outcomes The participants have solid knowledge on problems and methods in the area of computational text processing and are able to identify and apply suitable methods for a specific task. Courses (type, number of weekly contact hours, language if other than German, examination offered if not every semester, information on whether module can be chosen to eam a bonus) written examination on whether module can be chosen to eam a bonus) written examination of encadidate each (approx. 20 minutes) or an oral examination in groups of 2 candidate).	Module	acoord	inator		Modulo offered by	<u> </u>	
Institute or Computer Science X Institute or Computer Science ECTS Method of grading Only after succ. compl. of module(s) j numerical grade Duration Module level Other prerequisites i semester graduate Contents The lecture conveys advanced knowledge about methods in computational text processing. To this end, it presentes state of the art models and techniques in the area of machine learning, as well as their technical back-strong, and their respective applications in Natural Language Processing. As one important building block of almost all modern NLP-models, different techniques for learning representations of words, so called Word Embeddings, are presented. Starting from this we cover, among others, models from the area of Deep Learning, like CNNs, RNNs and Sequence-to-Sequence architectures. The theoretical foundations of these models, like their application to problems like sentiment analysis, text generation and machine translation in practice. Intended learning outcomes	Module				Institute of Comput		
ELIS Method or grading Unity arter succ. CompL. or module(s) 5 numerical grade	nolder	of the G	Lhair of Computer Scie		Institute of Comput	erScience	
5 Inumerical grade Duration Module level Other prerequisites 1 semester graduate Contests The lecture conveys advanced knowledge about methods in computational text processing. To this end, it presents state of the art models and techniques in the area of machine learning, as well as their technical back, ground, and their respective applications in Natural Language Processing. As one important building block of admost all modern NLP-models, different techniques for learning representations of works, so called Word Embeddings, are presented. Starting from this we cover, among others, models from the area of Deep Learning, like Keing in the area of computational text processing and are able to identify and apply suitable methods for a specific task. Courses (type, number of weekly contact hours, language – if other than German) V(2) 40 (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module can be chosen to earn a bonus) written examination offered – if not every semester, information on whether module can be chosen to earn a bonus) Wethod of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module can be chosen to earn a bonus) Written examination of prox. 50 to 120 minutes) Information of one candidate each (approx. 20 minutes) or an cal examination	ECIS	Metho	od of grading	Only after succ. con	npl. of module(s)		
Duration Module level Other prequisites i semester graduate Contents The lecture conveys advanced knowledge about methods in computational text processing. To this end, it presents state of the art models and techniques in the area of machine learning, as well as their technical back-ground, and their respective applications in Natural Language Processing. As one important building block of almost all modern NLP-models, different techniques for learning representations of words, so called Word Embeddings, are presented. Stating from this we cover, among others, models from the area of Deep Learning, like Kells ke CNNs, RNNs and Sequence-to-Sequence architectures. The theoretical foundations of these models, like their raining with Backpropagation, are also covered in depth. For all models presented in the lecture, we show their application to problems like sentiment analysis, text generation and machine translation in practice. Intended learning outcomes The participants have solid knowledge on problems and methods in the area of computational text processing and are able to identify and apply suitable methods for a specific task. Courses (type, number of weekly contact hours, language – if other than German) V (2) + 0 (2) Method of assessment (type, scope, language – if other than German) V (2) + 0 (2) Method pub the lecturer at the beginning of the course, the written examination offered – if not every semester, information on whether module can be chosen to earn a bonus) written examination	5	nume	rical grade				
1 semester praduate Contents Contents	Duratio	on	Module level	Other prerequisites			
Contents The lecture conveys advanced knowledge about methods in computational text processing. To this end, it presents state of the art models and techniques in the area of machine learning, as well as their technical back-ground, and their respective applications in Natural Language Processing. As one important building block of almost all models, different techniques for learning representations of words, so called Word Embeddings, are presented. Starting from this we cover, among others, models from the area of Deep Learning, like CNNS, RNNs and Sequence-to-Sequence architectures. The theoretical foundations of these models, like their training with Backpropagation, are also covered in depth. For all models presented in the lecture, we show their application to problems like sentiment analysis, text generation and machine translation in practice. Intended learning outcomes Intended learning outcomes Wethod of assessment (type, scope, language — if other than German) V (2) + 0 (2) Wethod of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus) written examination (approx. Go to 120 minutes) If announced by the lecture: at the beginning of the course, the written examination may be replaced by an oral examination of paces	1 seme	ster	graduate				
The lecture conveys advanced knowledge about methods in computational text processing. To this end, it pres- ents state of the art models and techniques in the area of machine learning, as well as their technical back- ground, and their respective applications in Natural Language Processing. As one important building block of almost all modern NLP-models, different techniques for learning representations of words, so called Word Em- beddings, are presented. Stating from this we cover, among others, models from the area of Deep Learning, li- ke CNNs, RNNs and Sequence-to-Sequence architectures. The theoretical foundations of these models, like their application to problems like sentiment analysis, text generation and machine translation in practice. Intended learning outcomes The participants have solid knowledge on problems and methods in the area of computational text processing and are able to identify and apply suitable methods for a specific task. Courses (type, number of weekly contact hours, language — if other than German) V (2) + 0 (2) Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus) written examination (approx. 60 to 120 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (ap- prox. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus Allocation of places — — Module appears in Module studies (Master) Computer Science (2019) Master's degree (1 maio) Computer Science (2019) Master's degree (1 maio) Computer Science (2021) Master's degree (1 maio) Computer Science (2022) Master's degree (1 maio) Computer Science (2022) Master's degree (1 maio) Computer Science (2023) Meter's with 1 major Information Systems (2022) Master's degree (1 maio) Computer Science (2023)	Conten	lts					
ents state of the art models and techniques in the area of machine learning, as well as their technical back- ground, and their respective applications in Natural Language Processing. As one important building block of almost all modern NLP-models, different techniques for learning representations of words, so called Word Em- beddings, are presented. Starting from this we cover, among others, models from the area of Deep Learning, li- ke (NNs, RNNs and Sequence-to-Sequence architectures. The theoretical foundations of these models, like their training with Backpropagation, are also covered in depth. For all models presented in the lecture, we show their application to problems like sentiment analysis, text generation and machine translation in practice. Intended learning outcomes The participants have solid knowledge on problems and methods in the area of computational text processing and are able to identify and apply suitable methods for a specific task. Courses (type, number of weekly contact hours, language — if other than German) V(2) + Ū (2) Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus) written examination (approx. 6o to 120 minutes)) if announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (ap- prox. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus Allocation of places - - Module appears in Module studies (Master) Computer Science (2019) Master's degree (1 major) Computer Science (2021) Master's degree (1 major) Computer Science (2021) Master's degree (1 major) Information Systems (2022) Master's degree (1 major) Compute	The lec	ture co	nveys advanced know	ledge about methods ir	n computational text	processing. To this	end, it pres-
almost all modern NLP-models, different techniques for learning representations of words, so called Word Em- beddings, are presented. Starting from this we cover, among others, models from the area of Deep Learning, li- ke CNNs, RNNs and Sequence-to-Sequence architectures. The theoretical foundations of these models, like their training with Backpropagation, are also covered in depth. For all models presented in the lecture, we show their application to problems like sentiment analysis, text generation and machine translation in practice. Intendel learning outcomes The participants have solid knowledge on problems and methods in the area of computational text processing and are able to identify and apply suitable methods for a specific task. Courses (type, number of weekly contact hours, language – if other than German) V (2) 40 (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every seme- ster, information on whether module can be chosen to earn a bonus) written examination (approx. 6o to 120 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (ap- prox. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus Allocation of places - - - Module appears in Module studies (Master) Computer Science (201) Master's degree (1 major) Computer Science (2021) Master's degree (1 major) Computer Science (2021) Master's degree (1 major) Computer Science (2021) Master's degree (1 major) Computer Science (2022) Master's degree (1 major) Computer Science (2023) Master's degre	ents st	ate of t	he art models and tech	iniques in the area of m	nachine learning, as	well as their technic	al back-
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Master's degree (1 major) Computational Mathematics (2024) Master's degree (1 major) Management (2024) Master's degree (1 major) Mathematics (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) Economathematics (2024)

Module title				Abbreviation				
Operat	Operations Research 10-I=OR-232-mo1							
Module	e coord	inator		Module offered by				
holder	of the (Chair of Computer Scienc	e l	Institute of Comput	er Science			
ECTS	Metho	od of grading	Only after succ. con	Only after succ. compl. of module(s)				
5	nume	rical grade						
Duratio	on	Module level	Other prerequisites					
1 seme	ster	graduate						
Conten	ts							
Produc	tion pla	ns, railway timetables, t	he assignment of rad	lio frequencies, plan	ning of delivery tour	s, or the con-		
structio	on of an	'optimal' university time	etable: these problen	ns – and many more	– can be modeled a	s (mixed-) in-		
teger III This co	near op urse te	aches integer programm	ing methods like brar	programming metho hch-and-bound cutti	us. ng plane and decou	mnosition		
method	ds. Furt	hermore, we practice ou	modeling skills by s	tudving a variety of a	pplication examples	5.		
Intende	ed learn	ning outcomes		, , ,				
After co	mnloti	ng the course						
• T	he stuc	lents are able to model o	ptimization problems	s as mathematical pr	ogram (in particular:	: mixed-in-		
te	eger lin	ear programs).	P P					
• T	he stuc	lents are able to apply in	teger programming n	nethods and underst	and how and why th	nese work		
Course	s (type,	number of weekly conta	ect hours, language –	- if other than Germa	n)			
V (2) +	Ü (2)							
Module	e taugh	t in: German and/or Engl	ish					
Method	d of ass formati	essment (type, scope, la	anguage — if other the	an German, examina a bonus)	tion offered — if not	every seme-		
ster, in	ovamir	off off whether module c	minutac)					
If anno	examin unced l	ov the lecturer at the beg	inning of the course	the written examinat	tion may be replace	d by an oral		
examin	ation o	f one candidate each (ar	pprox. 20 minutes) or	an oral examination	in groups of 2 cand	idates (ap-		
prox. 1	5 minut	es per candidate).	,		0	`		
Langua	ge of a	ssessment: German and	/or English					
credita	ble for	bonus						
Allocat	ion of p	olaces						
Additio	nal info	ormation						
Focuse	s availa	able for students of the M	Aaster's programme l	nformatik (Computer	Science, 120 ECTS	credits): IN		
Worklo	ad							
150 h								
Teachi	ng cvcl	9	-					
	0 7							
Referred to in LPO I (examination regulations for teaching-degree programmes)								
Module appears in								
Master's degree (1 major) Information Systems (2019)								
Master's degree (1 major) Information Systems (2022)								
Master's degree (1 major) Computer Science (2023)								
Master's degree (1 major) Computational Mathematics (2024)								
Master	's degre	ee (1 major) Managemen	t (2024)					
Master	's degre	ee (1 major) Mathematics	5 (2024)					
Master	s degre	ee (1 major) Information	Systems (2024)	nonevated on Novo	un von da			
widster's Wi	iui i major	monnation Systems (2025)	ta record Maste	r (120 ECTS) Information System	ems - 2025	page 23 / 131		



Master's degree (1 major) Economathematics (2024)

Module title					Abbreviation		
Profes	Professional Project Management 10-I=PM-252-m01						
Modul	e coord	inator		Module offered by			
holder	of the (Chair of Computer Scienc	e III	Institute of Comput	er Science		
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)			
5	nume	rical grade					
Duratio	on	Module level	Other prerequisites				
1 seme	ester	graduate	We recommend com	pleting module 10-l	=PRJAK in parallel.		
Conter	nts						
Project manag munica ment; o quality progra project Intendo	Project goals, project assignment, project success criteria, business plan, environment analysis and stakeholder management, initialisation, definition, planning, execution/control, finishing of projects, reporting, project communication and marketing, project organisation, team building and development, opportunity and risk management; conflict and crisis management, change and claim management; contract and procurement management, quality management, work techniques, methods and tools; leadership and social skills in project management, projects; agile project management, project portfolio management, PMOs; peculiarities of software projects; agile project management/SCRUM, combination of classic and agile methods.						
fessior plan, c	nal proj ontrol a	ect management. They ar and review projects.	e familiar with the cri	itical success criteria	a and are able to initiate, define,		
Course	es (type	, number of weekly conta	ct hours, language —	f other than Germa	n)		
V (4)	_						
Metho ster, in	d of ass formati	sessment (type, scope, la ion on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-		
written If anno examir prox. 1 Langua credita	examin ounced nation c 5 minut age of a oble for	nation (approx. 60 to 120 by the lecturer at the beg of one candidate each (ap tes per candidate). ssessment: German and, bonus	minutes) inning of the course, prox. 20 minutes) or [/] or English	the written examina an oral examination	tion may be replaced by an oral in groups of 2 candidates (ap-		
Allocat	tion of I	olaces					
Additio	onal inf	ormation					
Focuse IT, KI, E	es availa ES, LR, I	able for students of the N HCI, GE, IN	laster's programme li	nformatik (Computer	Science, 120 ECTS credits): SE,		
Workload							
150 h							
Teaching cycle							
Referred to in LPO I (examination regulations for teaching-degree programmes)							
Module appears in							
keinem	keinem Studiengang zugeordnet						

Module title					Abbreviation		
Program	mming	with neural nets			10-I=PNN-252-m01		
Module	e coord	inator		Module offered by			
holder	of the (Chair of Computer Scienc	e VI	Institute of Comput	er Science		
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)			
5	nume	rical grade					
Duratio	n	Module level	Other prerequisites				
1 seme	ster	graduate					
Conten	ts						
Overvie NN-arcl	ew over hitectu	NN, implementation of in res, among others in the	mportant NN-architec area of image and lar	tures like FCN, CNN nguage processing.	and LSTMs, practical example for		
Intende	ed leari	ning outcomes					
Knowle and how rature,	dge ab w they to prep	out possible application are implemented in NN-to are data and solve concr	s and limitations of N ools like Tensorflow/ ete tasks for NN.	N, for important arcl Keras, ability to prog	hitectures (eg. FCN, CNN, LSTM) gram network structures from lite-		
Course	s (type	, number of weekly conta	ct hours, language —	if other than Germa	n)		
V (2) +	Ü (2)						
Method ster, inf	l of ass formati	s essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-		
written If annou examin prox. 15 Langua credital	examin unced ation o 5 minut ge of a ble for	nation (approx. 60 to 120 by the lecturer at the beg of one candidate each (ap res per candidate). ssessment: German and, bonus	minutes) inning of the course, prox. 20 minutes) or /or English	the written examina an oral examination	tion may be replaced by an oral in groups of 2 candidates (ap-		
Allocat	ion of p	olaces					
Additio	nal inf	ormation					
Focuse: IT, KI, H	s availa ICI, GE,	able for students of the N IN	laster's programme lr	nformatik (Computer	Science, 120 ECTS credits): SE,		
Worklo	ad						
150 h							
Teaching cycle							
Referred to in LPO I (examination regulations for teaching-degree programmes)							
Module appears in							
keinem	keinem Studiengang zugeordnet						

Module title					Abbreviation	
Project - Current Topics in Computer Science					10-I=PRJAK-252-m01	
Module	e coordi	inator		Module offered by		
Dean of	f Studie	es Informatik (Computer S	Science)	Institute of Comput	er Science	
ECTS	Metho	od of grading	Only after succ. com	npl. of module(s)		
5	numei	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
Comple	etion of	a project task (in Teams)				
Intende	ed learr	ning outcomes				
The pro	ject all	ows participants to work	on a problem in com	puter science in tear	ms.	
Course	s (type,	number of weekly conta	ct hours, language —	- if other than Germa	n)	
P (4)						
Method ster, inf	l of ass formati	essment (type, scope, la on on whether module ca	nguage — if other than an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
Langua Assessi project only be	ge of a ment o will no offered	fiered: In the semester in t be repeated; there will i d for the project offered in	for English which the course is not be another project the respective semi	offered (Each project ct with the same topi ester)	t is offered one time only. The c. Assessment can, therefore,	
Allocat	ion of p	olaces				
Additio	nal info	ormation				
Focuse: SE, IT, F	s availa KI, ES, L	able for students of the M .R, HCI, GE, SEC, IN	aster's programme li	nformatik (Computer	Science, 120 ECTS credits): AT,	
Worklo	ad					
150 h						
Teaching cycle						
Referred to in LPO I (examination regulations for teaching-degree programmes)						
		、				
Module	e appea	rs in				
keinem	Studie	engang zugeordnet				

Module	e title				Abbreviation	
Softwa	Software Architecture 10-I=SAR-161-m01					
Module	e coordi	inator		Module offered by		
holder of the Chair of Computer Science II				Institute of Comput	er Science	
ECTS	ECTS Method of grading Only after succ. compl. of module(s)					
5	numer	rical grade				
Duratio	n l		Other prerequisites			
1 seme	ster	graduate				
Conten	ts		1			
Introdu tural st sed sof cloud-r model-	Introduction to software architecture, architectural styles and patterns, software metrics, evaluation of architec- tural styles, software components, interface models and design guidelines, design-by-contract, component-ba- sed software engineering, service-oriented architectures, microservice architectures, scalability of databases, cloud-native and serverless computing, continuous integration, continuous delivery, continuous deployment, model driven architecture					
Intend	ed learr	ning outcomes				
The stu with a f ring.	idents p focus o	oossess a fundamental a n modern software archit	nd applicable knowle tectures and fundame	edge about advanced ental approaches to	d topics in software model-driven softwa	engineering Ire enginee-
Course	s (type,	number of weekly conta	ict hours, language –	- if other than Germa	n)	
V (2) +	Ü (2)	,	· · · · · · ·		-	
Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus) written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (ap- prox. 15 minutes per candidate). Language of assessment: German and/or English						
Allocat	ion of r	lares				
Additio	onal info	ormation				
Focuse SE,IT,E	s availa S	able for students of the M	laster's programme l	nformatik (Computer	Science, 120 ECTS o	credits):
Worklo	ad					
150 h						
Teachi	ng cycl	9				
Referre	ed to in	LPOI (examination regu	lations for teaching-o	degree programmes)		
Module appears in						
Master's degree (1 major) Computer Science (2016)						
Master's degree (1 major) Mathematics (2016)						
Master's degree (1 major) Computational Mathematics (2016)						
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)						
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)						
Master's degree (1 major) Computer Science (2017)						
Master's degree (1 major) Computer Science (2018)						
Module	e studie	s (Master) Computer Sci	ence (2019)			
Master's w	ith 1 major	Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • exa r (120 ECTS) Information Syst	am. reg. da- ems - 2025	page 28 / 131

Master's degree (1 major) Computational Mathematics (2019) Master's degree (1 major) Mathematics (2019) Master's degree (1 major) Information Systems (2019) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020) Master's degree (1 major) Computer Science (2021) Master's degree (1 major) Computational Mathematics (2022) Master's degree (1 major) Information Systems (2022) Master's degree (1 major) Information Systems (2022) Master's degree (1 major) Mathematics (2022) Master's degree (1 major) Computer Science (2023) Master's degree (1 major) Computational Mathematics (2024) Master's degree (1 major) Management (2024) Master's degree (1 major) Mathematics (2024) Master's degree (1 major) Information Systems (2024)

UNIVERSITÄT

WÜRZBURG

Module title					Abbreviation	
System	Systems Benchmarking 10-I=SB-252-m01					
Module	e coord	linator		Module offered by		
holder	ofthe	Chair of Computer Scienc	e ll	Institute of Comput	er Science	
ECTS	Meth	od of grading	Only after succ. com	pl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
Benchmarking has become a major discipline in science and technology as a driver of product quality, efficiency, and sustainability. Reliable and fair benchmarks enable educated decisions and play an important role as eva- luation tools during system design, development, and maintenance. In research, benchmarks play an integral part in the evaluation and validation of new approaches and methodologies. The course introduces the foundati- ons of benchmarking as a discipline, covering the three fundamental elements of each benchmarking approach: metrics, workloads, and measurement methodology. More specifically the following topics are covered: bench- marking basics, metrics, statistical measurements, experimental design, workloads, measurement tools, opera- tional analysis, basic queueing models, and benchmark standardization. Furthermore, the course covers selec- ted application areas and case studies, such as benchmarking of energy efficiency, virtualization, storage, micro- services, cloud elasticity, performance isolation, resource demand estimation, and software and system security. Intended learning outcomes Students are able to design and build fair and reliable benchmarks, metrics, and measurement tools. Students can evaluate the quality of existing benchmarking approaches and benchmark results.						
V (2) +	Ü (2)					
Method ster, in	d of as: format	sessment (type, scope, la ion on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
written If anno examin prox. 19 Langua credita	exami unced ation o 5 minu ge of a ble for	nation (approx. 60 to 120 by the lecturer at the beg of one candidate each (ap tes per candidate). assessment: German and, bonus	minutes) inning of the course, pprox. 20 minutes) or /or English	the written examina an oral examination	tion may be replaced by an oral in groups of 2 candidates (ap-	
Allocat	ion of	places				
Additio	nal inf	ormation				
Focuse IT, ES, I	s avail HCI, GE	able for students of the N E, IN	laster's programme li	nformatik (Computer	Science, 120 ECTS credits): SE,	
Worklo	Workload					
150 h						
Teaching cycle						
Teaching cycle: every year, summer semester						
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)					
		_				
Module	e appea	ars in				
keinem	Studi	engang zugeordnet				

Module	Module title Abbreviation					
Statisti	Statistical Network Analysis 10-I=SNA-232-mo1					
Module	e coord	inator		Module offered by		
holder	of the (Chair of Computer Scienc	e XV	Institute of Comput	er Science	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
formation systems and social media in the World Wide Web, but also for various social, economic and biologi- cal systems. What can we learn from data that capture the interaction topology of such complex systems? What is the role of individual nodes and how can we discover significant patterns in the structure of networks? How do these structures influence dynamical process like diffusion or the spreading of epidemics? Which are the most influential actors in a social network? And how can we analyze time series data on systems with dynamic net- work topologies? Addressing those questions, the course combines a series of lectures which introduce fundamental concepts for the statistical modelling of complex networks with weekly exercises that show how we can apply them to practical network analysis tasks. Topics covered include foundations of graph theory, centrality and modulari- ty measures, aggregate statistical characteristics of large networks, random graphs and statistical ensembles of complex networks, generating function analysis of expected graph properties, scale-free networks, stocha- stic dynamics in networks, spectral analysis, as well as the modelling of time-varying networks. The course ma- terial consists of annotated slides for lectures as well as a accompanying git-Repository of jupyter notebooks, which implement and validate the theoretical concepts covered in the lectures. Students can test and deepen their knowledge through weekly exercise sheets. The successful completion of the course requires to pass a final written even						
Intende	ed lear	ning outcomes				
The course will equip participants with statistical network analysis techniques that are needed for the data-driven modelling of complex technical, social, and biological systems. Students will understand how we can quantitatively model the topology of networked systems and how we can detect and characterize topological patterns. Participants will learn how to use analytical methods to make statements about the expected properties of very large networks that are generated based on different stochastic models. They further gain an analytical understanding of how the structure of networks shapes dynamical processes, how statistical fluctuations in degree distributions influence the robustness of systems, and how emergent network features emerge from simple random processes.						
Course	s (type	, number of weekly conta	ict hours, language –	- if other than Germa	n)	
V (2) + Module	Ü (2) e taugh	t in: English				

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus)

written examination (approx. 60 to 120 minutes).

If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate).

