

# Module Catalogue

for the Subject

## Information Systems

as a Master's with 1 major with the degree "Master of Science" (120 ECTS credits)

Examination regulations version: 2024 Responsible: Faculty of Management and Economics

JMU Würzburg • generated 12-Jun-2025 • exam. reg. data record 88|j10|-|-|H|2024



### Contents

The subject is divided into		5
Learning Outcomes		6
Abbreviations used, Convent	tions, Notes, In accordance with	7
Compulsory Courses		8
Information Systems		9
Project Seminar		10
Compulsory Electives I: Fun	damentals Computer Science	12
Information Retrieval	·	13
Security of Software Systems		15
Software Architecture		17
Artificial Intelligence 1		19
Discrete Event Simulation		21
Advanced Programming Machine Learning for Natural Lang	uage Processing	23 25
Artificial Intelligence 2	uage Flocessing	25 27
Programming with neural nets		29
NLP and Text Mining		30
Systems Benchmarking		32
Computer Vision 1		34
Image Processing and Computatio	nal Photography	36
Multilingual NLP		38
Statistical Network Analysis Operations Research		40
Machine Learning for Networks 1		42
Data Science		44 46
Compulsory Electives II: Tra	rks	48
Track 1: Enterprise System		-
	5	49
Core	at and branks wants time of hefermatics. Contains	50
	nt and Implementation of Information Systems n Business Process Management and Automation	51
Core Electives	T business Flocess Management and Automation	53
	<b></b>	55
Professional Project Managemer Project - Current Topics in Comp		56 58
Industrial Management 1		50 60
Industrial Management 3		62
Human Resource Management a	nd Industrial Relations	64
Project Management and Contro	l	66
Software Architecture		67
Change Management		69
	osystems: Start & Scale Up, Venture Capital, Private Equity, EXIT	71
Selected Topics in Business Mar Selected Topics in Business Info	-	73
Topics in Enterprise Systems	simation systems 1	75 77
Track 2: Business Analytic	2	78
Core	5	
		79
Decision Support Systems Advanced Operations & Logistic	s Management	80 82
Analytical Information Systems	5 Management	84
Core Electives		86
Analytical Information Systems		87
Enterprise Al		89
Master's with 1 major Information Systems (2024)	JMU Würzburg • generated 12-Jun-2025 • exam. reg. da- ta record Master (120 ECTS) Information Systems - 2024	page 2 / 216

#### Module Catalogue for the Subject Information Systems Master's with 1 major, 120 ECTS credits

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Master's with 1 major Information Systems (2024)       JMU Würzburg • generated 12-Jun-2025 • exam. reg. da- ta record Master (120 ECTS) Information Systems - 2024	page 3 / 216
Project: Selected Topics in Business Management and Economics I	187
Project Modul: Journalism in Economic Policy	185
Practical Seminar: Economic Journalism	183
Economic and Business Ethics	181
Seminar: Applied Analytics in Logistics & Supply Chain Management	179
Business Analytics	177
Advanced Seminar: Managerial Accounting	175 175
Advanced Seminar: Entrepreneurship and Management	171
Advanced Seminar: Topics in Personnel Economics and Organizational Theory	171
Advanced Seminar: Enterprise Systems	169
Advanced Seminar: Corporate Finance Advanced Seminar: Analytical Tax Research	165
Advanced Seminar: Financial Accounting Advanced Seminar: Corporate Finance	163 165
Advanced Seminar: Industrial Management Advanced Seminar: Financial Accounting	161 162
Advanced Seminar: Marketing Strategy	159
	158
Compulsory Electives III: Seminar	
Topics in Artificial Intelligence	155 156
Selected Topics in Business Management and Economics 4 Selected Topics in Business Information Systems 4	153
Multilingual NLP Selected Topics in Business Management and Economics /	151
Machine Learning for Natural Language Processing	149
Statistical Network Analysis	147
Applied Data Science in Business and Economics	146
Marketing Analytics	144
Topics in Data Science	142
Computer Vision 1	140
Core Electives	139
Analytical Information Systems	137
Enterprise Al	135
Core	134
Track 4: Artificial Intelligence	133
Topics in Electronic Business	132
Selected Topics in Business Information Systems 3	131
Selected Topics in Business Management and Economics 3	129
Strategic Managerial Accounting	127
Strategic Management of Global Supply Chains	125
E-Commerce	121
Digital Entrepreneurship and Digital Transformation Marketing Analytics	119 121
Corporate Strategy	117
Corporate Entrepreneurship and Innovation	115
Core Electives	114
Mobile and Ubiquitous Business	112
E-Business Strategies	110
Core	109
Track 3: Electronic Business	108
Topics in Business Analytics	106
Selected Topics in Business Information Systems 2	104
Selected Topics in Business Management and Economics 2	102
Organizational Economics and Digital Transformation	100
Applied Data Analysis and Machine Learning	98
Applied Data Science in Business and Economics	95 97
Global Logistics & Supply Chain Management Topics in Data Science	93
Operations Research	91
Operations Research	



Project: Selected Topics in Business Management and Economics II	188
International Economics 1	189
International Economics 2	191
International Economics 3	193
Seminar: International Economics	195
Advanced Seminar: Industrial Organization	197
Advanced Seminar: Labour Economics	198
Advanced Seminar: Public Finance	199
Advanced Seminar: Econometrics	201
Seminar: Macroeconomics and Quantitative Economic Research	203
Seminar: Strategic Incentive Design	205
Seminar: E-Business Strategies	207
Seminar: Topics in Economics and Ethics of Artificial Intelligence	208
Research Seminar in Applied Data Science	210
Enterprise AI and Urban Analytics	211
Seminar: International Climate Policy	213
Thesis	215
Master Thesis Information Systems	216



### The subject is divided into

section / sub-section	ECTS credits	starting page
Compulsory Courses	20	8
Compulsory Electives I: Fundamentals Computer Science	20	12
Compulsory Electives II: Tracks	40	48
Track 1: Enterprise Systems	20	49
Core	10	50
Core Electives	10	55
Track 2: Business Analytics	20	78
Core	10	79
Core Electives	10	86
Track 3: Electronic Business	20	108
Core	10	109
Core Electives	10	114
Track 4: Artificial Intelligence	20	133
Core	10	134
Core Electives	10	139
Compulsory Electives III: Seminar	10	158
Thesis	30	215

### **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 anwendungsbezogene 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 Modellen 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)):

### 20-Mar-2024 (2024-29)

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.



## **Compulsory Courses**

(20 ECTS credits)

Information Systems       Inspace       I	Module title			Abbreviation		
holder of the Chair of Information Systems Engineering       Faculty of Management and Economics         ECTS       Method of grading       Only after succ. compl. of module(s)         5       numerical grade          Duration       Module level       Other prerequisites         1 semester       graduate          Contents         The course provides an overview of key strategic and operational aspects of the management of information and information systems in organizations. The focus is on (a) enterprise systems, (b) e-business, (c) business analytics and (d) enterprise AI.         Interded learning outcomes         •       Understanding the value of information and information systems from a business perspective         •       Be able to evaluate strategic and operational use cases for IT in the company         •       Get to know methods for the management and utilization of data         •       Be able to ransfer the concepts taught to praticical application examples         Courses (type, number of weekly contact hours, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)         a) written examination (approx. 6 on minutes) or b) term paper (ts to zo pages)       Language of assessment: German and/or English creditable for bonus)         Alditoral information <td< td=""><td colspan="3">Information Systems</td><td>12-M-IS-242-m01</td></td<>	Information Systems			12-M-IS-242-m01		
ECTS       Method of grading       Only after succ. compl. of module(s)         5       numerical grade          Duration       Module level       Other prerequisites         1 semester       graduate          Contents           The course provides an overview of key strategic and operational aspects of the management of information and information systems in organizations. The focus is on (a) enterprise systems, (b) e-business, (c) business analy-tics and (a) enterprise A.         Intended learning outcomes          •       Understanding the value of information and information systems from a business perspective         •       Be able to valuate strategic and operational use cases for IT in the company         •       Get to know methods for the management and utilization of data         •       Be able to transfer the concepts taught to practical application examples         Courses (wpe, number of weekly contact hours, language – if other than German)       S (2)         Module taught in: German and/or English	Module	coord	inator		Module offered by	
5     numerical grade        Duration     Module level     Other prerequisites       1 semester     graduate        Contents         Contents         Contents         Contents         Contents         Interded learning outcomes         •     Understanding the value of information and information systems from a business perspective        •     Be able to evaluate strategic and operational use cases for IT in the company        •     Get to know methods for the management and utilization of data        •     Be able to valuate strategic and operational use cases for IT in the company        •     Get to know methods for the management and utilization of data        •     Be able to transfer the concepts taught to practical application examples       Courses type, number of weekly contact hours, language – if other than German, examination offered – if not every semester, information on whether       module taught in: German and/or English       Method of assessment: (pre, scope, language – if other than German, examination offered – if not every semester, information on whether       module is creditable for bonus)       Allocation of places	holder	of the (	Chair of Information Syste	ems Engineering	Faculty of Managem	nent and Economics
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1 semester       graduate       -         Contents         Concents provides an overview of key strategic and operational aspects of the management of information and information systems in organizations. The focus is on (a) enterprise systems, (b) e-business, (c) business analytics and (d) enterprise AI.         Intended learning outcomes         •       Understanding the value of information and information systems from a business perspective         •       Be able to evaluate strategic and operational use cases for IT in the company         •       Get to know methods for the management and utilization of data         •       Be able to transfer the concepts taught to practical application examples         Courses (type, number of weekly contact hours, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)         S (a)       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 is creditable for bonus)         a) written examination (approx. 6o minutes) or       b) term paper (45 to 20 pages)         Language of assessment: German and/or English	5	nume	rical grade			
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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)         Master's degree (1 major) Information Systems (2025)         Master's degree (1 major) International Economic Policy (2025)         Master's degree (1 major) Management (2025)         Master's degree (1 major) China Business and Economics (2025)		au				
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) Information Systems (2025) Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025)			<b>a</b>			
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) Information Systems (2025)         Master's degree (1 major) International Economic Policy (2025)         Master's degree (1 major) International Economic Policy (2025)         Master's degree (1 major) Management (2025)         Master's degree (1 major) China Business and Economics (2025)						
 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) Information Systems (2025) Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025)				for toaching dogroe progra	mmoc)	
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) Information Systems (2025) Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025)					inities)	
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) Information Systems (2025) Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025)	Module					
Master's degree (1 major) Information Systems (2024) Master's degree (1 major) International Economic Policy (2024) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025)				(2024)		
Master's degree (1 major) Information Systems (2025) Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025)		-				
Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025)		-		•	24)	
Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025)		-		• -	)	
Master's degree (1 major) China Business and Economics (2025)						
		-		-	025)	
		-			-	