Language of assessment: English

creditable for bonus

Allocation of places

Additional information

Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): IN

Workload

150 h

Teaching cycle

P

Referred to in LPO I (examination regulations for teaching-degree programmes)

Module appears in

Master's degree (1 major) Information Systems (2019)

Master's degree (1 major) Information Systems (2022)

Master's degree (1 major) Computer Science (2023)

Master's degree (1 major) Aerospace Computer Science (2023)

Master's degree (1 major) Computational Mathematics (2024)

Master's degree (1 major) Management (2024)

Master's degree (1 major) Mathematics (2024)

Master's degree (1 major) Information Systems (2024)

Master's degree (1 major) Economathematics (2024)

Module title				Abbreviation		
Securit	Security of Software Systems 10-I=SSS-232-m01					
Module	e coord	inator		Module offered by		
holder	of the C	Chair of Computer Science	e II	Institute of Comput	er Science	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
The lec dern cc the foll x R V E S S H	 The lecture provides an overview of common software vulnerabilities, state-of-the-art attack techniques on modern computer systems, as well as the measures implemented to protect against these attacks. In the course, the following topics are discussed: x86-64 instruction set architecture and assembly language Runtime attacks (code injection, code reuse, defenses) Web security Blockchains and smart contracts Side-channel attacks Hardware security 					
Intend	ed learr	ning outcomes				
Studen cepts s ses allo tive.	its gain such as ow stud	a deep understanding of blockchains. The lecture ents to gain hands-on ex	software security, fr prepares for researc perience with attack	om hardware and lov h in the area of secu s and analysis of sys	w-level attacks to modern con- rity and privacy, while the exerci- stems from an attacker's perspec-	
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	n)	
V (2) +	Ü (2)	tin Fueliek				
Module				<u> </u>		
ster, in	d of ass formati	on on whether module ca	nguage — If other that an be chosen to earn	an German, examina a bonus)	tion offered — If not every seme-	
written examination (approx. 60 to 120 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (ap- prox. 15 minutes per candidate). Language of assessment: English creditable for bonus						
Allocat	ion of p	olaces				
Additio	onal info	ormation				
Focuse SE,KI,L	s availa R, HCI,	able for students of the M ES, SEC,IN	aster's programme l	nformatik (Computer	Science, 120 ECTS credits):	
Workload						
150 h						
Teaching cycle						
Teaching cycle: every year, summer semester						
Referre	ed to in	LPOI (examination regu	lations for teaching-	degree programmes)		
		<u> </u>				
Module	e appea	irs in				
Module	e studie	es (Master) Computer Scie	ence (2019)			
Master	's degre	ee (1 major) Computer Sc	ience (2023)			

Julius-Maximilians-UNIVERSITÄT WÜRZBURG

Master's degree (1 major) Artificial Intelligence & Extended Reality (2024) Master's degree (1 major) Artificial Intelligence (2024) Master's degree (1 major) Computational Mathematics (2024) Master's degree (1 major) Mathematics (2024) Master's degree (1 major) Information Systems (2024)

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Module	e title				Abbreviation	
Discret	Discrete Event Simulation 10-I=ST-232-m01					
Module	e coord	inator		Module offered by		
holder of the Chair of Computer Science III			nce III	Institute of Comput	er Science	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade		•		
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	its					
The sin	nulatio	n of communication sys	stems is illustrated and	I practically performe	ed on contemporary	examples,
e.g., po	opular I	nternet services or the	Internet of Things (IoT)	. The following topic	s will be conveyed:	
Introdu	iction to	o simulation technique	s, discrete-event simul	ation and process-o	riented simulation, g	generating
design	ing and	ers and random variable evaluation	experiments special r	andom processes in	s, evaluation of mea	sured data,
delling	and si	nulation. advanced cor	ncepts and techniques	, practical execution	of simulation project	ts.
Intend	ed leari	ning outcomes		<u>, , , , , , , , , , , , , , , , , , , </u>		
The stu	idents i	possess the methodic k	nowledge and the pra	ctical skills necessar	v for the stochastic	simulation of
(techni	ical) sys	stems, the evaluation o	f results and the correc	ct assessment of the	possibilities and lin	nits of simu-
	method	s.	tact hours language _	- if other than Germa	n)	
V(2) +	Ü (2)	, number of weekly con				
Metho	d of ass	essment (type_scope	 language — if other th	an German, examina	tion offered — if not	everv seme-
ster, in	formati	on on whether module	can be chosen to earn	a bonus)		every serie
written	examiı	nation (approx. 60 to 12	20 minutes)			
If anno	unced	by the lecturer at the be	eginning of the course,	the written examina	tion may be replace	d by an oral
examir	nation o	of one candidate each (a	approx. 20 minutes) or	an oral examination	in groups of 2 cand	idates (ap-
prox. 1	5 minut age of a	es per canuluale). ssessment: German an	d/or English			
credita	ble for	bonus				
Allocat	ion of r	places				
۵ ما ما : ۲: م	nal inf					
					C :	
Focuse	s availa S,GE,IN	able for students of the	Master's programme I	nformatik (Computei	r Science, 120 ECIS (credits):
Worklo	ad					
150 h						
Teachi	ng cycl	e				
Teachi	ng cycle	e: every year, summer s	emester			
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module appears in						
Module studies (Master) Computer Science (2019)						
Master's degree (1 major) Computer Science (2023)						
Master's degree (1 major) Artificial Intelligence & Extended Reality (2024)						
Master	Master's degree (1 major) Artificial Intelligence (2024)					
Master's degree (1 major) Annotational Mathematics (2024)						
Master	's degr	ee (1 major) Mathemati	(202) (2027)	.47		
Master's w	ith 1 major	Information Systems (2025)	JMU Würzburg •	generated 05-Nov-2024 • ex	am. reg. da-	page 35 / 131
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Master's degree (1 major) Information Systems (2024)
Module	Module title Abbreviation					
Semina	ar: Intei	national Economics			12-M-AMTIÖ-242-m	01
Module	e coord	inator		Module offered by		
holder	of the C	Chair of International Ec	conomics	Faculty of Business	Management and E	conomics
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
10	nume	rical grade				
Duratio	on	Module level	Other prerequisites	i		
1 seme	ster	graduate				
Content: Current topics in international economics and economic geography [e.g. Urbanization and Inequality; Tasks, Tra- de, and Cities; Outsourcing, Offshoring and Multinational Firms; Competition of Locations, Jurisdictions and Sy- stems; Globalization and the Environment; Trade, Multinational Firms and Labor Markets; Triumph of the City] Literature: Peer-reviewed articles and/or monographs						
Intend	ed learr	ning outcomes				
Drawin learn a papers work o	g on cu nd app and re f their p	rrent cutting-edge rese ly research methods. T search both in written a eers.	arch, students are ena ne seminar style of the and in oral form. Stude	bled to analyze curre course teaches ther nts are enabled to cr	ent research questio n to present their ow ritically analyze and	ns and to /n seminar discuss the
Course	s (type,	number of weekly con	tact hours, language –	- if other than Germa	ın)	
S (2) Module	e taugh	t in: English				
Metho ster, in	d of ass formati	essment (type, scope, on on whether module	language — if other th can be chosen to earn	an German, examina a bonus)	tion offered — if not	every seme-
term pa Langua	aper (ap age of a	oprox. 15 pages) and pr ssessment: English	esentation (approx. 40	o minutes) with thesi	s paper (1 page) (we	ighted 3:1)
Allocat	ion of p	olaces				
10 plac WA1: (1) Sho among ber of j ted by	uld the all app places v lot as th	number of application licants irrespective of t vill be allocated in the ney become available.	s exceed the number o heir subjects. (2) Place same procedure. (3) A	f available places, p es on all courses of t waiting list will be m	laces will be allocate he module with a res aintained and place	ed by lot stricted num- s re-alloca-
Additio	onal info	ormation				
Worklo	ad					
300 h						
Teachi	ng cycl	e				
Teachi	ng cycle	e: each semester				
Referre	ed to in	LPOI (examination reg	gulations for teaching-	degree programmes)		
Module	e appea	rs in				
Master Master Master Master	's degre 's degre 's degre 's degre	ee (1 major) Manageme ee (1 major) Information ee (1 major) Internation ee (1 major) Economath	nt (2024) n Systems (2024) al Economic Policy (20 nematics (2024)	924)	am reg da.	Dage 27 / 121
muster 5 W	iai i majul	mormation systems (2025)	ta record Maste	er (120 ECTS) Information Syst	iems - 2025	puge 3/ / 131

Modul	Module title				Abbreviation	
Advan	ced Ope	erations & Logistics Ma	anagement		12-M-AOLM-182-mc	01
Modul	e coord	inator		Module offered by	<u> </u>	
holder	of the (Chair of Logistics and C	Juantitative Methods	Faculty of Business	Management and E	conomics
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	U	
5	nume	rical grade				
Durati	on	Module level	Other prerequisites			
1 seme	ester	graduate				
Conte	nts					
The co planni of mul	urse "A ng of in tiple ca:	dvanced Operations & tegrated production ar se studies.	Logistics Management ad logistics systems and	" acquaints students d demonstrates the a	with advanced met application of these	hods for the with the help
Intend	ed lear	ning outcomes				
After c (i) ana (ii) dev (iii) ev (iii) ap	ompleti lyze and /elop ar aluate t ply cond	ng this course student d evaluate integrated p d apply appropriate m he consequences of ur cepts and methods to p	s can roduction and logistics ethods to plan comple ncertainties in processe plan uncertainties proc	s systems; x production and log es, and esses.	istics systems;	
Course	es (type	, number of weekly cor	ntact hours, language –	- if other than Germa	n)	
V (2) + Modul	Ü (2) e taugh	t in: English				
Metho	d of ass	essment (type, scope,	language — if other th	an German, examina	ition offered — if not	every seme-
a) writ	ten exa	mination (approx, 60 n	ninutes) or			
b) tern	n paper	(approx. 15 to 20 page	s)			
Langu	age of a	ssessment: English				
credita	able for	bonus				
Alloca	tion of p	Diaces				
Additio	onatim	ormation				
worku	Jau					
150 n		-				
Teach	ng cyci	e				
Teachi	ng cycle	e: summer semester				
Referr	ed to in	LPUT (examination re	gulations for teaching-	degree programmes)		
 Modul	e annea	ors in				
Maste	r's degr	ee (1 major) Managem	ent (2018)			
Maste	r's degr	ee (1 major) Internatior	nal Economic Policy (20	18)		
Maste	r's degr	ee (1 major) China Bus	iness and Economics (2	2019)		
Maste	Master's degree (1 major) China Language and Economy (2019)					
Maste	r's degr	ee (1 major) Informatio	n Systems (2019)			
Maste	r's degr	ee (1 major) China Bus	iness and Economics (2	2021)		
Maste	r's degri	ee (1 major) China Lang	guage and Economy (20	021)		
Maste	r's degr	ee (1 major) Economationee (1 major) Informatio	n Systems (2021)			
musie	Jucgi					
Master's v	vith 1 majo	r Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • ex r (120 ECTS) Information Syst	am. reg. da- tems - 2025	page 38 / 131

Master's degree (1 major) International Economic Policy (2022) Master's degree (1 major) Management (2022) Master's degree (1 major) Economathematics (2022) exchange program Business Management and Economics (2022) Master's degree (1 major) Management International (2024) Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) International Economic Policy (2024) Master's degree (1 major) Economathematics (2024)

Module	e title				Abbreviation
Project	: Selec	ted Topics in Business M	anagement and Ecor	nomics	12-M-APS-252-m01
Module	e coord	inator		Module offered by	
Dean of mics	f the Fa	culty of Business Manag	ement and Econo-	Faculty of Business	Management and Economics
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
10	nume	rical grade		• • • •	
Duratio	n	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	Contents				
This mo c a c The hol	 This module serves the purpose of transferring credits from courses taken at other German or non-German universities additional courses offered on a short-term basis courses offered by new Chairs that are yet to be included in the FSB (subject-specific provisions) The holders of the respective Chairs will ensure that the courses are eligible for credit transfer. 				
Intende	ed learı	ning outcomes			
As a res	sult of a	accrediting multiple kind	s of modules, a desci	ription of acquired sl	kills cannot be given.
Course	s (type	, number of weekly conta	ct hours, language —	- if other than Germa	n)
S (2) Module Method	taugh I of ass formati	t in: German and/or Engli sessment (type, scope, la	ish nguage — if other tha	an German, examina a bonus)	tion offered — if not every seme-
term pa Langua Assess credita	aper (ap ge of a ment o ble for	oprox. 20 pages) and pre ssessment: German and, ffered: In the semester in bonus	sentation (approx. 20 'or English which the course is	o minutes); (weighte offered	d 2:1)
Allocat	ion of p	olaces			
10 plac WA1: (1) Shor among ber of p ted by l	es. uld the all app blaces v ot as tl	number of applications o licants irrespective of the vill be allocated in the sa ney become available.	exceed the number o eir subjects. (2) Place me procedure. (3) A	f available places, p es on all courses of t waiting list will be m	laces will be allocated by lot he module with a restricted num- aintained and places re-alloca-
Additio	nal inf	ormation			
Worklo	ad				
300 h					
Teachir	ng cycl	e			
Teachir	ng cycle	e: after announcement			
Referre	d to in	LPOI (examination regu	lations for teaching-o	legree programmes)	
Module	appea	urs in			
keinem	Studie	engang zugeordnet			

Module title	Module title				
Selected Top	ics in Business Manage	ment and Economics 1		12-M-APW1-161-mo	1
Module coor	dinator		Module offered by	<u> </u>	
Dean of the F mics	aculty of Business Man	agement and Econo-	Faculty of Business Management and Economics		
ECTS Meth	od of grading	Only after succ. cor	npl. of module(s)		
5 num	erical grade				
Duration	Module level	Other prerequisites	;		
1 semester	graduate				
Contents					
 This module serves the purpose of transferring credits from courses taken at other German or non-German universities additional courses offered on a short-term basis courses offered by new Chairs that are yet to be included in the FSB (subject-specific provisions) The holders of the respective Chairs will ensure that the courses are eligible for credit transfer. 					
Intended lea	rning outcomes				
As a result of	accrediting multiple kir	nds of modules, a desc	ription of acquired s	kills cannot be giver	۱.
Courses (typ	e, number of weekly con	tact hours, language –	- if other than Germa	ın)	
V (2) + Ü (2)					
Method of as ster, informa	sessment (type, scope, tion on whether module	language — if other th can be chosen to earn	an German, examina a bonus)	tion offered — if not	every seme-
c) term pape Language of Assessment creditable fo	b) written examination (questions concerning mathematical methodology; approx. 120 minutes) or c) term paper (approx. 15 to 20 pages) or presentation (approx. 30 to 45 minutes) Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered creditable for bonus				
	•				
Additional in	formation				
Workload					
150 h					
Teaching cyc	le				
Teaching cyc	le: no courses offered				
Referred to in	IPOL (examination reg	gulations for teaching.	degree programmes)		
Module appe	ars in				
Master's deg	ree (1 major) Business I	nformation Systems (2	016)		
Master's deg	ree (1 major) Business N	Aanagement (2015)			
Master's deg	ree (1 major) China Busi	ness and Economics (2	2016)		
Master's deg	ree (1 major) Internation	iai Economic Policy (20	015 <i>)</i>		
Master's deg	ree (1 major) Clilla Lally	suage and Economy (20 ent (2018)	(010)		
Master's deg	ree (1 major) Internation	ial Economic Policy (20	018)		
Master's deg	ree (1 major) China Busi	ness and Economics (2	2019)		
Master's deg	ree (1 major) China Lang	guage and Economy (20	019)		
Master's with 1 maj	or Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • ex er (120 ECTS) Information Syst	am. reg. da- ems - 2025	page 41 / 131

Master's degree (1 major) Information Systems (2019) Master's degree (1 major) China Business and Economics (2021) Master's degree (1 major) China Language and Economy (2021) Master's degree (1 major) Information Systems (2022) Master's degree (1 major) International Economic Policy (2022) Master's degree (1 major) Management (2022) Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) International Economic Policy (2024)

Module	e title			Abbreviation		
Selecte	ed Topi	cs in Business Manage	ment and Economics 2	2	12-M-APW2-161-m	01
Module	e coord	inator		Module offered by		
Dean o mics	of the Fa	culty of Business Man	agement and Econo-	Faculty of Business Management and Economics		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites	;		
1 seme	ster	graduate				
Conten	Contents					
 This module serves the purpose of transferring credits from courses taken at other German or non-German universities additional courses offered on a short-term basis courses offered by new Chairs that are yet to be included in the FSB (subject-specific provisions) The holders of the respective Chairs will ensure that the courses are eligible for credit transfer. 						
Intend	ed lear	ning outcomes				
As a re	sult of a	accrediting multiple kir	nds of modules, a desc	ription of acquired s	kills cannot be give	n.
Course	s (type	, number of weekly con	tact hours, language –	- if other than Germa	an)	
V (2) +	Ü (2)					
Metho ster, in	d of ass formati	sessment (type, scope, on on whether module	language — if other th can be chosen to earn	an German, examina a bonus)	ition offered — if no	t every seme-
d) pres Langua Assess credita Allocat	entatio age of a ment o ble for ion of p	n (approx. 30 to 45 mir ssessment: German an ffered: In the semester bonus blaces	nutes) Id/or English in which the course is	offered		
Additio	onal inf	ormation				
Worklo	ad					
150 h						
Teachi	ng cycl	e				
Teachi	ng cycle	e: no courses offered				
Referre	ed to in	LPO I (examination reg	gulations for teaching-	degree programmes)		
Module	e appea	urs in				
Master	's degr	ee (1 major) Business II	nformation Systems (2	016)		
Master	's degr	ee (1 major) Business N	Aanagement (2015)			
Master	's degr	ee (1 major) China Busi	ness and Economics (2	2016)		
Master	's degr	ee (1 major) Internation	iai Economic Policy (20 mage and Economy (20	15) 16)		
Master	's degr	ee (1 major) Manageme	ent (2018)	J10)		
Master	's degr	ee (1 major) Internation	al Economic Policy (20	18)		
Master	's degr	ee (1 major) China Busi	ness and Economics (2	2019)		
Master's w	ith 1 majo	r Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • ex r (120 ECTS) Information Syst	am. reg. da- tems - 2025	page 43 / 131

Master's degree (1 major) China Language and Economy (2019) Master's degree (1 major) Information Systems (2019) Master's degree (1 major) China Business and Economics (2021) Master's degree (1 major) China Language and Economy (2021) Master's degree (1 major) Information Systems (2022) Master's degree (1 major) International Economic Policy (2022) Master's degree (1 major) Management (2022) Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) Informational Economic Policy (2024)

Module	e title			Abbreviation		
Selecte	ed Topi	cs in Business Manage	ment and Economics 3		12-M-APW3-161-mc	01
Module	e coord	inator		Module offered by	<u> </u>	
Dean o mics	of the Fa	culty of Business Man	agement and Econo-	Faculty of Business Management and Economics		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	Its					
 This module serves the purpose of transferring credits from courses taken at other German or non-German universities additional courses offered on a short-term basis courses offered by new Chairs that are yet to be included in the FSB (subject-specific provisions) The holders of the respective Chairs will ensure that the courses are eligible for credit transfer. 						
Intend	ed lear	ning outcomes				
As a re	sult of a	accrediting multiple kir	nds of modules, a desc	ription of acquired s	kills cannot be giver	າ.
Course	s (type	, number of weekly con	tact hours, language –	- if other than Germa	ın)	
V (2) +	Ü (2)					
Metho ster, in	d of ass formati	essment (type, scope, on on whether module	language — if other th can be chosen to earn	an German, examina a bonus)	ition offered — if not	every seme-
d) pres Langua Assess credita Allocat	entatio age of a ment o ble for	n (approx. 30 to 45 mir ssessment: German an ffered: In the semester bonus blaces	nutes) Id/or English in which the course is	offered		
Additio	onal inf	ormation				
Worklo	ad					
150 h						
Teachi	ng cycl	e				
Teachi	ng cycle	e: no courses offered				
Referre	ed to in	LPOI (examination reg	gulations for teaching-	degree programmes)		
Module	e appea	urs in				
Master	's degr	ee (1 major) Business II	nformation Systems (2	016)		
Master	's degr	ee (1 major) Business N	Aanagement (2015)			
Master	's degr	ee (1 major) China Busi	ness and Economics (2	2016)		
Master	's degr	ee (1 major) Internation	iai Economic Policy (20 mage and Economy (20	15 <i>)</i>		
Master	's degr	ee (1 major) Manageme	ent (2018)	,10)		
Master	's degr	ee (1 major) Internation	al Economic Policy (20	18)		
Master	's degr	ee (1 major) China Busi	ness and Economics (2	2019)		
Master's w	ith 1 majo	r Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • ex r (120 ECTS) Information Syst	am. reg. da- tems - 2025	page 45 / 131

Master's degree (1 major) China Language and Economy (2019) Master's degree (1 major) China Business and Economics (2021) Master's degree (1 major) China Language and Economy (2021) Master's degree (1 major) International Economic Policy (2022) Master's degree (1 major) Management (2022) Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) International Economic Policy (2024)

Module	e title			Abbreviation		
Selecte	ed Topi	cs in Business Manage	ment and Economics 4		12-M-APW4-161-mc)1
Module	e coord	inator		Module offered by	<u> </u>	
Dean o mics	of the Fa	culty of Business Man	agement and Econo-	Faculty of Business Management and Economics		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	Its					
 This module serves the purpose of transferring credits from courses taken at other German or non-German universities additional courses offered on a short-term basis courses offered by new Chairs that are yet to be included in the FSB (subject-specific provisions) The holders of the respective Chairs will ensure that the courses are eligible for credit transfer. 						
Intend	ed lear	ning outcomes				
As a re	sult of a	accrediting multiple kir	nds of modules, a desc	ription of acquired s	kills cannot be giver	າ.
Course	s (type	, number of weekly con	tact hours, language –	- if other than Germa	ın)	
V (2) +	Ü (2)					
Metho ster, in	d of ass formati	sessment (type, scope, on on whether module	language — if other th can be chosen to earn	an German, examina a bonus)	tion offered — if not	every seme-
d) pres Langua Assess credita Allocat	entatio age of a ment o ble for	n (approx. 30 to 45 mir ssessment: German an ffered: In the semester bonus	nutes) Id/or English in which the course is	offered		
Additio	onal inf	ormation				
Worklo	ad					
150 h						
Teachi	ng cycl	e				
Teachi	ng cycle	e: no courses offered				
Referre	ed to in	LPO I (examination reg	gulations for teaching-	degree programmes)		
Module	e appea	urs in				
Master	's degr	ee (1 major) Business li	nformation Systems (2	016)		
Master	's degr	ee (1 major) Business N	Aanagement (2015)			
Master	's degr	ee (1 major) China Busi	ness and Economics (2	2016)		
Master	's degr	ee (1 major) Internation	ial Economic Policy (20	15)		
Master	's degr	ee (1 major) China Lalig	ent (2018))10)		
Master	's degr	ee (1 major) Internation	al Economic Policy (20	18)		
Master	's degr	ee (1 major) China Busi	ness and Economics (2	2019)		
Master's w	ith 1 majo	r Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • ex r (120 ECTS) Information Syst	am. reg. da- tems - 2025	page 47 / 131

Master's degree (1 major) China Language and Economy (2019) Master's degree (1 major) China Business and Economics (2021) Master's degree (1 major) China Language and Economy (2021) Master's degree (1 major) International Economic Policy (2022) Master's degree (1 major) Management (2022) Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) International Economic Policy (2024)

Module title					Abbreviation	
Semina	ar: Stra	tegic Incentive Design			12-M-ATC-242-m01	
Module	e coord	inator		Module offered by		
holder formati	of the (ion Eco	Chair for Economics, Co nomics	ontract Theory and In-	Faculty of Business Management and Economics		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
10	nume	rical grade				
Duratio	on	Module level	Other prerequisites	i		
1 seme	ster	graduate				
Conten	Contents					
This module covers varying classical or recent topics from microeconomics, usually with a focus on decision theory, contract theory or behavioral economics. As a solid understanding of the corresponding basics will be helpful, the course is intended in particular for advanced students who completed the classes "Advanced Micoe-conomics" and "Contract Theory".						
Intende	ed lear	ning outcomes				
After cc • re • c • re • c	After completing the course students will have gathered experience in reading and understanding theoretical or experimental research articles, critically analyzing and discussing the results of research articles, relating the results of different research articles to each other, conveying their insights both verbally and in writing in accordance with common scientific standards. 					
Course	s (type	, number of weekly cor	itact hours, language –	– if other than Germa	n)	
S (2) Module	e taugh	t in: English				
Methoo ster, in	d of ass formati	sessment (type, scope, on on whether module	language — if other th can be chosen to earn	an German, examina a bonus)	tion offered — if not	every seme-
term pa Langua	aper (20 Ige of a	o to 25 pages) and pres ssessment: English	sentation (approx. 20 n	ninutes), weighted 2	:1	
Allocat	ion of p	olaces				
10 plac WA1: (1) Sho among ber of p ted by l	uld the all app places v lot as th	number of application olicants irrespective of will be allocated in the hey become available.	s exceed the number c their subjects. (2) Place same procedure. (3) A	of available places, p es on all courses of t waiting list will be m	laces will be allocate he module with a res aintained and place	ed by lot stricted num- s re-alloca-
Additio	onal Inf	ormation				
 World -						
workto	au					
300 n		_				
Teachin	ng cycl	e				
Teachir		e: each semester				
Referre	ed to in	LPOI (examination re	gulations for teaching-	degree programmes)		
Module	e appea	ars in				
Master	's degr	ee (1 major) Manageme	ent (2024) n Systems (2027)			
Master	's degr	ee (1 major) Internation	n Systems (2024) Nal Economic Policy (20)24)		
Master	's degr	ee (1 major) Economati	nematics (2024)			
<u> </u>						
Master's wi	ith 1 majo	r Information Systems (2025)	JMU Würzburg • ta record Maste	e generated 05-Nov-2024 • exer er (120 ECTS) Information Syst	am. reg. da- ems - 2025	page 49 / 131