Module title			Abbreviation			
Project	Project Seminar			12-M-PSI-242-m01		
Module	coord	inator		Module offered by		
holder o Informa		Chair of Business Manag vstems	ement and Business	Faculty of Managem	nent and Economics	
ECTS	Metho	od of grading	Only after succ. com	npl. of module(s)		
15	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 semes	ster	graduate				
Conten	ts					
<ul> <li>S</li> <li>ca</li> <li>ci</li> <li>p</li> <li>TI</li> <li>in</li> <li>in</li> <li>o</li> <li>g</li> <li>TI</li> </ul>	<ul> <li>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.</li> <li>The module places great emphasis on teaching and applying various project management techniques, including work planning, resource management, and time management.</li> <li>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.</li> </ul>					
Intende	d learr	ning outcomes				
<ol> <li>Subjection</li> <li>Special</li> <li>Methnew a aspection</li> <li>Praction a</li> <li>Interconduction</li> </ol>	<ul> <li>The "Project Seminar" module aims to achieve the following learning outcomes:</li> <li>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.</li> <li>2. Methodological Competencies: Students enhance their problem-solving skills by independently tackling new and complex tasks in a project context and developing flexible solution strategies. They learn important aspects of project management, including planning, organizing, and executing projects within a team context.</li> <li>3. Practical Professional Competencies: By working on realistic and practice-relevant problems, students can practically apply theoretical knowledge, thereby sharpening their professional skills. Implementing an IS solution allows students to develop technical skills in information technology and system development.</li> <li>4. Interdisciplinary Competencies: Working in small project groups enhances students' abilities in communication, cooperation, and conflict resolution.</li> </ul>					
Courses	<b>5</b> (type, n	umber of weekly contact hours,	language — if other than Ger	rman)		
S (2) Module	taugh	t in: German and/or Engl	ish			
		<b>essment</b> (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, informati	ion on whether
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						
Allocati	on of p	olaces				
Additio	nal info	ormation				
Master's wi	th 1 major	Information Systems (2024)	-	generated 12-Jun-2025 • exa r (120 ECTS) Information Syst	-	page 10 / 216

#### 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) Master's degree (1 major) Information Systems (2025)



### **Compulsory Electives I: Fundamentals Computer Science**

(20 ECTS credits)

Module title			Abbreviation			
Inform	ation R	etrieval			10-I=IR-212-m01	
Module	e coord	linator		Module offered by		
holder	of the	Chair of Computer Scier	nce XII	Institute of Comput	er Science	
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade		· · · · · · · · · · · · · · · · · · ·		
Duratio	•	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten			<u> </u>			
IR models (e. g. Boolean and vector space model, evaluation), processing of text (tokenising, text properties), data structures (e. g. inverted index), query elements (e. g. query operations, relevance feedback, query langua- ges and paradigms, structured queries), search engine (e. g. architecture, crawling, interfaces, link analysis), me- thods to support IR (e. g. recommendation systems, text clustering and classification, information extraction).						
Intende	ed lear	ning outcomes				
		possess theoretical and know-how to create a se		n the area of informa	ation retrieval and ha	ave acquired
		number of weekly contact hours		rman)		
V (2) +	_	· · · · · ·				
Metho	d of as	<b>sessment</b> (type, scope, lang ble for bonus)	uage — if other than German,	examination offered — if no	t every semester, informat	ion on whether
prox. 1	5 minu age of <i>a</i>	of one candidate each (a tes per candidate). assessment: German an bonus		an oral examination	in groups of 2 cand	idates (ap-
Allocat	ion of	places				
Additio	onal inf	ormation				
Focuse IT,KI,H(		able for students of the	Master's programme I	nformatik (Computer	Science, 120 ECTS of	credits):
Worklo	ad					
150 h						
Teachi	ng cycl	e				
Referre	ed to in	LPO I (examination regulation	ons for teaching-degree progra	immes)		
Module	e appea	ars in				
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) Mathematics (2022)						
Master's degree (1 major) Computer Science (2023) Master's degree (1 major) Computational Mathematics (2024)						
	Master's degree (1 major) Computational Mathematics (2024) Master's degree (1 major) Mathematics (2024)					
	Master's degree (1 major) Mathematics (2024) Master's degree (1 major) Information Systems (2024)					
	-	hing degree Gymnasiun		ion PLUS Flite Netwo	ork Bavaria (FNR) (a	025)
		or Information Systems (2024)	JMU Würzburg •	generated 12-Jun-2025 • exa r (120 ECTS) Information Syst	ım. reg. da-	page 13 / 216



Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)

Module title			Abbreviation			
Securi	ty of So	ftware Systems			10-l=SSS-232-m01	
Modul	e coord	inator		Module offered by		
holder	of the (	Chair of Computer Scie	nce II	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				
Conte	nts					
dern c the fol • 1 • 1 • 1	ompute lowing (86-64 Runtime Web sec Blockch Side-ch	r systems, as well as th topics are discussed: instruction set architec attacks (code injectio	common software vulne ne measures implemen ture and assembly lang n, code reuse, defense tts	ted to protect agains guage		
Intend	ed lear	ning outcomes				
cepts s ses all tive.	such as ow stuc	blockchains. The lectu lents to gain hands-on	of software security, fr re prepares for researc experience with attack	h in the area of secu s and analysis of sys	rity and privacy, whi	le the exerci-
	_	number of weekly contact hour	s, language — if other than Ge	rman)		
V (2) + Modul		t in: English				
			guage — if other than German,	ovamination offered if no	tovonu comoctor informat	ion on whothor
		le for bonus)	guage — If other than German,		t every semester, mormat	ion on whether
lf anno examin prox. 1 Langua	ounced nation c 5 minut	of one candidate each ( tes per candidate). ssessment: English	20 minutes) eginning of the course, approx. 20 minutes) or			
Alloca	tion of <sub>l</sub>	olaces				
Additi	onal inf	ormation				
		able for students of the ES, SEC,IN	Master's programme I	nformatik (Computer	Science, 120 ECTS	credits):
Workle	oad					
150 h						
Teachi	ng cycl	e				
Teaching cycle: every year, summer semester						
Referred to in LPO I (examination regulations for teaching-degree programmes)						
§ 22 II Nr. 3 b)						
Modul	e appea	ars in				
Modul	e studie	es (Master) Computer S	cience (2019)			
Master's v	/ith 1 majo	r Information Systems (2024)	_	• generated 12-Jun-2025 • exa er (120 ECTS) Information Syst	-	page 15 / 216

#### UNIVERSITÄT WÜRZBURG

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) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) Computer Science (2025) Master's degree (1 major) Aerospace Computer Science (2025) First state examination for the teaching degree Gymnasium Computer Science (2025)

Module title			Abbreviation			
Software Architecture			10-I=SAR-161-m01			
Module	e coord	inator		Module offered by		
holder	of the (	Chair of Computer Scier	nce II	Institute of Comput	er Science	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio		Module level	Other prerequisites			
1 seme	ster	graduate				
	Contents					
tural st sed sof cloud-n model-	yles, so tware o ative a driven	o software architecture oftware components, in engineering, service-ori and serverless computin architecture	terface models and de ented architectures, m	sign guidelines, des icroservice architect	ign-by-contract, com ures, scalability of d	ponent-ba- atabases,
Intende	ed lear	ning outcomes				
		possess a fundamental n modern software arcl				
Course	<b>S</b> (type, r	number of weekly contact hour	s, language — if other than Gei	rman)		
V (2) +	Ü (2)					
		<b>sessment</b> (type, scope, lang le for bonus)	uage — if other than German,	examination offered — if no	t every semester, informati	on on whether
lf annoi examin prox. 15 Langua	unced ation c 5 minut ge of a	nation (approx. 60 to 12 by the lecturer at the be of one candidate each ( res per candidate). ssessment: German an	eginning of the course, approx. 20 minutes) or			
credita						
Allocat		Jiaces				
		ormation		6	0.1 5.070	
Focuse: SE,IT,ES		able for students of the	Master's programme I	nformatik (Computer	Science, 120 ECIS (	credits):
Worklo	ad					
150 h						
Teachir	ng cycl	e				
Referre	d to in	LPOI (examination regulation	ons for teaching-degree progra	immes)		
§ 22 II Nr. 3 b)						
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)						
	-	ee (1 major) Computer S		generated 12-Jun-2025 • exa	im reg da-	page 17 / 216
master 5 WI	an i maju	momation systems (2024)	-	r (120 ECTS) Information Syst	-	page 1/ / 210

#### UNIVERSITÄT WÜRZBURG

Module studies (Master) Computer Science (2019) 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) 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) Master's degree (1 major) Economathematics (2024) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) Computer Science (2025) Master's degree (1 major) Economathematics (2025) First state examination for the teaching degree Gymnasium Computer Science (2025)

Module title			Abbreviation			
Artificia	Artificial Intelligence 1 10-					
Module	e coord	inator		Module offered by		
holder	ofthe	Chair of Computer Scie	nce VI	Institute of Comput	er Science	
ECTS		od of grading	Only after succ. con	· · ·		
	1	rical grade				
5 Duratio		Module level	Other prerequisites			
			Other prerequisites			
1 seme		graduate				
Conten						
		ents, uninformed and h and predicate logic and			search with partial	information,
Intende	ed lear	ning outcomes				
		possess theoretical and gic and are able to asse			gence in the area of	agents,
Course	<b>S</b> (type, r	number of weekly contact hour	s, language — if other than Ge	rman)		
V (2) +						
	. <u>· · ·</u>	<b>Sessment</b> (type, scope, lang	uage — if other than German	examination offered — if no	t even comester informati	on on whether
		ole for bonus)	uage in other than definant,		it every semester, mornal	on on whether
lf anno examin prox. 15	unced ation o 5 minut age of a	nation (approx. 60 to 12 by the lecturer at the bo of one candidate each ( tes per candidate). ussessment: German an bonus	eginning of the course, approx. 20 minutes) or			
Allocat						
Additio	nalinf	ormation				
	s avail	able for students of the	Master's programme l	nformatik (Computer	Science, 120 ECTS o	credits):
Worklo						
	au					
150 h						
Teachi	ng cycl	e				
Referre	ed to in	LPO I (examination regulation	ons for teaching-degree progra	immes)		
Module	e appea	ars in				
Master	's degr	ee (1 major) Computer S	Science (2021)			
Master	's degr	ee (1 major) Aerospace	Computer Science (20	21)		
Master	's degr	ee (1 major) Computati	onal Mathematics (202	2)		
Master	's degr	ee (1 major) Informatio	n Systems (2022)			
Master's degree (1 major) Mathematics (2022)						
Master's degree (1 major) Computer Science (2023)						
Master's degree (1 major) Aerospace Computer Science (2023)						
Master's degree (1 major) Quantum Engineering (2024)						
	-	ee (1 major) Physics Int		、 、		
Master	's degr	ee (1 major) Computati	onal Mathematics (202	24)		
Master's wi	ith 1 majo	r Information Systems (2024)		generated 12-Jun-2025 • exa r (120 ECTS) Information Syst	-	page 19 / 216

Master's degree (1 major) Mathematics (2024) Master's degree (1 major) Information Systems (2024) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) Computer Science (2025)