Module	title				Abbreviation
Practica	al Data	Science			12-M-ATDS-252-m01
Module	coord	inator		Module offered by	
holder o prise	of the C	Chair of Business Informa	tics and AI for Enter-	Faculty of Business	Management and Economics
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
5	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 semes	ster	graduate			
Conten	ts				
In this of flow fro teachin	course, m data g appre	students work on advan collection to data prepa pach, students are enabl	ced data science pro ration to modeling, e ed to apply complex	jects. The course cov valuation and deplo machine learning mo	vers the entire data science work- yment. By following a top-down odels from the beginning.
Intende	ed learr	ning outcomes			
As part 1. Beco 2. Apply 3. Desig Scier 4. Appli 5. Unde	 As part of the course work, students will acquire knowledge and skills in the following areas: Becoming familiar with the principles and frameworks in the research area of Data Science. Apply machine learning and deep learning frameworks to structured and unstructured data Design, implementation and evaluation of key algorithms within an end-to-end workflow in the field of Data Science Application of Jupyter notebooks and their infrastructure (collection, storage, retrieval, and analysis of data) 				
Course	s (type,	number of weekly conta	ct hours, language –	- if other than Germa	n)
V (2) + Í Module	Ü (2) taught	t in: English	, , , ,		
Method ster, inf	l of ass formati	essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
a) writte b) term c) portfe Langua Assessi credital	en exar paper olio (ap ge of a ment o ble for l	nination (approx. 60 min (approx. 15 pages) or oprox. 50 hours) ssessment: English ffered: In the semester in bonus	utes) or which the course is	offered	
Allocati	ion of p	olaces			
Numbe	r of pla	ces: 35.			
 WA: Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Students who already have successfully completed courses offered by the supervising chair will be given preferential consideration. a. Among applicants with the same number of successfully completed modules, places will be allocated according to the total number of ECTS credits achieved in the corresponding modules. b. When places are allocated in accordance with b) and the number of applications exceeds the number of available places, places will be allocated according to the average grade of assessments taken in the corresponding courses. c. Among applicants with the same average grade, places will be allocated by lot. (2) Any remaining places are available to students who have not yet successfully completed any courses of the supervising chair. The selection is made according to study progress (number of semesters); among applicants with the same number of semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available. 					
Additio	nal info	ormation			

Workload

150 h

Teaching cycle

Teaching cycle: no courses offered

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Modul	Module title				Abbreviation	
Interna	ational	Economics 1			12-M-ATIÖ1-242-mc	01
Modul	e coord	inator		Module offered by		
holder	of the C	Chair of International Eco	nomics	Faculty of Business	Management and E	conomics
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
10	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conter	its					
Current topics in international economics and economic geography [e.g. Urbanization and Inequality; Tasks, Tra- de, and Cities; Outsourcing, Offshoring and Multinational Firms; Competition of Locations, Jurisdictions and Sy- stems; Globalization and the Environment; Trade, Multinational Firms and Labor Markets; Triumph of the City] Literature: Peer-reviewed articles and/or monographs.						
Intend	ed learr	ning outcomes				
Drawin learn a papers work o	Drawing on current cutting-edge research, students are enabled to analyze current research questions and to learn and apply research methods. The seminar style of the course teaches them to present their own seminar papers and research both in written and in oral form. Students are enabled to critically analyze and discuss the work of their peers.					
Course	s (type,	, number of weekly conta	act hours, language –	- if other than Germa	n)	
S (2) Module	e taugh	t in: English				
Metho ster, in	d of ass formati	e ssment (type, scope, la on on whether module c	anguage — if other th an be chosen to earn	an German, examina a bonus)	tion offered — if not	every seme-
term pa Langua	aper (ap age of a	oprox. 15 pages) and pre ssessment: English	sentation (approx. 40	minutes) with thesi	s paper (1 page) (we	ighted 3:1)
Allocat	ion of p	olaces				
10 plac WA1: (1) Sho among ber of J ted by	es. Sould the Call app places v lot as th	number of applications licants irrespective of th vill be allocated in the sa ney become available.	exceed the number o eir subjects. (2) Place ame procedure. (3) A	f available places, p es on all courses of tl waiting list will be m	laces will be allocate he module with a res aintained and place	ed by lot stricted num- s re-alloca-
Additio	onal info	ormation				
			-			
Worklo	ad					
300 h						
Teachi	ng cycl	e				
Teachi	ng cycle	e: after announcement				
Referre	ed to in	LPOI (examination regu	lations for teaching-	degree programmes)		
Modul	e appea	rs in				
Master Master Master Master	's degre 's degre 's degre 's degre	ee (1 major) Managemen ee (1 major) Information ee (1 major) Internationa ee (1 major) Economathe	t (2024) Systems (2024) l Economic Policy (20 matics (2024)	24)		
Master's w	ith 1 major	Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • exa r (120 ECTS) Information Syst	am. reg. da- ems - 2025	page 52 / 131

Module title Abbreviation				Abbreviation	
Interna	itional I	Economics 2			12-M-ATIÖ2-242-m01
Module	e coordi	nator		Module offered by	
holder	of the C	hair of International Eco	nomics	Faculty of Business	Management and Economics
ECTS	Metho	od of grading	Only after succ. com	npl. of module(s)	
10	numer	ical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	lts				
Conten Current de, and stems;	<u>Content</u> Current topics in international economics and economic geography [e.g. Urbanization and Inequality; Tasks, Tra- de, and Cities; Outsourcing, Offshoring and Multinational Firms; Competition of Locations, Jurisdictions and Sy- stems; Globalization and the Environment; Trade, Multinational Firms and Labor Markets; Triumph of the City]				
Intend	ed learr	ving outcomes	monographs.		
Drawin	g on cu	rrent cutting-edge resear	ch. students are ena	bled to analyze curre	ent research questions and to
learn a papers work of	nd appl and res f their p	ly research methods. The search both in written an eers.	seminar style of the d in oral form. Stude	course teaches then nts are enabled to cr	n to present their own seminar itically analyze and discuss the
Course	s (type,	number of weekly conta	ct hours, language —	- if other than Germa	n)
S (2) Module	e taughi	t in: English			
Metho ster, in	d of ass formati	essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
term pa Langua	aper (ap age of a	pprox. 15 pages) and pres ssessment: English	entation (approx. 40	minutes) with thesis	s paper (1 page) (weighted 3:1)
Allocat	ion of p	laces			
10 plac WA1: (1) Sho among ber of p ted by	uld the all app places v lot as th	number of applications of licants irrespective of the vill be allocated in the sa ney become available.	exceed the number o eir subjects. (2) Place me procedure. (3) Av	f available places, pl es on all courses of th waiting list will be m	laces will be allocated by lot ne module with a restricted num- aintained and places re-alloca-
Additio	onal info	ormation			
Worklo	ad				
300 h					
Teachi	ng cycle	e			
Teachi	ng cycle	e: after announcement			
Referre	ed to in	LPOI (examination regu	lations for teaching-o	degree programmes)	
Module	e appea	rs in			
Master	's degre	ee (1 major) Management	: (2024)		
Master	's degre	ee (1 major) Information S	Systems (2024)		
Master	's degre	ee (1 major) International	Economic Policy (20	24)	
Master	's degre	ee (1 major) Economathei	matics (2024)		

Modul	Module title Abbreviation					
Interna	ational	Economics 3			12-M-ATIÖ3-242-mo	01
Modul	e coord	inator		Module offered by		
holder	of the (Chair of International Ec	onomics	Faculty of Business Management and Economics		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
10	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ester	graduate				
Conter	its		_			
Current topics in international economics and economic geography [e.g. Urbanization and Inequality; Tasks, Tra- de, and Cities; Outsourcing, Offshoring and Multinational Firms; Competition of Locations, Jurisdictions and Sy- stems; Globalization and the Environment; Trade, Multinational Firms and Labor Markets; Triumph of the City] Literature: Peer-reviewed articles and/or monographs.						
Intend	ed learı	ning outcomes				
Drawin learn a papers work o	Drawing on current cutting-edge research, students are enabled to analyze current research questions and to learn and apply research methods. The seminar style of the course teaches them to present their own seminar papers and research both in written and in oral form. Students are enabled to critically analyze and discuss the work of their peers.					
Course	s (type	number of weekly cont	act hours, language –	- if other than Germa	n)	
S (2) Module	e taugh	t in: English				
Metho ster, in	d of ass formati	essment (type, scope, l on on whether module	anguage — if other th can be chosen to earn	an German, examina a bonus)	tion offered — if not	every seme-
term pa Langua	aper (ap age of a	pprox. 15 pages) and pressessment: English	esentation (approx. 40	o minutes) with thesi	s paper (1 page) (we	ighted 3:1)
Allocat	tion of p	olaces				
10 plac WA1: (1) Sho among ber of ted by	ces. ould the all app places v lot as th	number of applications licants irrespective of th vill be allocated in the s ney become available.	exceed the number o neir subjects. (2) Place ame procedure. (3) A	f available places, p es on all courses of t waiting list will be m	laces will be allocate he module with a res aintained and place	ed by lot stricted num- s re-alloca-
Additio	onal inf	ormation	_			
			_			
Worklo	ad					
300 h						
Teachi	ng cycl	e				
Teachi	ng cycle	e: after announcement				
Referre	ed to in	LPOI (examination reg	ulations for teaching-	degree programmes)		
Modul	e appea	rs in				
Master Master Master Master	Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) International Economic Policy (2024) Master's degree (1 major) Economathematics (2024)					
Master's w	ith 1 major	Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • ex r (120 ECTS) Information Syst	am. reg. da- ems - 2025	page 54 / 131

Module	title				Abbreviation	
Advanced Seminar: Managerial Accounting 12-M-AUAS-252-m01					12-M-AUAS-252-m01	
Module coordinator Module offered by						
holder of and Acc	of the C countin	Chair of Business Manage	ement, Controlling	Faculty of Business	Management and Economics	
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)		
10	numei	rical grade				
Duratio	n	Module level	Other prerequisites			
1 semes	ster	graduate				
Content	ts					
In this of tured pa countin own em	course, aper ar g. Stuc pirical	students will acquire im nd to present the results dents independently anal work. They present, disc	portant knowledge a of their work by mear yze a selected topic uss, and defend thei	nd skills that will ena ns of relevant topics and write a seminar t r thesis.	able them to prepare a well-struc- in the field of managerial ac- thesis based on literature and/or	
Intende	d learr	ning outcomes				
After co all co fu in in di	 After completion of the seminar, students will be able to answer complex questions from the field of managerial accounting at a scientific level; conduct scientific literature research in a targeted manner and understand its contents as well as apply further scientific methods to answer questions; integrate acquired results into scientific papers; independently create presentations and lectures in which they present complex content in an understandable manner and effectively communicate it 					
Courses	s (type,	, number of weekly conta	ct hours, language –	- if other than Germa	n)	
S (2) Module	taugh	t in: German and/or Engli	ish			
Method ster, inf	l of ass ormati	e ssment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
term pa Langua credital	per (15 ge of a ble for l	; to 20 pages) and preser ssessment: German and, bonus	ntation (approx. 20 m ′or English	inutes), weighted 2:	1	
Allocati	ion of p	olaces				
10 place WA1: (1) Shou among ber of p ted by l	10 places. WA1: (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted num- ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-alloca- ted by lot as they become available.					
Additio	nal info	ormation				
Worklo	ad					
300 h						
Teachin		2				
Teachin	or cycle	e each semester				
Deferre		IDOL (overside the second	lations for tooshing			
Relefte			iations for leaching-(regree programmes)		
		•				
Module	appea	irs in				
keinem	Studie	engang zugeordnet				

Module	e title				Abbreviation		
Selected Topics in Business Information Systems 1 12-M-AWI1-242-mo1				12-M-AWI1-242-m01			
Module coordinator Module offered by							
Dean o mics	f the Fa	culty of Business Manag	ement and Econo-	Faculty of Business	Management and Economics		
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)			
5	nume	rical grade		-			
Duratio	n	Module level	Other prerequisites				
1 seme	ster	graduate					
Conten	ts						
This mo c a c The hol	odule s ourses dditior ourses ders of	erves the purpose of tran taken at other German o al courses offered on a s offered by new Chairs the the respective Chairs wi	sferring credits from r non-German univers hort-term basis at are yet to be incluc Il ensure that the cou	sities led in the FSB (subje rses are eligible for	ect-specific provisions) credit transfer.		
Intende	ed lear	ning outcomes					
As a res	sult of a	accrediting multiple kind	s of modules, a desci	iption of acquired sl	kills cannot be given.		
Course	s (type	, number of weekly conta	ct hours, language —	· if other than Germa	n)		
V (2) + Module Course	U (2) e taugh type: a d of ass	t in: German and/or Engli Iternatively S instead of Y Sessment (type, scope, la	ish V + Ü nguage — if other tha	an German, examina	tion offered — if not every seme-		
ster, in	formati	on on whether module ca	an be chosen to earn	a bonus)			
a) writt b) pres c) oral o approx Langua credita	 a) written examination (approx. 60 minutes) or b) presentation (15 to 20 minutes) with term paper (approx. 20 pages), weighted 1:2 or c) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) Language of assessment: German and/or English creditable for bonus 						
Allocat	ion of p	olaces					
Additio	nal inf	ormation					
Worklo	ad						
150 h							
Teachi	Teaching cycle						
Teachir	ng cycle	e: no courses offered					
Referre	d to in	LPO I (examination regu	lations for teaching-o	legree programmes)			
		<u>v</u>	<u></u>	<u> </u>			
Module	e appea	irs in					
Master	's degr	ee (1 major) Management	: (2024)				
Master	's degr	ee (1 major) Information S	Systems (2024)				
Master	's degr	ee (1 major) International	Economic Policy (20	24)			

Module	e title				Abbreviation	
Selected Topics in Business Information Systems 2				12-M-AWI2-242-m01		
Module	e coord	inator		Module offered by		
Dean o mics	f the Fa	culty of Business Manag	ement and Econo-	Faculty of Business	Management and Economics	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)		
5	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
This mo c a c The hol	odule s ourses dditior ourses ders of	erves the purpose of tran taken at other German o nal courses offered on a s offered by new Chairs th the respective Chairs wi	sferring credits from r non-German univers hort-term basis at are yet to be includ Il ensure that the cou	sities led in the FSB (subje rses are eligible for	ect-specific provisions) credit transfer.	
Intende	ed lear	ning outcomes				
As a res	sult of a	accrediting multiple kind	s of modules, a desci	ription of acquired sl	kills cannot be given.	
Course	s (type	, number of weekly conta	ct hours, language —	· if other than Germa	n)	
V (2) + Module Course	Ü (2) e taugh type: a	t in: German and/or Engli Ilternatively S instead of	ish V + Ü			
Methoo ster, in	l of ass formati	essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
a) writt b) pres c) oral o approx Langua credita	 a) written examination (approx. 60 minutes) or b) presentation (15 to 20 minutes) with term paper (approx. 20 pages), weighted 1:2 or c) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) Language of assessment: German and/or English 					
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad					
150 h						
Teachi	Teaching cycle					
Teachir	Teaching cycle: no courses offered					
Referre	d to in	LPOI (examination regu	lations for teaching-o	legree programmes)		
Module	e appea	irs in				
Master	's degr	ee (1 major) Management	: (2024)			
Master	's degr	ee (1 major) Information S	Systems (2024)			
Master	's degr	ee (1 major) International	Economic Policy (20	24)		

Module	title				Abbreviation	
Selected Topics in Business Information Systems 3			12-M-AWI3-242-m01			
Module	coordi	nator		Module offered by		
Dean of mics	the Fa	culty of Business Manag	ement and Econo-	Faculty of Business	Management and Economics	
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)		
5 1	numer	rical grade				
Duration	1	Module level	Other prerequisites			
1 semest	ter	graduate				
Contents	s					
This mod co ad co The hold	dule so ourses Idition ourses Iers of	erves the purpose of tran taken at other German o al courses offered on a s offered by new Chairs th the respective Chairs wi	sferring credits from r non-German univers hort-term basis at are yet to be includ Il ensure that the cou	sities ded in the FSB (subje irses are eligible for	ect-specific provisions) credit transfer.	
Intendeo	d learr	ing outcomes				
As a resu	ult of a	accrediting multiple kind	s of modules, a desc	ription of acquired sl	kills cannot be given.	
Courses	(type,	number of weekly conta	ct hours, language –	- if other than Germa	n)	
Module t Course t	taught ype: a	t in: German and/or Engli Iternatively S instead of Y essment (type, scope, la	ish V + Ü nguage — if other tha	an German, examina	tion offered — if not every seme-	
ster, info	ormati	on on whether module ca	an be chosen to earn	a bonus)	,	
a) writte b) prese c) oral ex approx. Languag creditab	 a) written examination (approx. 60 minutes) or b) presentation (15 to 20 minutes) with term paper (approx. 20 pages), weighted 1:2 or c) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) Language of assessment: German and/or English creditable for bonus 					
Allocatio	on of p	laces				
Addition	al info	ormation				
Workloa	d					
150 h						
Teaching	g cycle	9				
Teaching	g cycle	no courses offered				
Referred	l to in	LPO I (examination regu	lations for teaching-o	degree programmes)		
Module	appea	rs in				
Master's	s degre	ee (1 major) Information S	Systems (2024)			

Module title				Abbreviation	
Selected Topics in Business Information Systems 4			12-M-AWI4-242-m01		
Module coordinator			Module offered by		
Dean of the Faculty of E mics	Business Manag	ement and Econo-	Faculty of Business	Management and Economics	
ECTS Method of grad	ling	Only after succ. com	pl. of module(s)		
5 numerical grad	e				
Duration Module	level	Other prerequisites			
1 semester graduate	e				
Contents					
This module serves the courses taken at additional course courses offered b The holders of the resp	e purpose of tran other German of es offered on a s by new Chairs tha ective Chairs wil	sferring credits from r non-German univers hort-term basis at are yet to be includ Il ensure that the cou	sities ded in the FSB (subje rses are eligible for	ect-specific provisions) credit transfer.	
Intended learning outc	omes				
As a result of accreditin	ng multiple kinds	s of modules, a desci	ription of acquired sl	kills cannot be given.	
Courses (type, number	of weekly conta	ct hours, language —	· if other than Germa	n)	
Module taught in: Germ Course type: alternative	nan and/or Engli ely S instead of Y	sh / + Ü			
Method of assessment ster, information on wh	: (type, scope, la iether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
a) written examination b) presentation (15 to 2 c) oral examination (on approx. 30 minutes) Language of assessment creditable for bonus	(approx. 60 min 0 minutes) with 1e candidate eac nt: German and/	utes) or term paper (approx. h: approx. 10 to 15 m 'or English	20 pages), weighted inutes; groups of 2:	d 1:2 or approx. 20 minutes; groups of 3:	
Allocation of places					
Additional information					
Workload					
150 h	150 h				
Teaching cycle	Teaching cycle				
Teaching cycle: no cour	rses offered				
Referred to in LPO I (e)	xamination regu	lations for teaching-o	legree programmes)		
		0			
Module appears in					
Master's degree (1 majo	or) Information S	Systems (2024)			

Module	e title				Abbreviation
Analyti	ical Info	ormation Systems			12-M-BI-242-m01
Module	e coord	inator		Module offered by	
holder	of the (Chair of Business Analytic	s	Faculty of Business	Management and Economics
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
5	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts				
The cou ning. Tl artificia	urse pro he mod al intell	ovides a comprehensive i ule covers topics such as igence, including neural i	ntroduction to data n s SQL, data integratio networks.	nanagement, statist n, streaming data, a	ical methods, and machine lear- nd various learning methods in
Intende	ed learı	ning outcomes			
• U • L • E	Inderst earn ge ffective	and data management, in eneral statistical techniqu ely use machine learning	ncluding data entry, a ues for data inspectio approaches to perfor	annotation, and man n, exploration, and a m predictive analyti	ipulation. analysis. cs
Course	s (type	, number of weekly conta	ct hours, language —	if other than Germa	n)
V (2) +	Ü (2)				
Module	e taugh	t in: English			
Method ster, in	d of ass formati	s essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
written	exami	nation (approx. 60 minut	es)		
credita	ble for	bonus			
Allocat	ion of p	olaces			
Additio	nal inf	ormation			
Worklo	ad				
150 h					
Teachi	ng cycl	e			
Teachir	ng cycle	e: summer semester			
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)				
Module	e appea	irs in			
Master	's degr	ee (1 major) Management	t International (2024)		
Master	's degr	ee (1 major) Management	t (2024)		
Master	's degr	ee (1 major) Information S	Systems (2024)		
Master	's degr	ee (1 major) International	Economic Policy (20	24)	
Master	's degr	ee (1 major) Economathe	matics (2024)		

Module tit	le			Abbreviation			
Business Analytics 12-M-BUA-242-mo1							
Module co	le coordinator Module offered by						
holder of t	he Chair of Business Analyt	ics	Faculty of Business	Management and E	conomics		
ECTS M	ethod of grading	Only after succ. con	npl. of module(s)				
10 NI	Imerical grade						
Duration	Module level	Other prerequisites	i				
1 semeste	r graduate						
Contents	Contents						
In this cou tured term managem stems as v Students v on.	In this course, students will acquire important knowledge and skills that will enable them to prepare a well-struc- tured term paper and to present the results of their work with the help of relevant topics in the field of business management decision models and methods and their application in the development of decision-support sy- stems as well as analytical information systems and quantitative methods of data analysis. Students work on current topics using methods from machine learning, mathematical optimization and simulati-						
Intended l	earning outcomes						
The modu • Scie • Impl • Integ • Crea Courses (t	The module provides students with knowledge of: Scientific literature Implementation of methods in code Integration of developed results in scientific papers Creating presentations and lectures 						
S (2)	ype, number of weekly com		in other than oenna				
Module ta	ught in: German and/or Eng	glish					
Method of ster, inform	assessment (type, scope, mation on whether module	anguage — if other th can be chosen to earn	an German, examina a bonus)	tion offered — if not	every seme-		
term pape Language	r (20 to 25 pages) and preso of assessment: German and	entation (approx. 20 n d/or English	ninutes), weighted 2	:1			
Allocation	of places						
10 places. WA1: (1) Should among all ber of plac ted by lot	 10 places. WA1: (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available 						
Additiona	linformation						
Workload							
300 h							
Teaching	cycle						
Teaching o	Teaching cycle: each semester						
Referred t	o in LPOI (examination reg	ulations for teaching-	degree programmes)				
Module ap	opears in						
Master's d	legree (1 major) Manageme	nt (2024)					
Master's d	legree (1 major) Information	Systems (2024) al Fconomic Policy (20	24)				
Master's with 1	major Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • exercise (120 ECTS) Information System	am. reg. da- rems - 2025	page 61 / 131		



Master's degree (1 major) Economathematics (2024)

Modul	e title				Abbreviation	
Decision Support Systems					12-M-DSS-242-m01	
Module coordinator Module offered by						
holder	ofthe	Chair of Business Analytic	S	Faculty of Business	Management and Economics	
ECTS	Methe	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conter	Its					
The co The ac (Pytho	urse dis quired n).	scusses advanced approa insights are used to desig	aches for modelling a gn and implement de	nd solving decision cision support syste	problems in business settings. ms using standard software tools	
Intend	ed lear	ning outcomes				
After si • l • s • s	uccessf Jnderst solate k Solve di mplem	fully completing the cours and the structure of class key elements from general ifferent classes of optimiz ent decision support syst	se, students should b sic business decision l problem description cation problems (line ems	be able to problems s and convert them to ar, integer, non-linea	o quantitative decision models ar, stochastic, dynamic)	
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	n)	
V (2) + Module	Ü (2) e taugh	t in: English				
Metho ster, in	d of ass format	sessment (type, scope, la ion on whether module ca	nguage — if other the	an German, examina a bonus)	tion offered — if not every seme-	
a) writt b) oral approx Langua credita	en exa examir 3. 30 mi age of a ble for	mination (approx. 60 min nation (one candidate eac nutes) issessment: English bonus	utes) or :h: approx. 10 to 15 n	ninutes, groups of 2:	approx. 20 minutes, groups of 3:	
Allocat	ion of _l	places				
Additio	onal inf	ormation				
Worklo	ad					
150 h						
Teachi	ng cvcl	e				
Teachi	ng cycl	e: winter semester				
Referre	Paferred to in LPO L (evamination regulations for teaching degree programmes)					
	Referred to III LPOT (examination regulations for leaching-degree programmes)					
Modul						
Mastor	's door	ee (1 major) Management	International (2024)	1		
Master	's degr	ee (1 major) Artificial Inte	lligence (2024)			
Master	's degr	ee (1 major) Management	t (2024)			
Master	's degr	ee (1 major) Information S	Systems (2024)			
Master	's degr	ee (1 major) International	Economic Policy (20	24)		
Master	's degr	ee (1 major) Economathe	matics (2024)			

Module	e title				Abbreviation	
Enterprise Al 12-M-EAI-252-m01						
Module coordinator Module offered by						
holder prise	ofthe	Chair of Business Inform	natics and AI for Enter-	Faculty of Business	Management and E	conomics
ECTS	Meth	od of grading	Only after succ. con	pl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
Introdu Busine ML Ops ML Ops ML Ops ML Ops ML Ops Instrasi Manag Intende In this stems i fing an	Introduction to Enterprise AI Business Requirements for AI Systems ML Ops I: Data Engineering ML Ops II: Obtaining Training Data ML Ops III: Data Preprocessing ML Ops IV: Feature Engineering ML Ops V: Feature Engineering ML Ops V: Modeling & Evaluation ML Ops VI: Deployment ML Ops VI: Deployment ML Ops VII: System Monitoring ML Ops VII: System Monitoring ML Ops VIII: Updating in Production Instrastructure and Tools Managing Machine Learning Teams Intended learning outcomes In this course, you will learn the fundamentals for developing, deploying and maintaining machine learning sy- stems in companies (MLOps). This includes an understanding of the associated IT infrastructure as well as staf- fing and organizational forms for managing machine learning and data science teams.					
		number of weekly con	tact hours language -	if other than Germa	un)	
V (2) + Module	Ü (2) e taugh	t in: English				
Methoo ster, in	d of ass format	sessment (type, scope, ion on whether module	language — if other tha can be chosen to earn	an German, examina a bonus)	tion offered — if not	every seme-
a) writt b) term c) oral (d) portf Langua Assess credita	a) written examination (approx. 60 minutes) or b) term paper (approx. 15 pages) or c) oral examination of one candidate each (approx. 20 minutes) or d) portfolio (approx. 50 hours) Language of assessment: English Assessment offered: In the semester in which the course is offered creditable for bonus					
Allocat	ion of _l	olaces				
Additio	onal inf	ormation				
Worklo	ad					
150 h						
Teach		0				
Taach	ing Lytt					
reachir	ig cycl	e: summer semester				
Master's wi	ith 1 majo	r Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • ex r (120 ECTS) Information Syst	am. reg. da- ems - 2025	page 64 / 131

Referred to in LPO I (examination regulations for teaching-degree programmes)

Module appears in

Module title				Abbreviation	
E-Commerce 12-M-EC1-252-m01					
Module coordinator			Module offered by		
holder of the Chair of Business A ting	dministration an	d Marke-	Faculty of Business	Management and Economics	
ECTS Method of grading	Only after	r succ. con	npl. of module(s)		
5 numerical grade					
Duration Module level	Other pre	requisites			
1 semester graduate					
Contents					
E-commerce is a highly relevant f and strategies applied by compa dustry, types of customers, types egy of a selected firm. In doing so ons for improvements and for ad sentations where the students (ir or present the core aspects of res	ield for almost a nies differ strong of products). In o, they evaluate t dressing future to groups) will eith earch articles de	ll types of gly depend this semir the strateg rends. Fur her apply s ealing with	companies. Howeve ling on the respective nar, students analyze gies' current and futu thermore, each lectu selected lecture topics	r, the ecommerce approaches e firm context (e.g., in terms of in- e the specific e-commerce strat- re potential and make suggesti- re session will contain short pre- cs to real-world business cases in general.	
Intended learning outcomes					
This class enables students to ga	in insights into r	real-life e-o	commerce strategies	and to train their abilities in as-	
Courses (type, number of weekly	contact hours, la	anguage –	- if other than Germa	n)	
V (2) + Ü (2)				•	
Module taught in: German and/o	r English				
Method of assessment (type, sco ster, information on whether mod	pe, language — Iule can be chos	if other the earn	an German, examina a bonus)	tion offered — if not every seme-	
a) written examination (approx. 60 to 120 minutes) or b) term paper (15 to 20 pages) Language of assessment: German and/or English creditable for bonus					
Allocation of places					
Allocation of places Number of places: 15. WA: Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Students who already have successfully completed courses offered by the supervising chair will be given pre- ferential consideration. a. Among applicants with the same number of successfully completed modules, places will be allocated accor- ding to the total number of ECTS credits achieved in the corresponding modules. b. When places are allocated in accordance with b) and the number of applications exceeds the number of available places, places will be allocated according to the average grade of assessments taken in the correspon- ding courses. c. Among applicants with the same average grade, places will be allocated by lot. (2) Any remaining places are available to students who have not yet successfully completed any courses of the supervising chair. The selection is made according to study progress (number of semesters); among applicants with the same number of semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available. Additional information					
Workload					
150 h					

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Module title					Abbreviation	
Experir	mental	Economics			12-M-EE-252-m01	
Module	e coord	inator		Module offered by		
holder of the Chair of Labour Economics Faculty of Business Management and Eco			Management and Economics			
ECTS	Methe	od of grading Only after succ. co		npl. of module(s)		
5	nume	rical grade				
Duration Module level Other prerequisites						
1 seme	ster	graduate				
Conten	Contents					

Aim and outline of the course:

The Nobel Prizes for Daniel Kahneman and Vernon Smith 2002 and for Richard Thaler 2017 have underlined the increasing importance of experimental methods in economics. Experimental methods are used to collect data using randomization or a highly controlled environment. This course offers an introduction to the methodology of experimental economics and economic laboratory experiments.

In the methodology part it is shown why experiments are a good tool to generate scientific knowledge. Furthermore, widely used techniques in economic experiments are explained and how economic experiments differ from experiments in other social sciences. This part also deals with methods of reasoning, i.e. how inferences can be drawn from evidence that is generated by experiments.

The unifying theme of all laboratory experiments that will be covered is, understanding the behavior of agents, who produce and/or distribute goods by interacting with each other. The first topic is about markets and it includes experiments that shown under which conditions and institutions markets work very efficient and under which conditions and institutions they fail to yield a desirable outcome. The second topic includes experiments that look at the behavior of two agents, who bargain about the distribution of a common pie. On the basis of these results we will discuss experiments that try to explain bargaining behavior and show how agents deviate systematically from the neoclassical framework, i.e. the "homo oeconomicus". The third topic deals with cooperation and institutions that support cooperation in the long run as equilibrium. Further, systematic evidence will be presented on how individuals can be classified in different cooperative types and how these types can explain economic outcomes in natural environments. The forth topic concerns reciprocity, a strong determining factor of human behavior that is nearly universal. We will cover experiments that show how reciprocity can enforce relational contracts in the absence of third party enforcement. Moreover, there will be a special emphasis on how reciprocity affects labor markets.

When time permits up to two additional topics will be covered. The first topic is about gender differences in competitiveness, risk-aversion and overconfidence. The second topic is about the elicitation of social norms.

Prerequisites: Participants should have a basic knowledge about microeconomics, game theory and econometrics.

Literature:

The course will be mainly paper based but the following books provide a good overview and complement the discussed papers.

- Dhami, S. (2016). The Foundations of Behavioral Economic Analysis. Oxford University Press.
- Guala, F. (2005). The Methodology of Experimental Economics. Cambridge University Press

In addition lecture slides will be provided.

Intended learning outcomes

The aim of the course is to familiarize students with the methodology experimental economics. Further, students will be enabled to understand how causal evidence can be obtained using controlled variation and how to generalize from results that are derived in artificial laboratory setting to more natural environments. Moreover, the

	Master's with	ı major Informa	tion Systems	(2025)
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course shall deepen students' understanding of human decision making in multi-agent settings and to make them aware of systematic heterogeneous human behavior in the production and distribution of goods.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Module taught in: English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus)

portfolio (approx. 50 hours)

Language of assessment: English

Assessment offered: In the semester in which the course is offered

creditable for bonus

Allocation of places

30 places.

WA1:

(1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: after announcement

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Module	title		Abbreviation						
Business Software 2: Data-driven Business Process Management and Automa-									
tion									
Module	coord	inator		Module offered by					
holder of the Chair of Business Management and Business Faculty of Business Management and Econor Information Systems									
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)					
5	nume	rical grade							
Duratio	n	Module level	Other prerequisites						
1 semester graduate		graduate							
Conten	ts								
 The course comprises four main parts: Business Process Management Modern Data Management Process Mining Process Automation In addition to the lectures, students have the opportunity to engage with fundamental research papers on Business Process Management and gain practical experience by solving a case study based on real event logs. Intended learning outcomes									
 Intended tearing outcomes The module "Business Software 2: Data-driven Business Process Management and Automation" aims to achieve the following learning outcomes: Understanding of Business Process Management: Upon completion of the course, students will be able to articulate the fundamental theories and practical methodologies of Business Process Management. This includes the ability to analyze, redesign, and implement improved business processes both manually and using automated tools. Application of Modern Data Management Techniques: Students will acquire competencies in modern data management practices that are essential for real-time decision-making in business contexts. Conducting Process Mining: Students will develop skills in process mining, enabling them to extract data from event logs and analyze this information to uncover inefficiencies and opportunities within business processes. They will learn to apply process mining tools and techniques to real datasets, interpret results, and propose actionable improvements. Implementation of Process Automation Solutions: The course equips students with the knowledge and skills to automate business processes for automation, design automation software such as UiPath. Students will learn to identify suitable processes for automation, design automation workflows, and implement these systems to enhance operational efficiency. Engagement in Scientific Research and Practical Application: Students will expand their academic and practical understanding by engaging with fundamental research papers in the field of Business Process Management. They will also gain practical experience through case studies and hands-on projects, allowing them to effectively apply theoretical knowledge to solve real-world problems. Development of Professional Competencies: Throughout the course, students will develop a range of professional skills, including critical thinking, problem-solving, teamwork, and effective com									
Course	s (type.	number of weekly conta	act hours, language –	- if other than Germa	n)				
V(2) +	(2)			other than ochina	,				
Module taught in: German and/or English									
Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus)									
a) written examination (approx. 60 minutes) or b) oral examination (one candidate each: approx. 10 to 15 minutes, groups of 2: approx. 20 minutes, groups of 3: approx. 30 minutes) or c) term paper (15 to 20 pages) Language of assessment: German and/or English Assessment offered: Once a year, summer semester Master's with 1 major Information Systems (2025) JMU Würzburg • generated 05-Nov-2024 • exam. reg. da- page 70 / 131									
			ta record Maste	r (120 ECTS) Information Syst	ems - 2025				

creditable for bonus

Allocation of places

50 places.

WM1:

Should the number of applications exceed the number of available places, places will be allocated as follows: 1) Master's students of Information Systems, Management and Economathematics will be given preferential consideration.

(2) The remaining places will be allocated to students of other subjects.

(3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Management (2024)

Master's degree (1 major) Information Systems (2024)

Master's degree (1 major) International Economic Policy (2024)

Master's degree (1 major) Economathematics (2024)

Module	e title				Abbreviation			
Advanc	ed Ser	ninar: Enterprise System	5		12-M-ES-242-m01			
Module	e coord	inator		Module offered by				
holder of the Chair of Business Manage Information Systems			ement and Business	Faculty of Business Management and Economics				
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)				
10	nume	rical grade						
Duration Module level		Other prerequisites						
1 semester		graduate						
Contents								
The seminar offers a comprehensive introduction to key concepts and methods that are relevant for both rese- arch and practice in the field of information systems. This module is designed for students preparing to write their own research papers and subsequently present and discuss them.								
 The following contents and methods are covered in the seminar: Subject-specific contents vary individually depending on the paper, for example in areas such as: Process and Data Modeling: Students learn how business processes and underlying data structures are modeled in companies. Augmented Business Process Management (BPM): Advanced study in augmented BPM systems that uti- 								
 lize artificial intelligence to optimize and adapt business processes. Hyperautomation: Integration of Robotic Process Automation (RPA) and Al to automate complex business 								

- Hyperautomation: Integration of Robotic Process Automation (RPA) and Al to automate complex business processes.
 Application of Al and Machine Learning: Use of Al based Decision Support Systems to improve decision
- Application of AI and Machine Learning: Use of AI-based Decision Support Systems to improve decision-making and process efficiency.

Methodological contents vary individually depending on the paper, for example:

- Literature Research: Conducting structured literature searches in respective subject areas.
- Design Science Research and Prototyping: Introduction to research designs that involve the development and evaluation of new technologies.
- Empirical and Mathematical-Formal Methods: Application of statistical methods and mathematical models for investigating and validating theories.

The seminar aims to impart not only theoretical knowledge but also practical skills that students can directly incorporate into the creation of their own research works. These works will then be presented and critically discussed in an academic setting, where both the depth of content and the execution of methodology are evaluated.

Intended learning outcomes

The "Seminar: Enterprise Systems" module aims to achieve the following learning outcomes:

- 1. Professional Competence: Students develop and deepen their knowledge in business informatics by independently addressing a scientific question. They apply current research methods and integrate expertise into their work process. They acquire the ability to analyze scientific results, reflect on them critically, and assess their significance in the context of business informatics.
- 2. Methodological Competence: Students learn to plan and conduct scientific research processes. This includes the application of research methods, data collection and analysis, and the use of scientific software. They practice critical thinking and solving complex problems, which enables flexible application of the learned knowledge in new or changed situations.
- 3. Social Competence: Presenting research results and discussing them with fellow students and lecturers strengthens communicative competence. Students learn to convey their ideas clearly and convincingly and to react constructively to feedback.
- 4. Personal Competence: By independently working on a scientific topic, students develop a high degree of selforganization and time management. Engaging with scientific challenges promotes personal development, such as the ability to self-reflect and ethical awareness in handling research content.

Courses (type, number of weekly contact hours, language – if other than German)

S (2)

Module taught in: German and/or English

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	ta record Master (120 ECTS) Information Systems - 2025	
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus)

term paper (20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1 Language of assessment: German and/or English

Allocation of places

10 places.

WA1:

(1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

Module appears in

Master's degree (1 major) Management (2024)

Master's degree (1 major) Information Systems (2024)

Master's degree (1 major) International Economic Policy (2024)

Module	e title				Abbreviation	
Entrepr	Entrepreneurship in Software-Ecosystems: Start & Scale Up, Venture Capital, 12-M-FSF-242-mo1					
Private	Equity	, EXIT				
Module	e coord	inator		Module offered by		
holder	of the (Chair of Business Manage	ement and Business	Faculty of Business	Management and Economics	
Informa	ation Sy	ystems				
ECTS	Metho	od of grading	Only after succ. compl. of module(s)			
5	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts		<u>.</u>			
This mo sensch ware er stems,	This module is aimed at students of Wirtschaftsinformatik (Business Information Systems) and Wirtschaftswis- senschaft (Business Management and Economics) who are interested in enterprise thinking, scaling, and soft- ware entrepreneurship. Therefore, this module focuses on the intersection of entrepreneurship, software ecosy-					

The module first provides a foundation for understanding entrepreneurship from a theoretical perspective. It covers value management, business model development, and organizational structures. This is followed by a deeper insight into the various aspects of practical business management, including daily doing, sales, financing, traction, KPIs measuring success and performance, and legal forms.

The main part of this module discusses how software-based companies can position themselves in the market and generate value through different business models and innovative strategies. Students will learn about the ecosystems of digital companies and the composition of their strategies. These strategies form the foundation for the growth of young companies, especially scale-ups. The module provides theoretical overviews, practical tools, and instruments for developing growth strategies. Various financing and exit strategies are also covered.

This module includes the following course contents, as summarized below:

- Introduction to Entrepreneurship, Digital Startup Ecosystems, and Process Models
- Value Management and Business Model Development
- Daily Doing, KPI, Traction and Project-Management
- Software Entrepreneurship: Software-based Value Chain
- Scale-Ups: Introduction, Growth, Tools and Strategies
- Exit Strategies

Intended learning outcomes

The "Entrepreneurship in Software-Ecosystems: Start & Scale Up, Venture Capital, Private Equity, EXIT" module aims to achieve the following learning outcomes:

- 1. Software-Based Business Models: Students will learn to understand software-based business models, manage daily operations, maintain traction, and implement KPI management.
- 2. Software Entrepreneurship: After completing the module, students will be able to define software entrepreneurship, analyze its ecosystems, and engage with value-enhancing strategies.
- 3. Corporate Structures and Growth: Participants will learn to build scalable structures, develop growth strategies, and practically apply scaling tools.
- 4. Exit Strategies: Students will become familiar with various exit strategies for businesses and assess their advantages and disadvantages.

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)

Module taught in: German and/or English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus)

a) written examination (approx. 60 minutes) or

b) oral examination (one candidate each: approx. 10 to 15 minutes, groups of 2: approx. 20 minutes, groups of 3: approx. 30 minutes) or

Master's with	1 majo	^r Information	Systems	(2025)	



c) term paper (15 to 20 pages) Language of assessment: German and/or English creditable for bonus

Allocation of places

Number of places: 50.

WA:

Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Students who already have successfully completed courses offered by the supervising chair will be given preferential consideration.

a. Among applicants with the same number of successfully completed modules, places will be allocated according to the total number of ECTS credits achieved in the corresponding modules.

b. When places are allocated in accordance with b) and the number of applications exceeds the number of available places, places will be allocated according to the average grade of assessments taken in the corresponding courses.

c. Among applicants with the same average grade, places will be allocated by lot.

(2) Any remaining places are available to students who have not yet successfully completed any courses of the supervising chair. The selection is made according to study progress (number of semesters); among applicants with the same number of semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

Module appears in

Master's degree (1 major) Management (2024)

Master's degree (1 major) Information Systems (2024)

Master's degree (1 major) International Economic Policy (2024)

Module title					Abbreviation	
Global	Logisti	cs & Supply Chain Ma	nagement		12-M-GLSC-182-mo	1
Modul	e coord	inator		Module offered by	l	
holder	of the (hair of Logistics and ()uantitative Methods	Eaculty of Business Management and Economics		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		cononnes
5	nume	rical grade				
Durati	on	Module level	Other prerequisites	i		
1 seme	ester	graduate				
Conter	nts					
The co planni studie	urse "G ng of gl s.	lobal Logistics & Supp obal production netwo	ly Chain Management" rks and demonstrates	acquaints students the application of the	with advanced meth ese with the help of	ods for the multiple case
Intend	ed lear	ning outcomes				
After c (i) ana (ii) dev (iii) eva proces	ompleti lyze and velop ar aluate t sses.	ng this course student d evaluate global produ nd apply appropriate m he consequences of ur	s can uction networks; ethods to plan product ncertainties in processe	ion networks; es and apply concept	ts and methods to pl	an uncertain
Course	es (type	, number of weekly cor	ntact hours, language –	- if other than Germa	n)	
V (2) +	Ü (2)					
Modul	e taugh	t in: English				
Metho ster, ir	d of ass Iformati	sessment (type, scope, on on whether module	language — if other th can be chosen to earn	an German, examina a bonus)	ition offered — if not	every seme-
a) writ b) tern Langua credita	ten exa n paper age of a able for	mination (approx. 60 n (approx. 15 to 20 page ssessment: English bonus	ninutes) or s)			
Alloca	tion of _l	olaces				
Additi	onal inf	ormation				
Workle	bad					
150 h						
Teachi	ng cycl	e				
Teachi	ng cycle	e: winter semester				
Referr	ed to in	LPO I (examination re	gulations for teaching-	degree programmes)	I	
		· · ·	<u> </u>			
Modul	e appea	ars in				
Master's degree (1 major) Management (2018)						
Master's degree (1 major) International Economic Policy (2018)						
Master's degree (1 major) China Business and Economics (2019)						
Master	Master's degree (1 major) China Language and Economy (2019)					
Master	Master's degree (1 major) Information Systems (2019)					
Master	master's degree (1 major) Unina Business and Economics (2021) Master's degree (1 major) China Language and Economy (2021)					
Master	r's degr	ee (1 major) Economati	nematics (2021)	~ j		
Maste	r's degr	ee (1 major) Informatio	n Systems (2022)			
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waster's w	ntn 1 majo	r information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • ex er (120 ECTS) Information Syst	am. reg. da- tems - 2025	page 76 / 131

Master's degree (1 major) International Economic Policy (2022) Master's degree (1 major) Management (2022) Master's degree (1 major) Economathematics (2022) exchange program Business Management and Economics (2022) Master's degree (1 major) Management International (2024) Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) International Economic Policy (2024) Master's degree (1 major) Economathematics (2024)