Module title			Abbreviation			
Discret	e Even	t Simulation			10-l=ST-232-m01	
Module	e coord	inator		Module offered by		
holder	ofthe	Chair of Computer Scie	nce III	Institute of Comput	er Science	
ECTS	Methe	od of grading	Only after succ. cor	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites	i		
1 seme	ster	graduate				
Conten	ts		-			
e.g., po Introdu randon design delling	opular I action t n numb ing anc and si	nternet services or the o simulation technique pers and random variab l evaluating simulation mulation, advanced co	stems is illustrated and Internet of Things (IoT) is, discrete-event simul les, statistical analysis experiments, special r ncepts and techniques	. The following topic ation and process-o of simulation result andom processes, p	s will be conveyed: riented simulation, g s, evaluation of mea ossibilities and limit	generating sured data, ations of mo-
		ning outcomes				
	cal) sy	stems, the evaluation o	knowledge and the pra of results and the corre			
Course	<b>S</b> (type, r	number of weekly contact hour	s, language — if other than Ge	rman)		
V (2) +	Ü (2)					
		s <b>essment</b> (type, scope, lang ole for bonus)	guage — if other than German,	examination offered — if no	t every semester, informati	on on whether
lf anno examin prox. 1	unced ation o 5 minut age of a	of one candidate each ( tes per candidate). ssessment: German ar	eginning of the course, approx. 20 minutes) or			
Allocat	ion of <sub>l</sub>	places				
Additio	nal inf	ormation				
Focuse IT,KI,ES		able for students of the	Master's programme I	nformatik (Computer	Science, 120 ECTS o	credits):
Worklo	ad					
150 h						
Teachi	ng cycl	e				
Teachi	ng cycl	e: every year, summer s	semester			
Referre	ed to in	LPO I (examination regulation	ons for teaching-degree progra	ammes)		
§ 22 II Nr. 3 b)						
Module	e appea	ars in				
Module studies (Master) Computer Science (2019) 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) Computational Mathematics (2024)						
Master's w	ith 1 majo	r Information Systems (2024)		e generated 12-Jun-2025 • exa r (120 ECTS) Information Syst		page 21 / 216

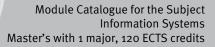
Master's degree (1 major) Mathematics (2024) Master's degree (1 major) Information Systems (2024) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) Computer Science (2025) Master's degree (1 major) Aerospace Computer Science (2025) First state examination for the teaching degree Gymnasium Computer Science (2025)

Module title				Abbreviation			
Advanc	ed Pro	gramming			10-I=APR-212-m01		
Module	e coord	inator		Module offered by			
holder	ofthe	Chair of Computer Scienc	e II	Institute of Comput	er Science		
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)			
5	nume	rical grade					
Duratio		Module level	Other prerequisites				
1 seme	ster	graduate					
Conten		0					
grams. and coo de a se	With the knowledge of basic programming, taught in introductory lectures, it is possible to realize simpler pro- grams. If more complex problems are to be tackled, suboptimal results like long, incomprehensible functions and code duplicates occur. In this lecture, further knowledge is to be conveyed on how to give programs and co- de a sensible structure. Also, further topics in the areas of software security and parallel programming are dis- cussed.						
Intende	ed lear	ning outcomes					
ges and	d their	n advanced programming efficiency measured usin ng in the use of GPU arch	g standard metrics. I	n addition, parallel p			
Course	<b>S</b> (type, r	number of weekly contact hours,	language — if other than Ger	man)			
V (2) +	Ü (2)						
		<b>Sessment</b> (type, scope, langua le for bonus)	age — if other than German, o	examination offered — if no	t every semester, informati	on on whether	
lf anno examin prox. 1 <u>9</u> Langua	unced ation o 5 minut ge of a	nation (approx. 60 to 120 by the lecturer at the beg of one candidate each (ap tes per candidate). ssessment: German and	inning of the course, oprox. 20 minutes) or				
credita	-		-				
Allocat	ion of	places					
Focuse	s avail	ormation able for students of the N	Aaster's programme l	nformatik (Computer	Science, 120 ECTS o	credits):	
		ES,GE,SEC					
Worklo	ad						
150 h							
Teachi							
		e: every year, winter sem					
Referre	d to in	LPO I (examination regulation	s for teaching-degree progra	mmes)			
Module	e appea	ars in					
Master's degree (1 major) eXtended Artificial Intelligence (xtAl) (2020) Master's degree (1 major) Computer Science (2021) Master's degree (1 major) Aerospace Computer Science (2021) Master's degree (1 major) Computational Mathematics (2022) Master's degree (1 major) Information Systems (2022) Master's degree (1 major) Mathematics (2022) Master's degree (1 major) Computer Science (2023)							
	-	r Information Systems (2024)	JMU Würzburg •	generated 12-Jun-2025 • exa r (120 ECTS) Information Syst	-	page 23 / 216	

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) Computational Mathematics (2024) Master's degree (1 major) Mathematics (2024) Master's degree (1 major) Information Systems (2024) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)

Module	Module title Abbreviation					
Machin	Machine Learning for Natural Language Processing 10-I=NLP-212-m01					
Module	coord	inator		Module offered by		
holder	of the (	Chair of Computer Scier	nce X	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		- <b>I</b>			
ents sta ground almost beddin ke CNN training applica	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. 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. <b>Intended learning outcomes</b> The participants have solid knowledge on problems and methods in the area of computational text processing					
		o identify and apply su				
		umber of weekly contact hour	, language — if other than Ger	rman)		
V (2) +	Ü (2)					
module is written If annou examin prox. 15 Langua	Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for 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					
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Focuses AT,KI,H		able for students of the	Master's programme l	nformatik (Computer	r Science, 120 ECTS o	credits):
Worklo	ad					
150 h						
Teachir	ng cycl	e				
Referre	d to in	LPO I (examination regulation	ons for teaching-degree progra	mmes)		
§ 22 II Nr. 3 b)						
	Module appears in					
Module studies (Master) Computer Science (2019) 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) Mathematics (2022)						
Master's wi	th 1 majoi	Information Systems (2024)		generated 12-Jun-2025 • exa r (120 ECTS) Information Syst		page 25 / 216