Business Software 1: Management and Implementation of Information Systems 12-M-GPU-242-mo1 Stems Module cordinator Module offered by Information Systems Faculty of Business Management and Business Faculty of Business Management and Economics Information Systems ECTS Method of grading Only after succ. compl. of module(s) - 5 numerical grade - - 1 semester graduate - - Contents - - - The module offers a comprehensive insight into the world of Enterprise Resource Planning (ERP) systems. ERP systems are central building blocks in modern business management and play a crucial role in the integration of business processes, data management and decision-making. This module is divided into three sections, each of which focuses on practical applications and create angules in the valuation of ERP systems. Using case studies, students compare two different ERP systems and apply the selection process in a real-life environment. • Section :: Lew code and no-code systems with applications in order busines of a company. Students are familiarized with low-code and no-code systems with applications in order to experience the advantages of low-code and no-code approaches in practice. • Section :: Low-code and no-code approaches in practice. Section si customizing ERP software using the example of SAP S/4HANA: In the final part, students learn the basics of customizing ERP software using th	Module title			Abbreviation			
Stems Module offered by Module offered by Information Systems Faculty of Business Management and Economics Information Systems Faculty of Business Management and Economics ECTS Method of grading Only after succ. compl. of module(s) 5 numerical grade - Contents - - The module offers a comprehensive insight into the world of Enterprise Resource Planning (ERP) systems. ERP systems are central building blocks in moderm business management and play a crucial role in the integration of business processes, data management and decision- making. This module is divided into three sections, each of which focuses on practical applications and examples of two ERP systems. The first part of the module is decitated to the complex process of selecting a suitable ERP system for a company. Students are sanillarized with proven methods and tools that are used in the evaluation of ERP systems. Using case studies, students compare two different ERP systems and apply the selection process in a real-life environment. Section 1: Low-code and no-code systems with application examples: In this part, students are familiarized with proven methods and tools that are used in the evaluation of ERP systems. Using case studies, students contae sprate using the example of SAP S/AHANA: In the final part, students leading company. In this field. Students leading company in this field. Students are enabled to adapt SAP S/AHANA to the specific requirements of a company. Practical exercises of customizing ERP systems and apply the selection process studees to aphy customizing techniquaus in real-life centraios. </td <td>Busines</td> <td>ss Soft</td> <td>ware 1: Management a</td> <td>nd Implementation of</td> <td>nformation Sy-</td> <td>12-M-GPU-242-m01</td> <th>l</th>	Busines	ss Soft	ware 1: Management a	nd Implementation of	nformation Sy-	12-M-GPU-242-m01	l
Module coordinator Module Coordinator Information Systems Faculty of Business Management and Business ECTS Method of grading Only after succ. compl. of module(s) s numerical grade - Duration Module level Other prerequisites 1 semester graduate - Contents - - The module offers a comprehensive insight into the world of Enterprise Resource Planning (ERP) systems. ERP systems are central building blocks in modern business management and play a crucial role in the integration of business processes, data management and decision-making. This module is divided into three sections, each of the complex process of selecting a suitable ERP system for a company. Students are familiarized with proven methods and tools that are used in the evaluation of ERP systems. The first part of the module is students compare two different ERP systems and apply the selection process in a real-life environment. Section 2: Low-code and no-code systems with application examples: In this part, students are familiarized with low-code and no-code systems in practice. Students learn the basics of these platforms that enable the efficient development of individual ERP applications; subonizing textomizing techniques in real-life environment. Students learn the basics of these platforms that enable the efficient development of individual ERP applications; subonizing textomizing textomizing techniques in real-life secontrons. In addition to the theoretical information pres	stems						
Index of the Chair of Business Management and Business Faculty of Business Management and Economics Information Systems Only after succ. compl. of module(s) 5 numerical grade Duration Module level Other prerequisites 1 semester graduate Contents The module offers a comprehensive insight into the world of Enterprise Resource Planning (ERP) systems. ERP systems are central building blocks in modern business management and play a crucial role in the integration of business processes, data management and decision-making. This module is divided into three sections, each of which focuses on practical applications and examples in dividion to theory. • Section 1: ERP selection process with application examples of two ERP systems. The first part of the module is dedicated to the complex process of selecting a suitable ERP system for a company. Students are familiarized with proven methods and tools that are used in the evaluation of ERP systems. The first part of the module and no-code platforms that enable the efficient development of Individual ERP applications. The focus is on dealing with a specific software solution from a leading company in this field. Students learn the basics of these platforms and create their own applications in order to expreince the advantages of low-code and no-code platforms and create their own applications in order to expreince the advantages of low-code and no-code appraches in practice. • Section 3: Customizing ERP software using the example of SAP S/ ₂ /4HAN. In the final part, students learn the basics of these plat	Module	coord	nator		Module offered by		
ECTS Method of grading Only after succ. compl. of module(s) 5 numerical grade	holder of Informa	of the C Ition Sy	hair of Business Mana stems	gement and Business	Faculty of Business	Management and E	conomics
S Inumerical grade	ECTS	Metho	d of grading	Only after succ. con	npl. of module(s)		
Duration Module level Other prerequisites 1 semester graduate Contents The module offers a comprehensive insight into the world of Enterprise Resource Planning (ERP) systems. ERP systems are central building blocks in modern business processes, data management and decision-making. This module is divided into three sections, each of which focuses on practical applications and examples in addition to theory. • Section 1: ERP selection process with application examples of thor ERP systems for a company. Students are familiarized with proven methods and tools that are used in the evaluation of ERP systems. Using case studies, students compare two different ERP systems and apply the selection process in a real-life environment. • Section 2: Low-code and no-code systems with application examples: In this part, students are familiarized with low-code and no-code aptroaches in practice. • Section 3: Customizing ERP software. The focus is on the world's leading ERP software in practice. • Section 3: Customizing ERP software. The focus is on the world's leading ERP software. The focus is on the world's leading ERP software. The focus is on the world's leading ERP software. The focus is on the world's leading ERP software. The focus is on the vorld's leading ERP software. The focus is on the world's leading ERP software. The focus is on the world's leading ERP software. The focus is on the world's leading ERP software. The focus is on the world's leading ERP software. The focus is on the world's leading ERP software. The focus is on the world's leading ERP software. The focus is on the world's leading ERP software. The focus is on the world's leading ERP software	5	numer	ical grade				
1 semester graduate Contents	Duratio	n	Module level	Other prerequisites			
Contents The module offers a comprehensive insight into the world of Enterprise Resource Planning (ERP) systems. ERP systems are central building blocks in modern business management and play a crucial role in the integration of business processes, data management and decision-making. This module is divided into three sections, each of which focuses on practical applications and examples of two ERP systems: The first part of the module is dedicated to the complex process of selecting a suitable ERP systems are familiarized with proven methods and tools that are used in the evaluation of ERP systems. Using case studies, students compare two different ERP systems and apply the selection process in a real-life environment. • Section 2: Low-code and no-code systems with application examples: In this part, students are familiarized with low-code and no-code approaches in practice. • Section 2: Low-code and no-code approaches in practice. • Section 3: Customizing ERP software using the example of SAP S/4HANA in the final part, students learn the basics of these platforms and create their own applications in order to experience the advantages of low-code and no-code approaches in practice. • Section 3: Customizing ERP software. The focus is on the world's leading ERP system SAP S/4HANA. Students are enabled to adapt SAP S/4HANA to the specific requirements of a company. Practical exercises and case studies enable students to apply customizing techniques in real-life scenarios. Intendel earning outcomes. Intender earning outcomes. Intended earning outcomes. Section 3: Customizing ERP software. The focus is on the world's leading ERP systems SAP S/4HANA. Students are enabled to adapt SAP S/4HANA to the specific requi	1 semes	ster	graduate				
The module offers a comprehensive insight into the world of Enterprise Resource Planning (ERP) systems. ERP systems are central building blocks in modern business processes, data management and decision-making. This module is divided into three sections, each of which focuses on practical applications and examples of two ERP systems: The first part of the mo- dule is dedicated to the complex process of selecting a suitable ERP system for a company. Students are familiarized with proven methods and tools that are used in the evaluation of ERP systems. Using case studies, students compare two different ERP systems and apply the selection process in a real-life environment. • Section 2: Low-code and no-code systems with application examples of two ERP systems. Using case studies, students compare two different ERP systems and apply the selection process in a real-life environment. • Section 2: Low-code and no-code spatforms that enable the efficient development of individual ERP applications. The focus is on dealing with a specific software solution from a leading company in this field. Students learn the basics of these platforms and create their own applications in order to experience the advantages of low-code and no-code approaches in practice. • Section 3: Customizing ERP software. The focus is on the world's leading ERP system SAP S/4HANA. Students learn the basics of tuese platforms and/y customizing techniques in real-life scenarios. In addition to the theoretical information presented in the lecture, the exercises offer the opportunity to access the ERP systems and deal with the respective software in a practical way by means of extensive case studies. 1. ERP Systems - Overview and Differentiation: Students gain a comprehensive understanding of various ERP systems to meet business Processes: Participants learn how ERP systems map and optimize business operations. 2. Selection and Customizing of ERP Systems: Students gain practical experience in independently implementing business processes in ERP an	Conten	ts					
Intended learning outcomes The "Business Software 1: Management and Implementation of Information Systems" module aims to achieve the following learning outcomes: 1. ERP Systems - Overview and Differentiation: Students gain a comprehensive understanding of various ERP systems, their architectures, and philosophies. 2. Integration of Business Processes: Participants learn how ERP systems map and optimize business operations. 3. Selection and Customizing of ERP Systems: Students develop skills to evaluate, select, and adapt ERP systems to meet business needs. 4. Implementation of Business Processes: Students gain practical experience in independently implementing business processes in ERP and low-code/no-code platforms, and learn practical ERP customizing. Courses (type, number of weekly contact hours, language — if other than German) V (2) + Ü (2) Module taught in: German and/or English Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus) a) written examination (approx. 60 minutes) or b) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) or c) term paper (15 to 20 pages) Language of assessment: German and/or English Assessment offered: once a year, winter semester The semester The semester The semester	 The module offers a comprehensive insight into the world of Enterprise Resource Planning (ERP) systems. ERP systems are central building blocks in modern business management and play a crucial role in the integration of business processes, data management and decision-making. This module is divided into three sections, each of which focuses on practical applications and examples in addition to theory. Section 1: ERP selection process with application examples of two ERP systems: The first part of the module is dedicated to the complex process of selecting a suitable ERP system for a company. Students are familiarized with proven methods and tools that are used in the evaluation of ERP systems. Using case studies, students compare two different ERP systems and apply the selection process in a real-life environment. Section 2: Low-code and no-code systems with application examples: In this part, students are familiarized with low-code and no-code platforms that enable the efficient development of individual ERP applications. The focus is on dealing with a specific software solution from a leading company in this field. Students learn the basics of these platforms and create their own applications in order to experience the advantages of low-code and no-code approaches in practice. Section 3: Customizing ERP software using the example of SAP S/4HANA: In the final part, students learn the basics of customizing ERP software. The focus is on the world's leading ERP system SAP S/4HANA. Students are enabled to adapt SAP S/4HANA to the specific requirements of a company. Practical exercises and case studies enable students to apply customizing techniques in real-life scenarios. 						
The "Business Software 1: Management and Implementation of Information Systems" module aims to achieve the following learning outcomes: 1. ERP Systems - Overview and Differentiation: Students gain a comprehensive understanding of various ERP sy- stems, their architectures, and philosophies. 2. Integration of Business Processes: Participants learn how ERP systems map and optimize business operati- ons. 3. Selection and Customizing of ERP Systems: Students develop skills to evaluate, select, and adapt ERP sy- stems to meet business needs. 4. Implementation of Business Processes: Students gain practical experience in independently implementing business processes in ERP and low-code/no-code platforms, and learn practical ERP customizing. Courses (type, number of weekly contact hours, language — if other than German) V (2) + Ü (2) Module taught in: German and/or English Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus) a) written examination (approx. 60 minutes) or b) oral examination (approx. 60 minutes) or b) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) or c) term paper (15 to 20 pages) Language of assessment: German and/or English Assessment offered: once a year, winter semester Taster's with 1 major Information Systems (2025) IMU Würzburg • generated 05:Nov:2024 • exam. reg. da: page 78 / 131	Intende	ed learr	ing outcomes		- · · ·		
Courses (type, number of weekly contact hours, language — if other than German) V (2) + Ü (2) Module taught in: German and/or English Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus) a) written examination (approx. 60 minutes) or b) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) or c) term paper (15 to 20 pages) Language of assessment: German and/or English Assessment offered: once a year, winter semester Taster's with 1 major Information Systems (2025) JMUU Würzburg • generated 05-Nov-2024 • exam. reg. da- page 78 / 131	The "Bu the follo 1. ERP S stem 2. Integ ons. 3. Selec stem 4. Imple busir	usiness owing l System s, their ration or ction ar s to me ementa ness pr	Software 1: Managem earning outcomes: s - Overview and Differ architectures, and phi of Business Processes: ad Customizing of ERP eet business needs. tion of Business Proce ocesses in ERP and low	ent and Implementatio entiation: Students gai losophies. Participants learn how Systems: Students dev sses: Students gain prave v-code/no-code platfor	n of Information Sys n a comprehensive u / ERP systems map a elop skills to evalua actical experience in ms, and learn practi	tems" module aims understanding of var nd optimize busines te, select, and adapt independently impl cal ERP customizing	to achieve rious ERP sy- ss operati- t ERP sy- ementing
V (2) + Ü (2) Module taught in: German and/or English Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus) a) written examination (approx. 60 minutes) or b) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) or c) term paper (15 to 20 pages) Language of assessment: German and/or English Assessment offered: once a year, winter semester taster's with 1 major Information Systems (2025) MU Würzburg • generated 05-Nov-2024 • exam. reg. da- page 78 / 131	Courses	s (type,	number of weekly con	tact hours, language –	- if other than Germa	ın)	
Method of assessment (type, scope, language – if other than German, examination offered – if not every seme- ster, information on whether module can be chosen to earn a bonus) a) written examination (approx. 60 minutes) or b) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) or c) term paper (15 to 20 pages) Language of assessment: German and/or English Assessment offered: once a year, winter semester (aster's with 1 major Information Systems (2025)	V (2) + l Module	Ü (2) taught	in: German and/or En	glish			
ster, information on whether module can be chosen to earn a bonus) a) written examination (approx. 60 minutes) or b) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) or c) term paper (15 to 20 pages) Language of assessment: German and/or English Assessment offered: once a year, winter semester taster's with 1 major Information Systems (2025) JMU Würzburg • generated 05-Nov-2024 • exam. reg. da- page 78 / 131	Method	l of ass	essment (type, scope.	language — if other th	an German, examina	tion offered — if not	every seme-
a) written examination (approx. 60 minutes) or b) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) or c) term paper (15 to 20 pages) Language of assessment: German and/or English Assessment offered: once a year, winter semester taster's with 1 major Information Systems (2025) JMU Würzburg • generated 05-Nov-2024 • exam. reg. da- page 78 / 131	ster, inf	ormati	on on whether module	can be chosen to earn	a bonus)		,
Master's with 1 major Information Systems (2025) JMU Würzburg • generated o5-Nov-2024 • exam. reg. da- page 78 / 131	 a) written examination (approx. 60 minutes) or b) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) or c) term paper (15 to 20 pages) Language of assessment: German and/or English Assessment offered: once a year, winter semester 						
to record Macter Mac ELIST Internation Systems apar	Master's wi	th 1 major	Information Systems (2025)	JMU Würzburg •	generated 05-Nov-2024 • ex	am. reg. da-	page 78 / 131

creditable for bonus

Allocation of places

50 places.

WM1:

Should the number of applications exceed the number of available places, places will be allocated as follows: 1) Master's students of Information Systems, Management and Economathematics will be given preferential consideration.

(2) The remaining places will be allocated to students of other subjects.

(3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Management (2024)

Master's degree (1 major) Information Systems (2024)

Master's degree (1 major) International Economic Policy (2024)

Module title				Abbreviation		
Human	Resou	rce Management and Inc	dustrial Relations		12-M-HRM-242-mo:	1
Module	coord	inator		Module offered by	<u> </u>	
holder	ofthe	Chair for Human Resourc	e Management and	Faculty of Business	Management and E	conomics
Organis	sation		-			
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	on ctor	Module level	Other prerequisites			
Conton		glauuale	<u> </u>			
The les	LS	uman Dasauraa Managa	mont and Industrial F) a lation all introduces	advanced the exist	actimation
technic such as	jues ar ithe d	ifferent actors in ndustri	the areas of human r al relations.	esources manageme	ent and institutional	frameworks
Syllabu	lS ction•	Human Resource Manag	ement & Industrial Re	lations		
Chapte	r 1: The	e employment contract				
Chapte	r 2: Mo	tivation				
Chapte	r 3: Em	ployee resistance agains	st reorganisations			
Chapte	r 5: Wo	rks councils and the em	ployer wage structure			
Chapte	r 6: Th	e behaviour of labour un	ions			
Chapte	r 7: Cre	dentials and signaling				
Chapte	r 8: De	mographic challenges of				
Literatu Milgror Picot, E Schäffe	ure n, Robe Dietl, Fr er Poes	erts (1992), Economics, C anck, Fiedler, Royer (201 chel, Stuttgart	Drganization and Mar 5), Organisation – Th	agement, Prentice H eorie und Praxis aus	all, Englewood Cliffs ökonomischer Sicht	5 t, 7. Auflage,
Zwick (bachs Z Freema	2003), Zeitsch m, Laze	Empirische Determinant rift für betriebswirtschaft ear (1995), An Economic /	en des Widerstandes tliche Forschung 55, 2 Analysis of Works Cou	von Mitarbeitern ge 45-59 uncils, in Rogers, Stru	gen Innovationen, S eeck (eds.), Works C	chmalen- ouncils, Chi-
cago, 2 Addiso	7-50 n, Teix	eira, Zwick (2010), Works	s Councils and the An	atomy of Wages, Ind	ustrial and Labor Re	lations Re-
Atherto	3 (2), 2. n (107 [.]	40-273 3). Theory of Union Barga	aining Goals, Princeto	n University Press. P	rinceton, NI	
Garibal Mohrer	di (200 nweise	o6), Personnel Economic r, Wydra-Somaggio, Zwic cates, Oxford Economic	s in Imperfect Labour k (2020), Information Papers 72(3), 651-671	Market, Oxford Univ advantages of train	ersity Press, Oxford ing employers despi	(chapter 6). te credible
Malmb	erg, Lir	idh, Halversson (2008), I	Productivity conseque	ences of workforce a	ging: Stagnation or I	Horndal ef-
fect. In	Prskav	vetz, Bloom, Lutz (eds.),	Population and Deve	lopment Review, Pop	oulation Ageing, Hun	nan Capital
Accum	ulation	, and Productivity Growth	n (suppl. to Vol. 34), 2	238-256		
The air	n of the	lectures is to enable stu	idents to understand	and apply advanced	theories estimation	n techniques
and empirical results in the area human resource management and industrial relations on the basis of scientific literature.						
Course	s (type	, number of weekly conta	act hours, language –	- if other than Germa	in)	
V (2) + Module	Ü (2) e taugh	t in: English				
Method	d of ass	sessment (type, scope, la	anguage — if other th	an German, examina	tion offered — if not	every seme-
ster, in	format	on on whether module c	an be chosen to earn	a bonus)		
a) writt	en exa	mination (approx. 60 mir	nutes) or			
Master's wi	ith 1 majo	r Information Systems (2025)	JMU Würzburg •	generated 05-Nov-2024 • ex	am. reg. da- rems - 2025	page 80 / 131

b) term paper (approx. 15 pages) Language of assessment: English

Allocation of places

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Additional information

Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

Module appears in

Master's degree (1 major) Management International (2024)

Master's degree (1 major) Management (2024)

Master's degree (1 major) Information Systems (2024)

Master's degree (1 major) International Economic Policy (2024)

Module title	Abbreviation				
E-Business Strategies	E-Business Strategies 12-M-IBS-242-mo1				
Module coordinator		Module offered by			
holder of the Chair of Information Syst	ems Engineering	Faculty of Business	Management and Economics		
ECTS Method of grading	Only after succ. con	npl. of module(s)			
5 numerical grade					
Duration Module level	Other prerequisites				
1 semester graduate					
Contents					
The module provides an overview of st industries and value networks. To this applied to digital innovations and illus dies of well-known digital companies a	rategic implications of end, concepts and fra- trated with numerous and their business mo	of digital technologie ameworks from strat s examples. In the ac odels are analysed a	s at the level of organisations, egic technology management are companying exercise, case stu- nd discussed.		
Intended learning outcomes					
 Become familiar with theoretical context Understand the strengths and we quisites for their meaningful app Apply the concepts to case studi Learn how to transfer the concept 	concepts of strategy of eaknesses of differen ilication es and derive action- its to other entrepren	levelopment and imp t frameworks and ap oriented recommenc eurial situations fron	plementation in the e-business proaches as well as the prere- lations from them n their studies or work		
Courses (type, number of weekly conta	act hours, language –	- if other than Germa	n)		
V (2) + Ü (2) Module taught in: English			·		
Method of assessment (type, scope, la ster, information on whether module c	anguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-		
a) written examination (approx. 60 mir b) oral examination (one candidate ea approx. 30 minutes) Language of assessment: English creditable for bonus	nutes) or ch: approx. 10 to 15 m	ninutes; groups of 2:	approx. 20 minutes; groups of 3:		
Allocation of places					
Additional information					
Workload					
150 h					
Teaching cycle					
Teaching cycle: winter semester					
Referred to in LPO I (examination regu	lations for teaching-o	degree programmes)			
Module appears in					
Master's degree (1 major) Management International (2024) Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) International Economic Policy (2024)					
Master's degree (1 major) Economathe	matics (2024)				

Module title			Abbreviation		
Seminar: International Climate Policy				12-M-ICP-242-m01	
Module coord	inator		Module offered by		
holder of the	unior Professorship of (Quantitative Interna-	Faculty of Business	Management and E	conomics
tional and Env	vironmental Economics			_	
ECTS Metho	od of grading	Only after succ. con	npl. of module(s)		
10 nume	rical grade				
Duration	Module level	Other prerequisites			
1 semester	graduate				
Contents					
In this semina ess of interna learn how clin free-riding or tative researc from these sta	In this seminar, we study international climate policy in a globalized world. We identify threats to the effectiven- ess of international climate policy initiatives such as the Paris Agreement or the EU Emission Trading Scheme, learn how climate policy, international trade, and trade policy interact and which measures can be taken to avoid free-riding or the relocation of emission-intensive industries. The course will cover recent theoretical and quanti- tative research papers in this area and students will reproduce the arguments and critically assess the insights from these state-of-the-art contributions in the literature.				
Intended lear	ning outcomes				
 knowled reading reprodu context 	dge of key challenges of and understanding stat cing key theoretic and e ualization and critical as	f climate policy in a glo te-of-the art research a econometric argument ssessment of research	balized world Irticles s of research articles articles		
Courses (type	, number of weekly cont	tact hours, language –	- if other than Germa	n)	
S (2) Module taugh	t in: English				
Method of as	sessment (type, scope,	language — if other th	an German, examina	tion offered — if not	every seme-
ster, informat	ion on whether module	can be chosen to earn	a bonus)		
term paper (2 Language of a	o to 25 pages) and pres ssessment: English	entation (approx. 20 n	ninutes), weighted 2	:1	
Allocation of	places				
10 places. WA1: (1) Should the among all app ber of places ted by lot as t	e number of applications olicants irrespective of t will be allocated in the s hey become available.	s exceed the number o heir subjects. (2) Place same procedure. (3) A	f available places, p es on all courses of t waiting list will be m	laces will be allocate he module with a res aintained and place	ed by lot stricted num- s re-alloca-
Additional inf	ormation				
Workload					
300 h					
Teaching cycl	e				
Teaching cycle: each semester					
Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module appears in					
Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) International Economic Policy (2024) Master's degree (1 major) Economation (2024)					
Master's with 1 majo	r Information Systems (2025)	JMU Würzburg •	generated 05-Nov-2024 • ex	am. reg. da-	page 83 / 131
		ta record Maste	r (120 ECIS) Information Syst	ems - 2025	

Module title				Abbreviation	
Strategic Managerial Accounting 12-M-INST-242-mo1					12-M-INST-242-m01
Module	coord	inator		Module offered by	
holder and Aco	of the (countir	Chair of Business Manage	ement, Controlling	Faculty of Business	Management and Economics
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)	
5	nume	rical grade		•	
Duratio	n	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts				
The module focuses on accounting instruments, which are applied in the context of strategic management of enterprises. First, it addresses important drivers of strategic decisions from a microeconomic perspective, such as the emergence of cost and quality advantages in competition as well as scale and experience curve effects. Second, the module covers analytical and heuristic techniques of planning and control. In the context of these techniques, instruments of target costing, life cycle cost analysis, benchmarking and business wargaming are discussed with regard to their theoretical foundation and fields of application. Intended learning outcomes Initially, students acquire an understanding of economic drivers of strategic decisions as well as fundamental re- quirements concerning instruments of decision-making and behavior control in enterprises. Upon completion of the course, they are able to analyze and evaluate the strengths and weaknesses, as well as fields of application and limitations, of prevalent instruments of strategic corporate management used in practice. Additionally, they develop competences in the design and further development of strategic instruments. Courses (type, number of weekly contact hours, language — if other than German) V (2) + Ü (2) Module taught in: German and/or English Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information (approx. 60 minutes) or b) term paper (approx. 15 pages)					
Allocat	ion of r	places			
Additio	nal inf	ormation			
Worklo	ad				
150 h					
Teachir	ng cycl	e			
Teachir	Teaching cycle: summer semester				
Referre	d to in	LPOI (examination regu	lations for teaching-	degree programmes)	
Module	appea	irs in			
Master'	s degr	ee (1 major) Management	(2024)		
Master'	s degr	ee (1 major) Information S	Systems (2024)	`	
Master	s degr	ee (1 major) International	Economic Policy (20	24)	
master	Master's degree (1 major) Economathematics (2024)				

Module title				Abbreviation	
Information Systems				12-M-IS-242-m01	
Module	e coord	inator		Module offered by	
holder	of the (Chair of Information Syste	ems Engineering	Faculty of Business	Management and Economics
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
5	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts				
The cou informa tics and	urse pro ation sy d (d) en	ovides an overview of key vstems in organizations. iterprise Al.	v strategic and operat The focus is on (a) en	ional aspects of the terprise systems, (b)	management of information and) e-business, (c) business analy-
Intende	ed learı	ning outcomes			
• U • B • G • B	Inderst Se able Set to k Se able	anding the value of infor to evaluate strategic and now methods for the mar to transfer the concepts	mation and information operational use case nagement and utilization taught to practical ap	on systems from a b es for IT in the compa tion of data plication examples	usiness perspective any
Course	s (type	, number of weekly conta	ct hours, language —	if other than Germa	n)
S (2) Module	e taugh	t in: German and/or Engl	ish		
Methoo ster, in	d of ass formati	s essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
a) writt b) term Langua credita	en exaı paper ge of a ble for	nination (approx. 60 min (15 to 20 pages) ssessment: German and, bonus	utes) or /or English		
Allocat	ion of p	olaces			
Additio	nal inf	ormation			
Worklo	ad				
150 h	150 h				
Teaching cycle					
Teachir	Teaching cycle: each semester				
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)				
Module	Module appears in				
Master	's degr	ee (1 major) Management	t (2024)		
Master	's degr	ee (1 major) Information S	Systems (2024)		
Master	Master's degree (1 major) International Economic Policy (2024)				

Module title					Abbreviation	
Semina	Seminar: Applied Analytics in Logistics & Supply Chain Management				12-M-LSCM-242-mo)1
Modul	e coord	inator		Module offered by		
holder	of the (Chair of Logistics and Qu	antitative Methods	Faculty of Business	Management and E	conomics
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
10	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conter	Its					
Quanti They su founde compa of quan nicatio blems access	Quantitative planning approaches are particularly valuable for designing logistics systems and supply chains. They support decision makers in taking important strategic, tactical, and operational decisions by providing well- founded and relevant information. Many of these decisions have significant impact on the competitiveness of companies because they considerably influence today's as well as tomorrow's costs and revenues. The adoption of quantitative planning methods has been strongly supported by the development of information and commu- nication systems: Advanced tools are available at low costs, versatile methods to model and solve planning pro- blems have been integrated in standard software, the user friendliness has improved, and last but not least: the access to perseave data has substantially progressed (i.e. through ERP systems)					
Intend	ed learı	ning outcomes				
The ma potent minar l stand l	ain obje ial solu earn ab now cor	ctive of this seminar is t tions. Planning procedur out actual planning pro npanies address these p	o familiarize participa res are applied to solv blems in Logistics and problems.	nts with diverse qua ve real problems in c d Supply Chain Mana	ntitative planning p ompanies. Participa agement; they analy	roblems and nts in this se- ze and under-
Course	s (type	, number of weekly conta	act hours, language —	- if other than Germa	n)	
S (2) Module	e taugh	t in: German and/or Eng	lish			
Metho ster, in	d of ass formati	e ssment (type, scope, la on on whether module c	anguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not	every seme-
term pa Langua	aper (20 age of a	o to 25 pages) and prese ssessment: German and	ntation (approx. 20 m /or English	ninutes), weighted 2	:1	
Allocat	ion of p	olaces				
10 plac WA1: (1) Sho among ber of ted by	es. Fould the all app places v lot as th	number of applications licants irrespective of th vill be allocated in the sa ney become available.	exceed the number o eir subjects. (2) Place ame procedure. (3) A	f available places, p es on all courses of t waiting list will be m	laces will be allocate he module with a res aintained and place	ed by lot stricted num- s re-alloca-
Additio	onal inf	ormation	-			
Worklo	ad					
300 h						
Teaching cycle						
Teaching cycle: each semester						
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Modul	e appea	rs in				
Master Master Master	Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) International Economic Policy (2024)					
Master's w	ith 1 majoı	Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • ex r (120 ECTS) Information Syst	am. reg. da- ems - 2025	page 86 / 131



Module title			Abbreviation			
Marketing Analytics			12-M-MA-242-m01			
Module	e coord	inator		Module offered by	<u> </u>	
holder	of the J	unior Professorship of N	Marketing Analytics	Faculty of Business	Management and E	conomics
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate	-			
Market mance automa key me keting science	ing ana of marl ate mar ethods a as well e.	llytics involves the colle keting activities. In fact, keting decisions. The g and specific techniques as of fundamental idea	ection, management, a it is increasingly poss bal of this course is to used in marketing an s at the intersection o	nd analysis of data t sible to use data ana provide students wi alytics. This requires f statistics, economi	o gain insights into lysis to inform, mak th a hands-on under substantive knowle cs, psychology, and	the perfor- e, and even standing of dge in mar- computer
The con turn to and me for cau hands- program	urse wil applied easurin sal infe on lear mming	ll cover fundamentals o d, real-world marketing g preferences and dema rence in marketing. The ning experience, the co language.	f data science, includi analytics problems su and. Emphasis will be course will also delve urse will include pract	ng data wrangling ar ch as marketing mix placed on data visua into a few advanced ical applications of t	nd data exploration, modeling, market so alization and valuab d marketing topics. T he covered content	and will then egmentation, le methods To provide a using the R
Intend	ed learı	ning outcomes				
ц ц ц ц ч ц ч	Dinderst problem Learn to Develop Develop Gain ha problem	and key methods and te is. identify the appropriat proficiency in data wra skills in data visualizat nds-on experience with is.	chniques used in mark e analytical methods t ngling and data explo tion and interpretation the R programming la	eting analytics and r o use for specific ma ration techniques. I to effectively comm nguage and apply it	now to apply them to arketing problems. unicate marketing ir to solving marketing	real-world nsights. g analytics
Course	s (type	, number of weekly cont	act hours, language –	- if other than Germa	ın)	
V (2) + Module	Ü (2) e taugh	t in: English				
Metho ster, in	d of ass formati	essment (type, scope, on on whether module	language — if other th can be chosen to earn	an German, examina a bonus)	tion offered — if not	every seme-
a) writt b) term Langua credita	en exan paper age of a ble for	nination (approx. 6o to (15 to 20 pages) ssessment: English bonus	120 minutes) or			
Allocat	ion of p	olaces				
Additio	onal inf	ormation				
Workload						
150 h	150 h					
Teachi	Teaching cycle					
Teachi	ng cycle	e: summer semester	_			
Referre	ed to in	LPOI (examination reg	ulations for teaching-	degree programmes)		
 Master's w	ith 1 major	Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • ex r (120 ECTS) Information Syst	am. reg. da- rems - 2025	page 88 / 131

Module appears in

Master's degree (1 major) Management International (2024) Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) International Economic Policy (2024) Master's degree (1 major) Economathematics (2024)

Module	e title				Abbreviation
Semina	Seminar: Macroeconomics and Quantitative Economic Research 12-M-MEW-242-mo1				12-M-MEW-242-m01
Module	e coord	inator		Module offered by	
head o	f the W	ork Group of Empirical Ec	onomics	Faculty of Business	Management and Economics
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
10	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts				
This co and qu my web	urse wi antitati osite.	ill provide students with a ive economic research. A	a more in-depth unde current list of topics,	erstanding of specific , from which student	c problems of macroeconomics s may select one, is available on
Intende	ed lear	ning outcomes			
After th (i) cons (ii) crea (iii) dea (iii) dea (iv) pre (v) alre	te semi solidate ate, pre al with t pare be ady ap	nar, students can e acquired knowledge and sent and defend a scient the working papers of oth etter for the processing of ply methodological know	d if necessary apply a ific paper; ner participants; f the master's thesis. ledge in econometric	additional technique cs/programming	s of scientific work;
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	n)
S (2) Module	e taugh	t in: English			
Metho ster, in	d of ass formati	sessment (type, scope, la ion on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
term pa Langua	aper (20 Ige of a	o to 25 pages) and preser ssessment: English	ntation (approx. 20 m	ninutes), weighted 2:	1
Allocat	ion of p	olaces			
10 plac WA1: (1) Sho among ber of p ted by	uld the all app places v lot as th	number of applications of alicants irrespective of the will be allocated in the sa hey become available.	exceed the number o eir subjects. (2) Place me procedure. (3) A	f available places, p es on all courses of t waiting list will be m	laces will be allocated by lot he module with a restricted num- aintained and places re-alloca-
Additio	nal inf	ormation			
Worklo	ad				
300 h					
Teaching cycle					
Teaching cycle: each semester					
Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module	e appea	ars in			
Master Master Master Master	Module appears in Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) International Economic Policy (2024) Master's degree (1 major) Economathematics (2024)				

Module title			Abbreviation		
Advanced Seminar: Marketing Strategy 12-M-MSS-242-mo1					12-M-MSS-242-m01
Module	coord	inator		Module offered by	
holder of ting	of the C	Chair of Business Adminis	stration and Marke-	Faculty of Business	Management and Economics
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
10	numei	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts				
In this o	course,	students will acquire im	portant knowledge a	nd skills that will ena	able them to prepare a well-struc-
tured p	aper ar	nd to present the results of	of their work with the	help of relevant top	ics in the fields of strategic mar-
Keting a	and stra	ategic management.			
Reading	g: will v	vary according to topic			
Intende	ed learr	ning outcomes			
After co	mpleti	ng the course "Marketing	Strategie", students	will be able to	
1. unde	rstand	the fundamentals of scie	entific literature revie	ws;	
2. Integ	rate ela	aborated content in a scie	entific thesis;		
	s (type	number of weekly conta	ct hours Janguage -	if other than Germa	n)
S(2)	5 (type,	, number of weekty conta	et nouis, tanguage	n other than Germa	
Module	taught	t in: German and/or Engli	sh		
Method	l of ass	essment (type, scope, la	nguage — if other tha	an German, examina	tion offered — if not every seme-
ster, inf	formati	on on whether module ca	an be chosen to earn	a bonus)	
term pa Langua	per (20 ge of a	o to 25 pages) and preser ssessment: German and/	ntation (approx. 20 m ′or English	ninutes), weighted 2:	1
Allocat	ion of p	olaces			
10 plac	es.				
WA1:					
(1) Sho	uld the	number of applications e	exceed the number o	f available places, pl	aces will be allocated by lot
ber of n	all app blaces v	vill be allocated in the sa	me procedure. (2) Place	waiting list will be m	aintained and places re-alloca-
ted by l	ot as th	ney become available.			
Additio	nal info	ormation			
Worklo	ad				
300 h					
Teaching cycle					
Teaching cycle: each semester					
Referre	d to in	LPOI (examination regu	lations for teaching-o	degree programmes)	
Module	e appea	rs in			
Master'	s degre	ee (1 major) Management	(2024)		
Master'	s degre	ee (1 major) Information S	Systems (2024)		
Master's degree (1 major) Economathematics (2024)					

Module title				Abbreviation		
Mobile	Mobile and Ubiquitous Business 12-M-MUS-242-mo1					
Modul	e coord	inator		Module offered by		
holder	of the O	Chair of Information Syste	ems Engineering	Faculty of Business	Management and Economics	
ECTS	Metho	od of grading	Only after succ. com	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ester	graduate				
Conter	nts					
The mo applica Basic o corresp	odule pr ations (i concept ponding	rovides an overview of tee including mobile comments and their use in practic case study texts are and	chnologies and busir rce and payment) thr e are illustrated using alyzed and discussed	ness applications of ough to smart object g numerous example	mobile networks, end devices, s in a future "Internet of Things". s. In the accompanying exercise,	
Intend	ed learr	ning outcomes				
• l t • / • /	Jnderst heir inte Analyzir Analysis gement Applicat	anding the technological egration into existing IS i g business applications and evaluation of the op perspective ion of the learned conce	l foundations and ca nfrastructures in processes, produc perational and strateg pts to real manageme	pabilities of mobile ts/services, and bus gic implications of su ent challenges based	and ubiquitous systems and siness models ich technologies from a mana- l on case studies	
Course	es (type,	, number of weekly conta	ct hours, language –	- if other than Germa	n)	
V (2) + Module	Ü (2) e taugh	t in: English			-	
Metho ster, in	d of ass Iformati	e ssment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
a) writt b) oral approx Langua credita	ten exar examin k. 30 min age of a able for	nination (approx. 60 min ation (one candidate eac nutes) ssessment: English bonus	utes) or :h: approx. 10 to 15 m	inutes; groups of 2:	approx. 20 minutes; groups of 3:	
Allocat	tion of p	olaces				
Additio	onal info	ormation				
Worklo	oad					
150 h						
Teachi	ng cycl	9				
Teaching cycle: summer semester						
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module appears in						
Master	r's degre	ee (1 major) Management	t International (2024)			
Master	r's degre	ee (1 major) Management	t (2024)			
Master	r's degre	ee (1 major) Information S	Systems (2024)	、		
Master	r's degre	ee (1 major) International	Economic Policy (20	24)		
Master's degree (1 major) Economathematics (2024)						

Module title			Abbreviation			
Organi	zationa	ll Economics and Digit	al Transformation		12-M-OEDT-252-mo	1
Module	e coord	inator		Module offered by		
holder mics, e	of the J sp. Hu	unior Professorship of man-Machine Interaction	Applied Microecono-	Faculty of Business	Management and E	conomics
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites	1		
1 seme	ester	graduate				
Conten	its					
The con econor nomic as thos nally, t studen sights ses.	urse Or mics, w theory, se relat he cou its not o into the	ganizational Economic ith a focus on economi as well as empirical fir ed to performance mea rse integrates key aspe only gain a solid overvi e challenges, opportun	s and Digital Transform c decision-making with ndings from field studie isurement and incentiv cts of digital transform ew of the fundamental ities, and strategies as	nation introduces adv in organizations. Co es and laboratory exp es, organizational st ation shaping mode principles of organiz sociated with the dig	vanced topics in orga ncepts and tools fro periments, are incorp ructure, and authori rn business landsca ational economics b gital transformation o	anizational m microeco- oorated, such ty. Additio- pes. Thus, out also in- of busines-
Intend	ed lear	ning outcomes				
With th s z s s e	 With this course, students will be able to understand and reflect on modern microeconomic concepts and current organizational economics. students will learn to master and apply quantitative microeconomic methods. students will be enabled to classify and relate specialized knowledge from theoretical microeconomics, experimental and empirical microeconomics, business administration, and psychology. 					
Course	student s (type	, number of weekly cor	itact hours, language –	- if other than Germa	nn)	
V (2) + Module	Ü (2) e taugh	t in: English				
Metho ster, in	d of ass formati	essment (type, scope, on on whether module	language — if other th can be chosen to earn	an German, examina a bonus)	ition offered — if not	every seme-
a) writt b) term Langua Assess credita	ten exa n paper age of a sment o ible for	mination (approx. 60 n (approx. 15 pages) ssessment: English ffered: In the semester bonus	iinutes) or in which the course is	offered		
Allocat	tion of j	olaces				
Additio	onal inf	ormation				
Workload						
150 h						
Teaching cycle						
Teaching cycle: after announcement						
Referred to in LPO L (examination regulations for teaching-degree programmes)						
Module	e appea	urs in				
keinem	1 Studie	engang zugeordnet				
Master's w	ith 1 majo	r Information Systems (2025)	JMU Würzburg • ta record Maste	generated 05-Nov-2024 • ex r (120 ECTS) Information Syst	am. reg. da- tems - 2025	page 93 / 131

Module title				Abbreviation	
Optimization in Practice					12-M-OIP-252-m01
Module	e coord	inator		Module offered by	
				Faculty of Business	Management and Economics
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
5	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster				
Conten	ts				
Intende	ed lear	ning outcomes			
Course	s (type	, number of weekly conta	ct hours, language —	if other than Germa	n)
V (2) +	Ü (2)				
Module	e taugh	t in: English			
Method ster, in	d of ass formati	essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
a) writt b) term Langua Assess credita	en exa paper ge of a ment o ble for	mination (approx. 60 min (approx. 15 pages) and p ssessment: English ffered: In the semester in bonus	utes) or resentation (15 to 20 which the course is	minutes), (weighted offered	l 2:1)
Allocat	ion of p	olaces			
Additio	nal inf	ormation			
Worklo	ad				
150 h					
Teaching cycle					
Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module appears in					
keinem	keinem Studiengang zugeordnet				

Module title				Abbreviation		
Project	Project Seminar 12-M-PSI-242-mo1					
Module	e coord	inator		Module offered by		
holder Informa	of the (ation Sy	Chair of Business Manage /stems	ement and Business	Faculty of Business	Management and Economics	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
15	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
 Intendocompression S c c p T in In o g T in Intended The "Pr Subj conc tion) spec Meth new aspec Pract pract tion a Inter on c 	Studate Contents The module "Project Seminar," in which students work in small groups on a practice-relevant problem, offers a comprehensive teaching and learning experience that covers various competency areas: • Students deal with real-life problem situations that come directly from practice. This includes the detailed capture of current states (the present situation) and desired states (the target situation). Additionally, by creating a subject concept, theoretical and practical knowledge is applied in both a documenting and planning manner. • The module places great emphasis on teaching and applying various project management techniques, including work planning, resource management, and time management. • In the implementation of the developed subject concepts into an information system solution (IS solution), students practically apply their technical skills. They engage in software development, data management, and possibly aspects of artificial intelligence, depending on the project theme. • The module also promotes interdisciplinary skills. This particularly includes teamwork, which is essential in this context. Intended learning outcomes The "Project Seminar" module aims to achieve the following learning outcomes: 1. Subject-specific Competencies: Students learn to identify and design the current and desired states in subject concepts. They apply this knowledge practically by implementing it in an information system solution (IS solution). Through intensive engagement with realistic problems, students expand their basic knowledge and gain specialized expertise based on current research. 2. Methodologica					
Course	s (type	, number of weekly conta	ct hours, language —	- if other than Germa	n)	
S (2) Module	taugh	t in: German and/or Engl	ish			
Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus)						
project (approx Langua credita	project: preparing a conceptual design (approx. 150 hours), designing and implementing an approach to solution (approx. 300 hours) as well as presentation (approx. 20 minutes), weighted 1:2:1 Language of assessment: German and/or English creditable for bonus					
Allocat	ion of p	olaces				
Additio	nal inf	ormation				

Workload

300 h

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Information Systems (2024)

Module title				Abbreviation	
Research Seminar in Applied Data Science 12-M-RS-252-mo1					12-M-RS-252-m01
Module	e coord	inator		Module offered by	
holder mics	of the (Chair of Data Science in B	usiness and Econo-	Faculty of Business	Management and Economics
ECTS	Metho	od of grading	Only after succ. com	npl. of module(s)	
10	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts				
Buildin own ide dents ta	g on th eas for aking t	eir knowledge of empiric empirical research, resea his course should have a	al research methods, Irch designs, data ge n advanced knowled	, students in this cou neration, data prepa ge of statistics and e	rse will learn to develop their ration and data analysis. Stu- conometrics.
Intende	ed leari	ning outcomes			
Studen analyze and in v	ts are i e these writing	ntroduced to the latest re topics critically and inde and to critically examine	esearch questions an pendently using sem the work results of o	d methods using exc inar-based methods ther seminar particip	iting literature; they learn to and to present them both orally pants.
Course	s (type	, number of weekly conta	ct hours, language —	- if other than Germa	n)
S (2) Module	e taugh	t in: English			
Methoo ster, inf	d of ass formati	essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
term pa Langua Assess	aper (20 ge of a ment o	o to 25 pages) and prese ssessment: English ffered: In the semester in	ntation (approx. 20 m which the course is	ninutes), weighted 2: offered	1
Allocat	ion of p	olaces			
10 plac WA1: (1) Shor among ber of p ted by l	es. uld the all app places v lot as tl	number of applications licants irrespective of the vill be allocated in the sa ney become available.	exceed the number o eir subjects. (2) Place me procedure. (3) A v	f available places, pl es on all courses of th waiting list will be ma	aces will be allocated by lot ne module with a restricted num- aintained and places re-alloca-
Additio	nal inf	ormation			
Worklo	ad				
300 h					
Teaching cycle					
Teaching cycle: after announcement					
Referre	d to in	LPOI (examination regu	lations for teaching-c	degree programmes)	
Module appears in					
keinem	Studie	engang zugeordnet			

Module title			Abbreviation		
Advanced Seminar: Entrepreneurship and Management			12-M-SAS-242-m01		
Module	e coord	inator		Module offered by	
holder	of the (Chair of Entrepreneurship	and Strategy	Faculty of Business	Management and Economics
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)	
10	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts				
Studen and pre	ts deve esent th	elop seminar papers on va ne key insights from their	arying topics in the d work.	omain of entreprene	urship, strategy, and innovation
Intende	ed lear	ning outcomes			
 Educational aims Enable students to position their research Enable students to critically review a substantial body of literature in short time Enable students to develop a sound theoretical framework Enable students to create a research paper fully meeting academic standards 					
Learnir	ng outc	omes			
On suc	cessful	completion of this modu	le students will be a	ble to:	
• D • A • E • A)ifferen dopt tł ingage vrticula	tiate their research from neoretical perspectives to in comprehensive acader te abstract and complex p	previous work o understand comple nic reasoning ohenomena and rela	x phenomena tionships in written a	and oral form
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	n)
S (2) Module	e taugh	t in: German and/or Engli	ish		
Metho ster, in	d of ass formati	essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
term pa Langua Assess	aper (ap ige of a ment o	oprox. 20 pages) and pressessment: German and/ ffered: Once a year, winte	sentation (15 to 30 m /or English er semester	inutes), weighted 2:	1
Allocat	ion of p	olaces			
10 plac WA1: (1) Sho among ber of p ted by	Autocation of places 10 places. WA1: (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted num- ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-alloca- ted by lot as they become available				
Additional information					
Workload					
300 h					
Teachi	ng cycl	e			
Teachi	ng cycle	e: each semester			
Referre	ed to in	LPOI (examination regu	lations for teaching-	legree programmes)	

Module appears in

Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) Economathematics (2024)

Module title			Abbreviation		
Seminar: Beliefs and Biases				12-M-SBB-252-m01	
Module	coord	inator		Module offered by	
				Faculty of Business	Management and Economics
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
10	numei	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster				
Conten	ts				
Intende	ed learr	ning outcomes			
Course	s (type,	, number of weekly conta	ct hours, language —	if other than Germa	n)
S (2)	_				
Module	taugh	t in: English			
Methoo ster, inf	l of ass formati	s essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
term pa	per (15	to 20 pages) and preser	ntation (approx. 30 m	inutes), weighted 60	0:40
Langua	ge of a	ssessment: English fforod, In the compositor in	which the course is	offered	
Allocat	ion of p	olaces	which the course is	olleled	
10 place WA1: (1) Shor among ber of p	es. uld the all app laces v	number of applications of applications of applications of the licants irrespective of the vill be allocated in the same available.	exceed the number o eir subjects. (2) Place me procedure. (3) A v	f available places, p s on all courses of th waiting list will be m	laces will be allocated by lot he module with a restricted num- aintained and places re-alloca-
	ot as tr	ney become available.			
Additio	natinfo	Drination			
 Workla					
Referre	d to in	LPOI (examination regu	lations for teaching-c	legree programmes)	
	<u> </u>				
Module	appea	irs in			
keinem	Studie	engang zugeordnet			