#### UNIVERSITÄT WÜRZBURG



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) Master's degree (1 major) Economathematics (2024) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) Computer Science (2025) Master's degree (1 major) Mathematical Data Science (2025) Master's degree (1 major) Economathematics (2025) First state examination for the teaching degree Gymnasium Computer Science (2025)

Module title					Abbreviation	
Artificia	al Intel	ligence 2			10-I=KI2-212-m01	
Module	e coord	inator		Module offered by		
holder	ofthe	Chair of Computer Scie	nce VI	Institute of Comput	er Science	
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				
Conten	ts		<b>I</b>			
observa	Planning, probabilistic closure and Bayesian networks, utility theory and decidability problems, learning from observations, knowledge while learning, neural networks and statistical learning methods, reinforcement learning, processing of natural language.					
Intende	ed lear	ning outcomes				
			d practical knowledge a essing and are able to a		-	probabilistic
Course	<b>S</b> (type, r	number of weekly contact hour	s, language — if other than Ge	rman)		
V (2) +	Ü (2)					
		S <b>essment</b> (type, scope, lang ole for bonus)	guage — if other than German,	examination offered — if no	t every semester, informati	on on whether
examin prox. 1	ation o 5 minut 1ge of a	of one candidate each ( tes per candidate). ssessment: German ar	eginning of the course, approx. 20 minutes) or nd/or English			
Allocat	ion of <sub>l</sub>	places				
Additio	onal inf	ormation				
Focuse AT,SE,k			Master's programme I	nformatik (Computer	Science, 120 ECTS o	credits):
Worklo	ad					
150 h						
Teachi	ng cycl	e				
Referre	ed to in	LPO I (examination regulati	ons for teaching-degree progra	immes)		
Module	e appea	ars in				
	Module appears in Master's degree (1 major) Computer Science (2021)					
	Master's degree (1 major) Aerospace Computer Science (2021) Master's degree (1 major) Aerospace Computer Science (2021)					
Master's degree (1 major) Computational Mathematics (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) Aerospace Computer Science (2023)					
	Master's degree (1 major) Aerospace Computer Science (2023) Master's degree (1 major) Computational Mathematics (2024)					
	-	ee (1 major) Mathemat		12		
						· · · · ·
Master's wi	ith 1 majo	r Information Systems (2024)	-	• generated 12-Jun-2025 • exa r (120 ECTS) Information Syst	-	page 27 / 216

Master's degree (1 major) Information Systems (2024) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) Computer Science (2025)

Module title					Abbreviation
Program	nming	with neural nets			10-I=PNN-212-m01
Module	coord	inator		Module offered by	
holder	of the C	Chair of Computer Science	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 semes	ster	graduate			
Conten	ts				
		NN, implementation of in res, among others in the	-		and LSTMs, practical example for
Intende	ed learr	ning outcomes			
and how	w they		ools like Tensorflow/		nitectures (eg. FCN, CNN, LSTM) gram network structures from lite-
Courses	<b>5</b> (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)	
V (2) + l	Ü (2)				
		<b>essment</b> (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
lf annou examin prox. 15	unced l ation o ; minut ge of a	f one candidate each (ap es per candidate). ssessment: German and/	inning of the course, prox. 20 minutes) or		tion may be replaced by an oral in groups of 2 candidates (ap-
Allocati	ion of p	olaces			
Additio	nal info	ormation			
Focuses SE,IT,KI			aster's programme Ir	nformatik (Computer	Science, 120 ECTS credits):
Worklo	ad				
150 h					
Teachir	ng cycle	9			
Referre	d to in	LPOI (examination regulations	s for teaching-degree progra	mmes)	
Module	appea	rs in			
Master' Master' Master' Master'	s degre s degre s degre s degre s degre	ee (1 major) Information S ee (1 major) Computer Sc ee (1 major) Information S ee (1 major) Computer Sc ee (1 major) Information S ning degree Gymnasium I	ience (2021) Systems (2022) ience (2023) Systems (2024)	on PLUS, Elite Netwo	ork Bavaria (ENB) (2025)
Supple	Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)				