Module title				Abbreviation	
Advanced Seminar: Corporate Finance 12-M-SBL-242-m01				12-M-SBL-242-m01	
Module	e coord	inator		Module offered by	
holder Finance	of the (Chair of Business Manage	ement and Corporate	Faculty of Business	Management and Economics
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
10	nume	rical grade		• • • •	
Duratio	'n	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts				
The mo studen ture-ba	dule is ts work sed, er	held as a seminar. Topic independently on the re npirical or by working inc	s from the financial s spective problems ar lependently with forn	sector and company nd prepare a term pa nal models. A paper	valuation will be assigned. The per. This can be strongly litera- on the topic is to be given.
Intende	ed lear	ning outcomes			
Studen rate fin ve-men	ts acqu ance a Itioned	uire in-depth knowledge i nd valuation. Students ar subject areas, to prepare	n important areas of re able to work indep e them in structured v	application in banki endently on more in- vritten form and to p	ng management theory, corpo- depth problems within the abo- resent them in a lecture.
Course	s (type	, number of weekly conta	ct hours, language —	if other than Germa	n)
S (2) Module	e taugh	t in: German and/or Engl	ish		
Method ster, in	l of ass formati	essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
term pa Langua	aper (20 ge of a	o to 25 pages) and prese ssessment: German and,	ntation (approx. 20 m /or English	iinutes), weighted 2:	1
Allocat	ion of p	olaces			
10 plac WA1: (1) Sho among ber of p ted by l	es. uld the all app places v lot as tl	number of applications o licants irrespective of the will be allocated in the sa hey become available.	exceed the number o eir subjects. (2) Place me procedure. (3) A	f available places, p es on all courses of t waiting list will be m	laces will be allocated by lot he module with a restricted num- aintained and places re-alloca-
Additio	nal inf	ormation			
Worklo	ad				
300 h					
Teaching cycle					
Teaching cycle: each semester					
Referre	d to in	LPOI (examination regu	lations for teaching-o	legree programmes)	
Module appears in					
Master	's degr	ee (1 major) Management	t (2024)		
Master	's degr	ee (1 major) Information S	Systems (2024)		
Master	's degr	ee (1 major) International	Economic Policy (20	24)	
Master's degree (1 major) Economathematics (2024)					

Module title			Abbreviation		
Seminar: E-Business			12-M-SEBS-252-m01		
Module	e coord	inator		Module offered by	
holder	of the (Chair of Information Syste	ems Engineering	Faculty of Business	Management and Economics
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
10	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts				
In this	course,	students will acquire im	portant knowledge a	nd skills that will ena	able them to prepare a well-struc-
Intende	ad loar	aing outcomes			it topics in L-Dusiness.
		ic literature review			
• II	ntegrat	ion of developed results	in scientific papers		
• 0	reating	presentations and talks			
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	n)
S (2)					
Module	e taugh	t in: German and/or Engl	ish		
Method ster, in	d of ass formati	s essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
term pa	aper (20	o to 25 pages) and prese	ntation (approx. 20 m	ninutes), weighted 2:	1
Langua	ige of a	ssessment: German and, fforod: Onco a year, wint	/or English		
Allocat	ion of r	lieleu: Olice a year, willo			
Allocal		Jaces			
WA1:	es.				
(1) Sho	uld the	number of applications	exceed the number o	f available places, p	laces will be allocated by lot
among	all app	licants irrespective of the	eir subjects. (2) Place	es on all courses of the	he module with a restricted num-
ber of p	blaces v	will be allocated in the sa	ime procedure. (3) A	waiting list will be m	aintained and places re-alloca-
Additio	nalinf	ormation			
	natini	omation			
Worklo	ad				
200 h					
Teachir	Teaching cycle- each semester				
Referre	d to in	LPO I (examination regu	lations for teaching-	degree programmes)	
		,			
Module	e appea	irs in			
keinem	Studie	engang zugeordnet			
L					

Module title				Abbreviation	
Advanc	Advanced Seminar: Financial Accounting 12-M-SER-242-mo1				
Module	e coord	inator		Module offered by	
holder ting	of the (Chair of Business Manage	ement and Accoun-	Faculty of Business	Management and Economics
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
10	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts				
In this i ves as a acaden Studen lowing	module a prelin nic wor ts shou areas:	e, students engage with a ninary stage for the mast k. Students will be suppo uld have an interest in a t	cademic topics in the er's thesis and aims orted in identifying ar opic from the field of	e fields of Accounting to prepare students i n area of interest and accounting or financ	g and Finance. The seminar ser- to learn important aspects of I developing a research question. ce that belongs to one of the fol-
 F C S R C V D A C 	 Iowing areas: Financial Accounting Corporate Disclosure Sustainability Reporting Reporting Standard Setting Capital Markets Valuation Digital Transformation in Accounting Auditing 				
Intende	ed learı	ning outcomes			
Upon c • lo • F • C	omplet dentify ind rele conduct	ion of this module, stude and motivate an econom evant scientific literature t a scientific discussion b	ents will be able to: ic research question and interpret and an ased on scientific fag	in the field of Accou alyze it with regard to cts and arguments.	nting or Finance; o the research question;
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	n)
S (2)					
Module	e taugh	t in: German and/or Engl	isn		
ster, in	formati	on on whether module ca	nguage — if other the an be chosen to earn	an German, examina a bonus)	tion offered — If not every seme-
term pa Langua	aper (20 ge of a	o to 25 pages) and presensessessment: German and,	ntation (approx. 20 m /or English	ninutes) (weighted 2:	1)
Allocat	ion of p	olaces			
 10 places. WA1: (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available. 					
Additio	nal inf	ormation			
Worklo	ad				
300 h					

Teaching cycle

Teaching cycle: each semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

Module appears in

Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024)

Module title			Abbreviation		
Advanced Seminar: Industrial Organization 12-M-SIO-252-mo1			12-M-SIO-252-m01		
Module	e coord	inator		Module offered by	
holder	of the (Chair of Industrial Econor	nics	Faculty of Business	Management and Economics
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
10	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts				
This co their ac and wri their fir	urse co lvisor, ite a pa ndings	overs selected advanced t will choose a topic and fo oper on this research quest orally to an audience.	topics from the field optics from the field optics from the field optication (20-30 pages).	of industrial econom Juestion. Then they a At the end of the sen	ics. Students, with the help of are expected to conduct research nester the students will present
Intende	ed lear	ning outcomes			
After cc 1. perfc 2. critic 3. desc 4. sugg 5. prese	After completing the course "Seminar: Industrieökonomik", students will be able to 1. perform a survey of the scientific literature on a given topic; 2. critically assess the economic models and their findings in the literature; 3. describe the economic mechanisms underlying important economic observations; 4. suggest future research directions; 5. prosent their findings to an audience				
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	n)
S (2) Module	e taugh	t in: English			
Methoo ster, in	d of ass formati	sessment (type, scope, la ion on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
term pa Langua	aper (a ge of a	pprox. 20 pages) and pre ssessment: English	sentation (approx. 20	o minutes); (weighte	d 2:1)
Allocat	ion of _l	olaces			
10 plac WA1: (1) Sho among ber of p ted by l	10 places. WA1: (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted num- ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-alloca- ted by lot as they become available				
Additio	nal inf	ormation			
Workload					
300 h					
Teaching cycle					
Teachir	ng cycle	e: each semester			
Referre	d to in	LPOI (examination regu	lations for teaching of	legree programmes)	
				<u> </u>	
Module	annes	ars in			
koinom	keinem Studiengeng zugeerdnet				

keinem Studiengang zugeordnet

Module	e title		Abbreviation				
Strateg	gic Man	agement of Global Supp	ly Chains		12-M-SMGS-242-m01		
Module	e coord	inator		Module offered by			
holder	of the (Chair of Logistics and Qua	antitative Methods Faculty of Business Management and Economics				
ECTS Method of grading		Only after succ. compl. of module(s)					
5	nume	rical grade					
Duration		Module level	Other prerequisites				
1 semester		graduate					
Conten	ts						
Description: In the course "Strategic Management of Global Supply Chains", students will become familiar with the basic principles of building an efficient global supply chain and will apply what they have learned working on multiple case studies.							
Intende	ed leari	ning outcomes					
After completing this course students (i) can apply the basic methods and concepts of supply chain management to practical settings and evaluate the results, and (ii) understand the effects of global value chains onto strategic company decisions.							
Course	s (type	, number of weekly conta	ct hours, language —	if other than Germa	n)		
V (2) + Ü (2) Module taught in: English							
Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus)							
written examination (approx. 60 minutes) Language of assessment: English creditable for bonus							
Allocat	ion of p	olaces					
Additio	onal info	ormation					
Worklo	ad						
150 h							
Teaching cycle							
Teaching cycle: no courses offered							
Referred to in LPO I (examination regulations for teaching-degree programmes)							
Module appears in							
Master's degree (1 major) Management International (2024)							
Master's degree (1 major) Management (2024)							
Master's degree (1 major) Information Systems (2024)							
Master	Master's degree (1 major) International Economic Policy (2024)						
Master's degree (1 major) Economathematics (2024)							

Module	title		Abbreviation				
Advanc	ed Sen	ninar: Econometrics			12-M-SOE-242-m01		
Module	coord	inator		Module offered by			
holder of the Chair of Econometrics			Faculty of Business Management and Economics				
ECTS Method of grading		od of grading	Only after succ. compl. of module(s)				
10	nume	rical grade					
Duration		Module level	Other prerequisites				
1 semester		graduate					
Conten	ts						
This module will take the form of a seminar and will cover advanced topics in econometrics. Students will be re- quired to independently familiarise themselves with the respective topics and to present the results of their work both in a seminar paper and orally during a seminar session.							
Intende	d lear	ning outcomes					
Student can pre	ts are a sent th	able to analyze independ ie results orally and in wr	ently academic publi iting by conventional	cations on their releves scientific standards	vance for a given theme. They		
Courses	s (type	, number of weekly conta	ct hours, language —	· if other than Germa	n)		
S (2) Module	taugh	t in: English					
Method of assessment (type, scope, language — if other than German, examination offered — if not every seme-							
ster, inf	ormati	on on whether module ca	an be chosen to earn	a bonus)			
term paper (approx. 15 pages) and presentation (approx. 20 minutes); (weighted 2:1) Language of assessment: English							
Allocation of places							
 10 places. WA1: (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available. 							
Additional information							
Workload							
300 h							
Teaching cycle							
Teaching cycle: each semester							
Referred to in LPO I (examination regulations for teaching-degree programmes)							
Module appears in							
Master's degree (1 major) Management (2024)							
Master's degree (1 major) Information Systems (2024)							
Master'	Master's degree (1 major) International Economic Policy (2024)						
master's degree (1 major) Economathematics (2024)							

Module	e title		Abbreviation				
Advanc	ed Sen	ninar: Topics in Personne	12-M-SPO-242-m01				
Module coordinator				Module offered by			
holder Organis	of the (sation	Chair for Human Resource	e Management and	Faculty of Business Management and Economics			
ECTS	Metho	od of grading	Only after succ. compl. of module(s)				
10 numerical grade							
Duration		Module level	Other prerequisites				
1 seme	ster	graduate					
Conten	ts						
Studen sources	ts will v s mana	write a seminar paper on, gement and organisation	deliver a talk on and . Topics will be anno	l discuss current issi unced for each semi	ues in the field of human re- nar separately.		
Intende	ed learn	ning outcomes	·		i		
The stu man res	dents l source	earn to handle, write in o management and organi	wn words, present, a sation.	and discuss current r	esearch literature in the area hu-		
Course	s (type.	number of weekly conta	ct hours, language –	- if other than Germa	n)		
S (2)	tough	t in English			,		
Module			ununga if ath author		tion offered if not even come		
Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus)							
term paper (approx. 20 pages) and presentation with sub-presentation including discussion (approx. 50 minu- tes), weighted 1:1							
Allocation of places							
 10 places. WA1: (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available. 							
Additional information							
Workload							
300 h							
Teaching cycle							
Teaching cycle: each semester							
Referred to in LPO I (examination regulations for teaching-degree programmes)							
Module appears in							
Master's degree (1 major) Management (2024)							
Master	Master's degree (1 major) Information Systems (2024)						
Master	Master's degree (1 major) International Economic Policy (2024)						
Master's degree (1 major) Economathematics (2024)							
Module title			Abbreviation				
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Advanced Seminar: Analytical Tax Research			12-M-SSL-242-m01				
Module coordinator		Module offered by					
holder of the Chair of Business Manag Taxation	ement and Business	Faculty of Business	Management and Economics				
ECTS Method of grading	Only after succ. con	pl. of module(s)					
10 numerical grade							
Duration Module level	Other prerequisites						
1 semester graduate							
Contents							
In this seminar, current problems of ta arch papers in German and/or English Although the seminar will be held in G if a participant prefers this to German.	x research will be ana language. erman, individual ser	Ilysed. Usually, stud	ents will read and discuss rese- written and discussed in English				
Intended learning outcomes	-						
After the seminar, students are able • to analyze a complex issue in ta. • to identify problems and to sugg • to formulate and to defend their	xation using research est solutions, analysis and suggest	methods, ed solutions.					
Courses (type, number of weekly conta	act hours, language –	· if other than Germa	n)				
S (2) Module taught in: German and/or Eng	lish						
Method of assessment (type, scope, la ster, information on whether module of	anguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-				
term paper (20 to 25 pages) and prese Language of assessment: German and	ntation (approx. 20 m /or English	iinutes), weighted 2:	1				
Allocation of places							
 10 places. WA1: (1) Should the number of applications among all applicants irrespective of the ber of places will be allocated in the stated by lot as they become available. 	exceed the number o eir subjects. (2) Place ame procedure. (3) A	f available places, pl s on all courses of th waiting list will be m	laces will be allocated by lot ne module with a restricted num- aintained and places re-alloca-				
Additional information							
Workload							
300 h							
Teaching cycle							
Teaching cycle: each semester							
Referred to in LPO I (examination regu	llations for teaching-o	legree programmes)					
Module appears in							
Master's degree (1 major) Managemen	t (2024)						
Master's degree (1 major) Information	Systems (2024)						
Master's degree (1 major) Economathe	matics (2024)						

Module title			Abbreviation		
Advanced Seminar: Public F	12-M-SV5-242-m01				
Module coordinator			Module offered by		
holder of the Chair of Public	: Finance		Faculty of Business	Management and Economics	
ECTS Method of grading		Only after succ. com	pl. of module(s)		
10 numerical grade					
Duration Module level	l	Other prerequisites			
1 semester graduate					
Contents					
Gaining a more in-depth un tific economic journal article	derstandinន es in Germa	g of specific problems In and English langua	s discussed in lectur ge.	es on public finance using scien-	
Intended learning outcome	s				
After the seminar, students (i) consolidate acquired kno (ii) create, present and defe (iii) deal with the working pa (iv) prepare beter for the pro	can owledge and end a scient apers of oth ocessing of	d if necessary apply a ific paper; ier participants; the master's thesis.	dditional technique	s of scientific work;	
Courses (type, number of w	eekly conta	ct hours, language —	if other than Germa	n)	
S (2) Module taught in: English					
Method of assessment (typ ster, information on whethe	e, scope, la er module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
term paper (20 to 25 pages) Language of assessment: E Assessment offered: Once a) and preser nglish a year, sumr	ntation (approx. 20 m ner semester	inutes), weighted 2:	1	
Allocation of places					
10 places. WA1: (1) Should the number of ap among all applicants irresp ber of places will be allocat ted by lot as they become a	oplications of ective of the ed in the sa vailable.	exceed the number of eir subjects. (2) Place me procedure. (3) A v	f available places, pl s on all courses of th vaiting list will be m	laces will be allocated by lot ne module with a restricted num- aintained and places re-alloca-	
Additional information					
Workload					
300 h					
Teaching cycle					
Teaching cycle: each semester					
Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module appears in					
Module appears in Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) International Economic Policy (2024) Master's degree (1 major) Economathematics (2024)					

Module title				Abbreviation		
Practio	Practical Seminar: Economic Journalism 12-M-SWJ-242-mo1					
Modul	e coord	inator		Module offered by		
holder	of the l	Professorship of Economi	c Journalism	Faculty of Business	Management and Economics	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)		
10	nume	rical grade				
Durati	on	Module level	Other prerequisites			
1 seme	ester	graduate				
Conte	nts					
Studer their p ledge as wel ment c	nts will laceme of econe l as to s compan	acquire an in-depth insig nts at company or other i omics journalism. Studen ubmit proof of regular att y is to be submitted.	ht into the practical s nstitution at which th ts will be required to rendance and particip	ide of economics jou ney will have an oppo prepare a practical u pation. In addition, a	urnalism. They must complete ortunity to gain an in-depth know- report on the placement module a certificate issued by the place-	
Intend	ed lear	ning outcomes				
The mo	odule st nomics	rengthens practical com journalism.	petences and encour	ages work experienc	es. It prepares for the career start	
Course	es (type	, number of weekly conta	ct hours, language —	- if other than Germa	n)	
S (2) Modul	e taugh	t in: German and/or Engl	ish			
Metho ster, ir	d of ass Iformati	sessment (type, scope, la ion on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
portfol Langu	io on ol age of a	bservation visit, including ssessment: German and,	g work samples (appr ′or English	ox. 40 pages)		
Alloca	tion of _l	olaces				
10 plac WA1: (1) Sho among ber of ted by	ces. ould the g all app places v lot as t	number of applications of alicants irrespective of the will be allocated in the sa hey become available.	exceed the number o eir subjects. (2) Place me procedure. (3) A	f available places, pl es on all courses of th waiting list will be m	laces will be allocated by lot ne module with a restricted num- aintained and places re-alloca-	
Additi	onal inf	ormation				
Workle	bad					
300 h						
Teachi	Teaching cycle					
Teachi	Teaching cycle: each semester					
Referr	ed to in	LPO I (examination regu	lations for teaching-o	legree programmes)		
			<u></u>	<u> </u>		
Modul	e appea	ars in				
Maste	r's degr	ee (1 major) Management	(2024)			
Maste	r's degr	ee (1 major) Information S	Systems (2024)			
Maste	Master's degree (1 major) Economathematics (2024)					

Module	e title				Abbreviation
Semina	ar: Beh	avioral, Organizational, a	and Labor Economics		12-M-SWOSP-252-m01
Module	e coord	linator		Module offered by	
holder	ofthe	Chair of Labour Economic	S	Faculty of Business	Management and Economics
ECTS	Meth	od of grading	Only after succ. com	pl. of module(s)	
10	nume	rical grade			
Duratio	on .	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	ts	· · · · · · · · · · · · · · · · · · ·			
This se people allow s The rec and the	minar i 's socia tudent curring e schoo	targets any students inter al behavior and social pre s to acquire the necessar topic will be related to th ol in shaping children's so	rested in acquiring the eferences. We will rea y empirical tools to co e origins of social col pocial behavior and pro	e skills to conduct a d and discuss scien onduct an empirical nesion and social pre eferences.	n empirical study to understand tific methodological papers that thesis. eferences, the role of the family
Intende	ed lear	ning outcomes			
This se ses on the det	minar i the acc ermina	is designed to acquire the quisition of empirical tool ants of social behavior an	e skills to write a mas s - mostly related to e d preferences.	ter thesis at the Cha experimental empirio	ir of Labour Economics. It focu- cal tools - in order to understand
Course	s (type	, number of weekly conta	ct hours, language —	if other than Germa	n)
S (2) Module	e taugh	ıt in: English			
Metho ster, in	d of as format	sessment (type, scope, la ion on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
term pa Langua Assess	aper (2 Ige of a ment o	o to 25 pages) and presensessment: English	ntation (approx. 20 m mer semester	iinutes), weighted 2:	:1
Allocat	ion of	places			
20 plac WA1: (1) Sho among ber of p ted by	ces. uld the all app places lot as t	e number of applications olicants irrespective of the will be allocated in the sa hey become available.	exceed the number of eir subjects. (2) Place me procedure. (3) A v	f available places, p s on all courses of th waiting list will be m	laces will be allocated by lot he module with a restricted num- aintained and places re-alloca-
Additio	nal inf	ormation			
Worklo	ad				
300 h					
Teaching cycle					
Teachi	Teaching cycle: after announcement				
Referre	ed to in	LPOI (examination regu	lations for teaching-c	legree programmes)	
Module appears in					
keinem	keinem Studiengang zugeordnet				

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Module title			Abbreviation			
Topics in Artificial Intelligence 12-M-TAI-24					12-M-TAI-242-m01	
Module	e coord	inator		Module offered by		
Dean of mics	f the Fa	culty of Business Manag	ement and Econo-	Faculty of Business	Management and Economics	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
This mo • c • a • c The hol	odule s ourses dditior ourses ders of	erves the purpose of tran taken at other German o al courses offered on a s offered by new Chairs th the respective Chairs wi	sferring credits from r non-German univer: hort-term basis at are yet to be inclue Il ensure that the cou	sities ded in the FSB (subje urses are eligible for e	ect-specific provisions) credit transfer.	
Intende	ed leari	ning outcomes				
As a res	sult of a	accrediting multiple kind	s of modules, a desc	ription of acquired sl	kills cannot be given.	
Course	s (type	number of weekly conta	ct hours, language –	- if other than Germa	n)	
V (2) + Module	Ü (2) e taugh	t in: German and/or Engl	ish nguage — if other th:	an German, examina	tion offered — if not every seme-	
ster, in	formati	on on whether module ca	an be chosen to earn	a bonus)		
a) writte b) writte c) term d) prese Langua Assess credita	en exai paper entatio ge of a ment o ble for	mination (approx. 60 to 9 mination (questions cond (15 to 20 pages) or n (30 to 45 minutes) ssessment: German and, ffered: In the semester in bonus	o minutes) or erning mathematica or English which the course is	l methodology; appro offered	ox. 120 minutes) or	
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad					
150 h						
Teachir	ng cycl	e				
Teachir	ng cycle	e: after announcement				
Referre	d to in	LPOI (examination regu	lations for teaching-	degree programmes)		
Module	Module appears in					
Master	's degr	ee (1 major) Management	: (2024)			
Master	's degr	ee (1 major) Information S	Systems (2024)			
Master	Master's degree (1 major) Economathematics (2024)					

Module title			Abbreviation				
Topics in Business Analytics 12-M-TBA-242					12-M-TBA-242-m01		
Module	e coord	inator		Module offered by			
Dean of mics	f the Fa	culty of Business Manag	ement and Econo-	Faculty of Business	Management and Economics		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)			
5	nume	rical grade					
Duratio	n	Module level	Other prerequisites				
1 seme	ster	graduate					
Conten	ts						
This mo • c • a • c The hol	 This module serves the purpose of transferring credits from courses taken at other German or non-German universities additional courses offered on a short-term basis courses offered by new Chairs that are yet to be included in the FSB (subject-specific provisions) 						
Intende	ed leari	ning outcomes					
As a res	sult of a	accrediting multiple kind	s of modules, a desc	ription of acquired sl	kills cannot be given.		
Course	s (type	number of weekly conta	ct hours. language –	- if other than Germa	n)		
V (2) + Module Method	Ü (2) e taugh l of ass	t in: German and/or Engl	ish nguage — if other th	an German, examina	tion offered — if not every seme-		
ster, in	formati	on on whether module ca	an be chosen to earn	a bonus)	·····,····		
a) writte b) writte c) term d) prese Langua Assess credita	en exai paper entatio ge of a ment o ble for	mination (approx. 60 to 9 mination (questions cond (15 to 20 pages) or n (30 to 45 minutes) ssessment: German and, ffered: In the semester in bonus	o minutes) or cerning mathematica /or English which the course is	l methodology; appro offered	ox. 120 minutes) or		
Allocat	ion of p	olaces					
Additio	nal inf	ormation					
Worklo	ad						
150 h							
Teachir	ng cycl	e					
Teachir	Teaching cycle: after announcement						
Referre	d to in	LPOI (examination regu	lations for teaching-	degree programmes)			
Module	e appea	irs in					
Master	's degr	ee (1 major) Management	t (2024)				
Master	's degr	ee (1 major) Information S	Systems (2024)				
Master	Master's degree (1 major) Economathematics (2024)						

Module title			Abbreviation			
Applied Data Analysis and Machine Learning				12-M-TDS-242-m01		
Module	e coord	inator		Module offered by		
holder Econon	of the J nics of	unior Professorship of Digitization	Microeconomics, esp.	Faculty of Business	Management and E	conomics
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)		
5	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts		·			
Data so des an zed wit estimat	ience i introdu h data tion. W	s concerned with extra uction to data science a handling in Python, da e will apply the acquire	cting knowledge and va ind its application in bi ta visualization, and va id knowledge in topics	aluable insights from usiness and econom arious machine learn from business and e the techniques will b	n data assets. This co ics. Participants will ing techniques for p economics.	ourse provi- be familiari- rediction and
which s	student	ts will be able to work v	vith data on their own.	the techniques with	Je taugiit as well as	
Intende	ed lear	ning outcomes				
In this i • s • s • s	module tudent tudent tudent	e, s learn data handling a s are familiarized with 1 s gain an understandin	nd visualization in Pyth he development and e g of how to apply the ta	non. valuation of maching aught techniques to	e learning models. real data sets.	
Course	s (type	, number of weekly con	tact hours, language –	- if other than Germa	n)	
V (2) + Module	Ü (2) e taugh	t in: English				
Methoo ster, in	d of ass formati	sessment (type, scope, ion on whether module	language — if other the can be chosen to earn	an German, examina a bonus)	tion offered — if not	every seme-
a) writt b) term Langua Assess credita	en exa paper ge of a ment o ble for	mination (approx. 60 m (approx. 15 pages) ssessment: English ffered: In the semester bonus	inutes) or in which the course is	offered		
Allocat	ion of j	olaces				
Additio	nal inf	ormation				
Worklo	ad					
150 h						
Teachi	ng cycl	ρ				
Teachir	ng cycle	e: summer semester				
Referre	Paferred to in LPO L (examination regulations for teaching degree programmes)					
 Module appears in						
Master	's dear	ee (1 major) Manageme	ent International (2024)			
Master	's degr	ee (1 major) Manageme	ent (2024)			
Master	Master's degree (1 major) Information Systems (2024)					
Master	's degr	ee (1 major) Internation	al Economic Policy (20	24)		
Master	's degr	ee (1 major) Economath	ematics (2024)			
Master's wi	ith 1 majo	r Information Systems (2025)	JMU Würzburg ● ta record Maste	generated 05-Nov-2024 • exa r (120 ECTS) Information Syst	am. reg. da- ems - 2025	page 115 / 131

Module title				Abbreviation		
Applied Topics in Data Science in Business and Economics			12-M-TE-252-m01			
Modul	e coord	inator		Module offered by		
holder	of the (Thair of Data Science in F	Business and Econo-	Faculty of Business	Management and Economics	
mics	orthev			ruculty of Busiliess	munagement and Leonomies	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conter	Its					
This course aims to equip students with key empirical research methods and their applications in business and economics. The course will cover the development of empirical research ideas, research designs, data generation, data editing, and data analysis. The course will use a paper-based approach to introduce and apply these topics. Additionally, students will learn about existing panel datasets and be led to perform their own empirical research. Students that attend this course should have advanced knowledge in statistics and econometrics.						
Intend	ed lear	ning outcomes				
By the arch in	end of busine	the course, students will ss and economics.	have a comprehensiv	ve understanding of	how to conduct empirical rese-	
Course	s (type	, number of weekly conta	ct hours, language —	if other than Germa	ın)	
V (2) +	Ü (2)					
Modul	e taugh	t in: English				
Metho ster, in	d of ass formati	s essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
portfol Langua Assess credita	io (app age of a ment o ble for	rox. 50 hours) ssessment: English ffered: In the semester in bonus	which the course is	offered		
Allocat	tion of p	olaces				
Additio	onal inf	ormation				
Worklo	ad					
150 h	150 h					
Teachi	ng cycl	e				
Teachi	ng cycle	e: each semester				
Referre	ed to in	LPO I (examination regu	lations for teaching-c	legree programmes)		
Modul	e appea	ins in				
keinem Studiengang zugeordnet						

Module title				Abbreviation			
Topics in Electronic Business 12-M-TEB-242-m01					12-M-TEB-242-m01		
Module	coord	inator		Module offered by			
Dean of mics	f the Fa	culty of Business Manag	ement and Econo-	Faculty of Business	Management and Economics		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)			
5	nume	rical grade					
Duratio	n	Module level	Other prerequisites				
1 seme	ster	graduate					
Conten	ts						
This mo cu a cu The hol	 This module serves the purpose of transferring credits from courses taken at other German or non-German universities additional courses offered on a short-term basis courses offered by new Chairs that are yet to be included in the FSB (subject-specific provisions) 						
Intende	ed leari	ning outcomes					
As a res	sult of a	accrediting multiple kinds	s of modules, a desc	ription of acquired sl	kills cannot be given.		
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	n)		
V (2) + Module Method	Ü (2) e taugh l of ass	t in: German and/or Engli sessment (type, scope, la	ish nguage — if other tha	an German, examina	tion offered — if not every seme-		
a) writte b) writte c) term d) prese Langua Assesse credital	en exar en exar paper entatio ge of a ment o ble for	nination (approx. 60 to 9 mination (questions cond (15 to 20 pages) or n (30 to 45 minutes) ssessment: German and, ffered: In the semester in bonus	o minutes) or cerning mathematica /or English which the course is	l methodology; appro offered	ox. 120 minutes) or		
Allocat	ion of p	olaces					
Additio	nal inf	ormation					
Worklo	ad						
150 h							
Teachir	ng cycl	e					
Teaching cycle: after announcement							
Referre	d to in	LPO I (examination regu	lations for teaching-	degree programmes)			
				0 1 0 /			
Module	appea	irs in					
Master	s degr	ee (1 major) Management	t (2024)				
Master	s degr	ee (1 major) Information S	Systems (2024)				
Master	Master's degree (1 major) Economathematics (2024)						

Module title			Abbreviation			
Seminar: Applied Topics in Economics and Ethics of Artificial Intelligence			12-M-TEE-252-m01			
Module	e coord	inator		Module offered by		
holder mics, e	of the J sp. Hui	unior Professorship of Ap nan-Machine Interaction	plied Microecono-	Faculty of Business	Management and Economics	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
10	nume	rical grade				
Duratio	n	Module level	Other prerequisites	;		
1 seme	ster	graduate				
Conten	ts					
With the increasing effectiveness of machine learning and artificial intelligence (AI) methods, there is growing interest in understanding the potentially disruptive impact of these technologies. Artificial intelligence powers Google's search engine, enables targeted ads, is also behind self-driving cars, predictive policing, and autonomous weapons. Our goal is to look beyond the "hype" around AI by considering current research that attempts to provide a rigorous answer to questions related to the impact of AI. In particular, we will seek to understand the consequences of AI from an economic perspective by looking at non-technical AI research. In this seminar, we will discuss recent articles on important aspects of human-machine interaction. From an economic perspective, we look at the impact of algorithms in the workplace and in decision-making, as well as behavioral economic factors involved in interacting with machines. In addition, we consider ethical issues related to artificial intelligence and the potential impacts of increasingly powerful AI on husiness and						
Intende	d lear	ning outcomes				
With th	is somi	nar				
• si • si • si • si • si	tudents tudents omic s tudents tudents dminis	s learn how to present res s will be equipped to unc tudies, especially in the s will learn to incorporate s will be able to classify a tration, and psychology.	search in a structure lerstand and reflect o domain of human-ma e ethical concerns in and relate specialized	d manner, both orally on advanced current achine interaction. their economic decis d knowledge from be	y and in writing. theoretical and empirical eco- ion-making processes. havioral economics, business	
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	n)	
S (2)						
Module Method ster, inf	taugh d of ass formati	t in: English s essment (type, scope, la on on whether module ca	nguage — if other th an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
term pa Langua Assessi	aper (15 ge of a ment o	to 20 pages) and preser ssessment: English ffered: In the semester in	ntation (approx. 30 m which the course is	iinutes); (weighted 6 offered	0:40)	
Allocat	ion of p	olaces				
10 places. WA1: (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted num- ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-alloca- ted by lot as they become available.						
Additio	nal inf	ormation				
Worklo	ad					
300 h						

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

keinem Studiengang zugeordnet

Module title			Abbreviation				
Topics in Enterprise Systems 12-M-TES-242-m01					12-M-TES-242-m01		
Module	coord	inator		Module offered by			
Dean of mics	f the Fa	culty of Business Manag	ement and Econo-	Faculty of Business	Management and Economics		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)			
5	nume	rical grade					
Duratio	n	Module level	Other prerequisites				
1 seme	ster	graduate					
Conten	ts						
This mo cu a cu The hol	 This module serves the purpose of transferring credits from courses taken at other German or non-German universities additional courses offered on a short-term basis courses offered by new Chairs that are yet to be included in the FSB (subject-specific provisions) 						
Intende	ed leari	ning outcomes					
As a res	sult of a	accrediting multiple kinds	s of modules, a desc	ription of acquired sl	kills cannot be given.		
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	n)		
V (2) + Module Method	Ü (2) e taugh l of ass formati	t in: German and/or Engli sessment (type, scope, la	ish nguage — if other th	an German, examina	tion offered — if not every seme-		
a) writte b) writt c) term d) press Langua Assess credita	en exai en exai paper entatio ge of a ment o ble for	nination (approx. 60 to 9 mination (questions cond (15 to 20 pages) or n (30 to 45 minutes) ssessment: German and, ffered: In the semester in bonus	o minutes) or cerning mathematica /or English which the course is	l methodology; appro offered	ox. 120 minutes) or		
Allocat	ion of p	olaces					
Additio	nal inf	ormation					
Worklo	ad						
150 h							
Teaching cycle							
Teaching cycle: after announcement							
Referre	d to in	LPO I (examination regu	lations for teaching-	degree programmes)			
				0 1 0 /			
Module	appea	irs in					
Master	s degr	ee (1 major) Management	t (2024)				
Master	s degr	ee (1 major) Information S	Systems (2024)				
Master	Master's degree (1 major) Economathematics (2024)						

Module title			Abbreviation			
Enterprise AI and Urban Analytics			12-M-UAAI-242-m01			
Module	coord	inator		Module offered by		
holder (prise	of the (Chair of Business Informa	tics and AI for Enter-	Faculty of Business	Management and Economics	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)		
10	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 semes	ster	graduate				
Conten	ts					
The seminar addresses advanced questions from research and teaching of the Chair for Enterprise AI. This inclu- des both methodological questions from the fields of AI & Data Science and domain-specific questions from the areas of energy, mobility, and smart cities. An overview of the topics can be obtained by visiting the chair's web- site.						
Intende	d learn	ning outcomes				
With the ster's le	e assis evel an	tance of the chair, studer d to communicate the res	nts learn to tackle a c sults in presentations	uestion according to and a written semir	o scientific standards at a Ma- nar paper.	
Courses	s (type,	, number of weekly conta	ct hours, language —	· if other than Germa	n)	
S (2) Module	taugh	t in: English				
Method ster, inf	l of ass ormati	e ssment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
term pa Langua	per (20 ge of a	o to 25 pages) and preser ssessment: English	ntation (approx. 20 m	iinutes), weighted 2:	1	
Allocati	ion of p	olaces				
10 place WA1: (1) Shou among ber of p ted by l	es. uld the all app laces v ot as th	number of applications of licants irrespective of the vill be allocated in the sa ney become available.	exceed the number o eir subjects. (2) Place me procedure. (3) A v	f available places, pl s on all courses of th waiting list will be m	laces will be allocated by lot ne module with a restricted num- aintained and places re-alloca-	
Additio	nal inf	ormation				
Worklo	ad					
300 h						
Teachir	ig cycl	e				
Teachir	ıg cycle	e: each semester				
Referre	d to in	LPOI (examination regu	lations for teaching-c	legree programmes)		
Module	appea	rs in				
Master'	s degre	ee (1 major) Management	: (2024)			
Master'	s degre	ee (1 major) Information S	Systems (2024)			
Master'	s degre	ee (1 major) International	Economic Policy (20	24)		
master	s aegre	ee (1 major) Economathei	naucs (2024)			

Module title					Abbreviation		
Corporate Entrepreneurship and Innovation 12-M-UGF1-242-mo1							
Module coordinator				Module offered by			
holder	of the (Chair of Entrepreneurs	nip and Strategy	Faculty of Business	Management and E	conomics	
ECTS	ECTS Method of grading Only after succ. con			npl. of module(s)			
5	nume	rical grade					
Duratio	on	Module level	Other prerequisites	es			
1 seme	ster	graduate					
Conten	ts						
Contents This module is a theory-led and practice-oriented primer on corporate entrepreneurship. It provides you with knowledge useful for anyone aiming at working (or researching) in the field of corporate innovation and entrepreneurship or at pursuing an 'intrapreneurial' or entrepreneurial career. (1) Introduction to corporate entrepreneurship (2) Antecedents and forms of corporate entrepreneurship (3) Corporate strategy and corporate entrepreneurship (4) Organizational structure and corporate entrepreneurship (5) Human resource management and corporate entrepreneurship (6) Building supportive organizational cultures (7) Entrepreneurial control systems (8) Entrepreneurial leadership (9) The corporate entrepreneurship (10) The pay-off from corporate entrepreneurship (11) Orporate venture capital (12) Corporate entrepreneurship (13) Universities and academic spin-offs (14) Wrap-up and Q&A Intended learning outcomes Educational aims • Clarify the role of corporate entrepreneurship							
 Enable students to critically appraise alternative approaches to corporate entrepreneurship Enable students to evaluate the boundaries and risks of corporate entrepreneurship 							
On suc	cessful	completion of this mo	dule students will be a	ble to:			
 Create and evaluate concepts related to corporate entrepreneurship Assess the role of corporate entrepreneurship for creating and sustaining competitive advantage Make judgements about the organizational and managerial implications of corporate entrepreneurship Systematically choose between different routes of action 							
Courses (type, number of weekly contact hours, language — if other than German)							
V (2) + Ü (2) Module taught in: English							
Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus)							
a) written examination (approx. 60 to 120 minutes) or b) term paper (15 to 20 pages) or c) oral examination of one candicate each (approx. 10 to 15 minutes) or oral examination in groups (groups of 2 approx. 20 minutes, groups of 3 approx. 30 minutes) Language of assessment: English							
Master's w	Master's with 1 major Information Systems (2025) JMU Würzburg • generated 05-Nov-2024 • exam. reg. da- ta record Master (120 ECTS) Information Systems - 2025 page 122 / 131						

Allocation of places

Additional information

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Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Management International (2024) Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) International Economic Policy (2024)

Master's degree (1 major) Economathematics (2024)

Module title					Abbreviation	
Corporate Strategy 12-M-UGF2-182-m01						
Module coordinator				Module offered by		
holder of the Chair of Entrepreneurship and S		p and Strategy	Faculty of Business	Management and E	conomics	
ECTS Method of grading Only after succ.			Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
This the porate private chelor-	eory-leo strateg or pub level m eloping	d and application-oriento y—essential for anyone lic sector. The module go odules.	ed module provides y aspiring to take on lea oes beyond basic kno competitive advantag	ou with critical know adership roles in the wledge about strate re	vledge and skills rela ir future career, may gic management pro	ted to cor- it be in the vided by ba-
 (1) Developing strategies in pursuit of competitive advantage (2) Corporate diversification (3) Vertical integration and outsourcing (4) Mergers & acquisitions (5) Dynamic strategies (6) Cooperative strategies (7) Corporate spin-offs and spin-outs (8) Internationalization strategies (I) (9) Internationalization strategies (II) (10) Strategic change (11) Corporate strategies and new technologies (12) Corporate governance and corporate social responsibility (13) Corporate communication and crisis management 						
Intended learning outcomes						
 Educational aims Clarify the role of corporate strategy Explain theoretical concepts and mechanisms behind corporate strategy Enable students to critically appraise alternative approaches to corporate strategy Enable students to evaluate the boundaries and risks of corporate strategy 						
Learning outcomes						
On successful completion of this module students will be able to:						
 Assess the role of corporate strategy for creating and sustaining competitive advantage Create and evaluate concepts related to corporate strategy Make judgements about the organizational and managerial implications of corporate strategy Systematically choose between different routes of action 						
Courses (type, number of weekly contact hours, language — if other than German)						
V (2) + Ü (2) Module taught in: English						
Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus)						
a) written examination (approx. 60 to 120 minutes) or b) term paper (15 to 20 pages) or c) oral examination of one candidate each (approx. 10 to 15 minutes) or oral examination in groups (groups of 2 approx. 20 minutes, groups of 3 approx. 30 minutes) Language of assessment: English Master's with 1 major Information Systems (2025) JMU Würzburg • generated 05-Nov-2024 • exam. reg. da- ta record Master (120 ECTS) Information Systems - 2025						

Allocation of places

Additional information

Workload

150 h

Teaching cycle

Teaching cycle: winter semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

Module appears in

Master's degree (1 major) Management (2018)
Master's degree (1 major) International Economic Policy (2018)
Master's degree (1 major) China Business and Economics (2019)
Master's degree (1 major) China Language and Economy (2019)
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) China Business and Economics (2021)
Master's degree (1 major) China Language and Economy (2021)
Master's degree (1 major) Economathematics (2021)
Master's degree (1 major) Information Systems (2022)
Master's degree (1 major) International Economic Policy (2022)
Master's degree (1 major) Management (2022)
Master's degree (1 major) Economathematics (2022)
exchange program Business Management and Economics (2022)
Master's degree (1 major) Management International (2024)
Master's degree (1 major) Management (2024)
Master's degree (1 major) Information Systems (2024)
Master's degree (1 major) International Economic Policy (2024)
Master's degree (1 major) Economathematics (2024)

Module title					Abbreviation		
Digital Entrepreneurship and Digital Transformation				12-M-UGF3-242-m01			
Module coordinator				Module offered by			
holder of the Chair of Entrepreneurship			p and Strategy	Faculty of Business	Management and Economics		
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)			
5	nume	rical grade					
Duratio	on	Module level	Other prerequisites				
1 seme	ster	graduate					
Conten	Its						
This m (1) Intro (2) Dig (3) Iden (4) Stra (5) Digi (6) Cro (7) Des (8) Lea (9) Plat (10) Dig (11) Tho (12) Cro (13) Cy (14) Wr Intendo Educat cepts a	ContentsThis module provides an introduction into digital entrepreneurship and digital transformation.(1) Introduction(2) Digital business models(3) Identifying and exploiting opportunities for digital entrepreneurship(4) Strategies for creating competitive advantage in digital entrepreneurship(5) Digital marketing for entrepreneurs(6) Crowdfunding for entrepreneurs(7) Design thinking(8) Lean startup(9) Platform ecosystems and online communities(10) Digital strategy and digital transformation(11) The agile organization(12) Crowdsourcing(13) Cyberfraud(14) Wrap-up and Q&AIntended learning outcomesEducational aims: Clarify the role of digital entrepreneurship and digital transformation. Explain theoretical con-						
appraise alternative approaches to digital entrepreneurship and digital transformation. Enable students to eva- luate the boundaries and risks of digital entrepreneurship and digital transformation Learning outcomes: On successful completion of this module students will be able to (1) Assess the role of di- gital entrepreneurship and digital transformation for creating and sustaining competitive advantage, (2) Crea- te and evaluate concepts related to digital entrepreneurship and digital transformation, (3) Make judgements about the organizational and managerial implications of digital entrepreneurship and digital transformation, (4) Systematically choose between different routes of action							
Course	s (type	, number of weekly cont	act hours, language –	· if other than Germa	n)		
V (2) + Ü (2) Module taught in: English							
Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus)							
a) written examination (approx. 60 to 120 minutes) or b) term paper (15 to 20 pages) or c) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) Language of assessment: English							
Allocat	ion of _l	olaces					
Additional information							

Workload

150 h

Teaching cycle

Teaching cycle: summer semester

Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Management International (2024)

Master's degree (1 major) Management (2024)

Master's degree (1 major) Information Systems (2024)

Master's degree (1 major) International Economic Policy (2024)

Master's degree (1 major) Economathematics (2024)

Module title				Abbreviation			
Project Modul: Journalism in Economic Policy 12-M-WPJ-242-mo1							
Module	e coordinator		Module offered by				
holder of the Professorship of Economi		ic Journalism	Faculty of Business	Management and Economics			
ECTS	Method of grading	Only after succ. con	npl. of module(s)				
10	numerical grade						
Duratio	on Module level	Other prerequisites					
1 seme	ster graduate						
Econon ny med these to kes for ons wil topic th Busine Intende Studen they wi present pics in in respo	Contents Economic journalism is often regarded as unwieldy, but the reporting usually revolves around content that ma- ny media users can relate to: The focus is on market developments and (economic) political conditions. How can these topics be presented in a way that is clear, easy to understand, and yet as precise as possible? What ma- kes for good economic reporting? What research options and forms of presentation are available? Such questi- ons will first be answered using examples from various media. Subsequently, the students will work on the main topic themselves. The seminar is thematically oriented towards current research projects/projects of the Chair of Business Journalism and Business Communication and can therefore vary thematically per semester. Intended learning outcomes Students learn the terminology, topics, and framework of economic journalism. After completing the seminar they will have an overview of selected areas of application. They master the research and the different forms of presentation of economic journalism. The students learn scientific methods to break down complex economic to- pics in reporting. After completing the seminar, students are able to independently examine journalistic products						
acquire	e subject as well as specific met	hodological compete	incies in this semina	r.			
S (2) Module	e taught in: German and/or Engl	ish		11)			
Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus)							
portfolio (e. g. record of research activities, commentary, text analyses of different types of media); approx. 3 items with a duration of 3 minutes each, audio/video format or text format approx. 20 pages Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered creditable for bonus							
Allocat	ion of places						
 10 places. WA1: (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated by lot as they become available. 							
Additional information							
Workload							
300 h							
Teaching cycle							
Teaching cycle: after announcement							
Referred to in LPO I (examination regulations for teaching-degree programmes)							

Module appears in

Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) International Economic Policy (2024) Master's degree (1 major) Economathematics (2024)

Module title				Abbreviation		
Economic and Business Ethics 12-M-WUE-242-mo1					12-M-WUE-242-m01	
Module coordinator				Module offered by		
holder Taxatio	of the (n	Chair of Business Manage	ement and Business	Faculty of Business	Management and Economics	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)		
10	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
In this s ship et	semina hics, co	r, students will gain an o prruption, ethcial theories	verview of different e s, consumer ethics, C	thical aspects in bus SR.	siness and economy, e.g. leader-	
Intende	ed learı	ning outcomes				
Using c ethcial and un	ommo proble derstar	n scientific methods the s m in business and/or eco ndable way und he/she s	student should be ab pnomiy. He/she shou hould discuss the arg	le to write a seminar ld be able to presen guments with other p	paper dealing with a selected t a complex problem in an clear participants in the class.	
Course	s (type	, number of weekly conta	ct hours, language —	· if other than Germa	n)	
S (2) Module	e taugh	t in: German and/or Engli	ish			
Methoo ster, inf	l of ass formati	s essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
term pa Langua	aper (20 ge of a	o to 25 pages) and preser ssessment: German and/	ntation (approx. 20 m for English	ninutes), weighted 2:	1	
Allocation of places						
10 places. WA1: (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted num- ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-alloca- ted by lot as they become available.						
Additional information						
Workload						
300 h						
Teaching cycle						
Teaching cycle: each semester						
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module appears in						
Master's degree (1 major) Management (2024)						
Master	Master's degree (1 major) Information Systems (2024)					
Master's degree (1 major) International Economic Policy (2024)						
Master's degree (1 major) Economathematics (2024)						

Module title					Abbreviation	
Master Thesis Information Systems 12-WI-MA-192-m01						
Module coordinator				Module offered by		
Dean of the Faculty of Business Management and Econo- mics				Faculty of Business	Management and Economics	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
30	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
Students will complete their degree with a Master's thesis in which they will be required to independently rese- arch and write on a topic in the area of business management and economics, drawing on the subject-specific knowledge they have acquired and adhering to the principles of good scientific practice. This thesis may either take the form of an analysis and structured presentation of the existing literature on a certain topic or may, as is often the case, also include a presentation of the students' own original achievements, e. g. new algorithms de- veloped by students, surveys, the prototypical demonstration of a concept they developed or the application and						
Intende	d learr	ning outcomes				
problem within a specified period autonomously and to document the results in accordance with the professio- nal scientific standards in writing. Students are able to understand relevant contributions to research and pro- fessional practice, critically analyze and assess the relevance to their own specific questions. They can assess and recognize major lines of development and dynamics of the subject and therefore also the need to retrain continuously						
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	n)	
Methoo ster, inf	l of ass formati	e ssment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
Master' Langua	s thesi ge of a	s (approx. 60 to 80 page ssessment: German and,	s) /or English			
Allocat	ion of p	olaces				
Additio	nal info	ormation				
Time to complete: 6 months						
Workload						
900 h						
Teaching cycle						
Teaching cycle: each semester						
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module appears in						
Master	Master's degree (1 major) Information Systems (2019)					
Master	Master's degree (1 major) Information Systems (2022)					
Master's degree (1 major) Information Systems (2024)						