Module title				Abbreviation				
NLP and	d Text	Mining			10-I=STM-162-m01			
Module	e coord	inator		Module offered by				
holder	of the (	Chair of Computer Scier	ce VI	Institute of Comput	er Science			
ECTS	Metho	od of grading	Only after succ. com	Only after succ. compl. of module(s)				
5	nume	rical grade						
Duratio	n	Module level	Other prerequisites					
1 seme	ster	graduate						
Conten	ts		•					
tection, stic par The stu text min	Foundations in the following areas: definition of NLP and text mining, properties of text, sentence boundary de- tection, tokenisation, collocation, N-gram models, morphology, hidden Markov models for tagging, probabili- stic parsing, word sense disambiguation, term extraction methods, information extraction, sentiment analysis. The students possess theoretical and practical knowledge about typical methods and algorithms in the area of text mining and language processing mostly for English. They are able to solve problems through the methods taught. They have gained experience in the application of text mining algorithms.							
Intende	ed lear	ning outcomes						
text mi	ning an	possess theoretical and Id language processing ve gained experience ir	They are able to solve	practical problems				
Course	<b>S</b> (type, r	number of weekly contact hours	, language — if other than Ger	man)				
V (2) +	Ü (2)							
Method	d of ass	<b>Sessment</b> (type, scope, langu	uage — if other than German, e	examination offered — if no	t every semester, informati	on on whether		
		le for bonus)						
lf anno examin prox. 15	unced ation c 5 minut	nation (approx. 60 to 12 by the lecturer at the be of one candidate each (a ses per candidate). ssessment: German an	ginning of the course, approx. 20 minutes) or					
Allocat								
Additio	nal inf	ormation						
		able for students of the	Master's programme li	nformatik (Computer	Science, 120 ECTS o	redits): AT,		
Worklo	ad							
150 h								
Teachir	ıg cycl	e						
Referre	<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)							
§ 22 II Nr. 3 b)								
Module	e appea	ars in						
Master's degree (1 major) Computer Science (2016) Master's degree (1 major) Computer Science (2017) Master's degree (1 major) Computer Science (2018) 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) Master's with 1 major Information Systems (2024) MASTER'S DEGREE (1 major) Mathematics (2019) Master's with 1 major Information Systems (2024) MASTER'S DEGREE (1 major) Mathematics (2019) Master's with 1 major Information Systems (2024) MASTER'S DEGREE (1 major) Mathematics (2019) MASTER'S DEGREE (1 major) Mathematics (2019) MASTER'S DEGREE (1 major) Mathematics (2019) Master's degree (1 major) Information Systems (2019) MASTER'S DEGREE (1 major) Mathematics (2019) MAS								
			· · · · · ·	r (120 ECTS) Information Syst	•			

Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)

Master's degree (1 major) Computer Science (2021)

UNIVERSITÄT

WÜRZBURG

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

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

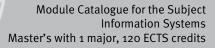
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)

Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)

Master's degree (1 major) Mathematical Data Science (2025)

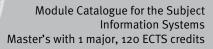
First state examination for the teaching degree Gymnasium Computer Science (2025)

Module title					Abbreviation			
System	ns Bend	hmarking			10-I=SB-212-m01			
Module	e coord	inator		Module offered by				
holder	of the (	Chair of Computer Scie	nce II	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	i				
1 seme	ster	graduate						
Conten	ts							
and su luation part in ons of metrics markin tional a ted app service Intende Studen can eva Course V (2) + Methoo module is written If anno	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 evaluation 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 foundations 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: benchmarking basics, metrics, statistical measurements, experimental design, workloads, measurement tools, operational analysis, basic queueing models, and benchmark standardization. Furthermore, the course covers selected application areas and case studies, such as benchmarking of energy efficiency, virtualization, storage, microservices, 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. Courses (type, number of weekly contact hours, language – if other than German) V (2) + Ú (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for 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-							
credita	•							
Allocat	ion of <sub>l</sub>	olaces						
	-	ormation						
Focuse SE,IT,E			e Master's programme I	nformatik (Computer	Science, 120 ECTS (	credits):		
Worklo	ad							
150 h								
Teachi	ng cycl	e						
Teaching cycle: every year, summer semester								
Referre	ed to in	LPO I (examination regulat	ons for teaching-degree progra	ammes)				
Module								
Master	's degr	ee (1 major) Informatio ee (1 major) eXtended ee (1 major) Computer	Artificial Intelligence (x	tAI) (2020)				
Master's w	ith 1 majo	r Information Systems (2024)		egenerated 12-Jun-2025 • exa r (120 ECTS) Information Syst	-	page 32 / 216		



Master's degree (1 major) Aerospace Computer Science (2021) 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	Module title Abbreviation							
Compu	Computer Vision 1 10-Al=CV1-242-mo1					L		
Module	e coord	inator		Module offered by				
holder	of the (	Chair of Computer Scie	nce IV	e IV Institute of Computer Science				
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)				
5	nume	rical grade						
Duratio	on	Module level	Other prerequisites	i i				
1 seme	ster	graduate						
Conten	ts							
basics taught. Topics image	The lecture provides knowledge about current methods and algorithms in the field of computer vision. Important basics as well as the most recent approaches to image representation, image processing and image analysis are taught. Topics include data representation, image acquisition, restoration and enhancement, features, object modeling, image and video understanding, deep learning and generative methods and applications. Actual models and methods of machine learning as well as their technical backgrounds are presented and their							
		ning outcomes						
to inde • C a • C	pender Overviev Ilgorith Gaining	ntly identify and apply w of the most importan ms from Computer Visi experience through ho	lge of problems and teo suitable methods for co t concepts of image rep on ome assignments, pract round knowledge for th	oncrete problems. presentation, image a tical computer and p	analysis, machine lea rogramming exercise	arning and		
Course	<b>S</b> (type, r	number of weekly contact hour	s, language — if other than Ge	rman)				
V (2) + Module		t in: English						
Metho	d of ass	sessment (type, scope, lang	guage — if other than German,	examination offered — if no	ot every semester, informati	on on whether		
module is	s creditab	le for bonus)						
lf anno examin prox. 1	unced ation c 5 minut ge of a	of one candidate each ( tes per candidate). ssessment: English	20 minutes) eginning of the course, (approx. 20 minutes) or					
Allocat	ion of <b>j</b>	olaces						
Additio	nal inf	ormation						
Worklo	ad							
150 h								
Teaching cycle								
Teaching cycle: every year, summer semester								
Referred to in LPO I (examination regulations for teaching-degree programmes)								
Module appears in								
Master	's degr		telligence & Extended telligence (2024)	Reality (2024)				
Master's w	ith 1 majo	r Information Systems (2024)		e generated 12-Jun-2025 • exa r (120 ECTS) Information Syst	-	page 34 / 216		



Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) Economathematics (2024) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) Mathematical Data Science (2025) Master's degree (1 major) Economathematics (2025)

JMU Würzburg • generated 12-Jun-2025 • exam. reg. data record Master (120 ECTS) Information Systems - 2024

Module title					Abbreviation	
Image	Image Processing and Computational Photography     10-I=IP-222-m01					
Modul	e coord	inator		Module offered by		
holder	ofthe	Chair of Computer Scienc	e IV	Institute of Comput	er Science	
ECTS	Methe	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					
• i • l • i • i • i • i • i • i	<ul> <li>light and color</li> <li>image acquisition</li> <li>deep learning</li> <li>generative methods</li> <li>image signal processing</li> </ul>					
	applicat <b>ed lear</b>	ning outcomes				
• ( 1 • (	Overvie nal Pho Gaining	ography and are able to in w of the most important o tography experience through hom ng a sound solid backgro	concepts of image for le assignments, pract	mation, perception a tical computer and p	and analysis, and Co rogramming exercise	omputatio-
Course	<b>es</b> (type, r	number of weekly contact hours,	language — if other than Ge	rman)		
V (2) +	• •					
		t in: English				
		<b>Sessment</b> (type, scope, langua	age — if other than German,	examination offered — if no	ot every semester, informati	ion on whether
writter If anno examin prox. 1 Langua	module is creditable for 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 creditable for bonus					
Alloca	tion of <sub>l</sub>	places				
Additional information						
Workle	bad					
150 h						
Teachi	ng cycl	e				
Teachi	ng cycl	e: every year, winter sem	ester			
Master's w	/ith 1 majo	r Information Systems (2024)	-	• generated 12-Jun-2025 • exa r (120 ECTS) Information Syst	-	page 36 / 216

Referred to in LPO I (examination regulations for teaching-degree programmes)
§ 22 II Nr. 3 b)
Module appears in
Master's degree (1 major) Information Systems (2019)
Master's degree (1 major) eXtended Artificial Intelligence (xtAl) (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)
Master's degree (1 major) Information Systems (2025)
Master's degree (1 major) Computer Science (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Aerospace Computer Science (2025)
First state examination for the teaching degree Gymnasium Computer Science (2025)

Module	title			Abbreviation		
Multilin	ngual N	LP			10-I=MNLP-232-m01	
Module coordinator				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. com	pl. of module(s)		
5		rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	l	graduate				
Conten						
of-spee on spac ge Mod transla transfe pics: cu	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-					
		r generation, multi-sourc ning outcomes	e transier, gradient n			
and als from di transfe solve p	o get a fferent r for va ractica	n insight into cutting edg languages in shared rep rious NLP tasks. Upon su	e research in (multili resentation spaces th ccessful completion s of the language of t	ngual) NLP. They wil at enable semantic of the course, the stu he text data, and to	al natural language processing l learn how to represent texts comparison and cross-lingual udents will be well-equipped to determine the optimal strategy	
Course	<b>S</b> (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)		
V (2) + Module		t in: German and/or Engl	ish			
		<b>essment</b> (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether	
lf anno examin prox. 19 Langua	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					
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
	Workload					
-	150 h					
	Teaching cycle					
		e: every year, summer ser				
	Referred to in LPO I (examination regulations for teaching-degree programmes)					
§ 22 II Nr. 3 b) Module appears in						
	Master's degree (1 major) Information Systems (2019)					
master	Juegn		2019)			

Master's with 1 major Information Systems (2024)

JMU Würzburg • generated 12-Jun-2025 • exam. reg. data record Master (120 ECTS) Information Systems - 2024

Master's degree (1 major) Information Systems (2022)
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)
Master's degree (1 major) Information Systems (2025)
Master's degree (1 major) Management (2025)
Master's degree (1 major) Computer Science (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)
First state examination for the teaching degree Gymnasium Computer Science (2025)

Module title					Abbreviation	
Statist	ical Ne	twork Analysis			10-I=SNA-232-m01	
Module coordinator				Module offered by		
holder of the Chair of Computer Science XV			e XV	Institute of Computer Science		
ECTS	Meth	od of grading	Only after succ. compl. of module(s)			
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 semester graduate						
Conten	Contents					
Networ	Networks matter! This holds for technical infrastructures like communication or transportation networks, for in-					

Networks matter! This holds for technical infrastructures like communication or transportation networks, for information systems and social media in the World Wide Web, but also for various social, economic and biological 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 network 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, stochastic dynamics in networks, spectral analysis, as well as the modelling of time-varying networks. The course material 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 exam.

#### Intended learning 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.

**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 is creditable for 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

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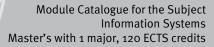
#### Additional information

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

Master's with 1 major Information Systems (2024)	JMU Würzburg • generated 12-Jun-2025 • exam. reg. da-	page 40 / 216
	ta record Master (120 ECTS) Information Systems - 2024	

Workload
150 h
Teaching cycle
<b>Referred to in LPO I</b> (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)
Master's degree (1 major) Information Systems (2025)
Master's degree (1 major) Management (2025)
Master's degree (1 major) Computer Science (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)
Master's degree (1 major) Aerospace Computer Science (2025)

Module title				Abbreviation		
Operat	ions Research			10-l=0R-232-m01		
Module coordinator			Module offered by			
holder	of the Chair of Computer Scie	nce l	Institute of Comput	er Science		
ECTS	Method of grading	Only after succ. con	npl. of module(s)			
5	numerical grade					
Duratio	n Module level	Other prerequisites	i			
1 seme	ster graduate					
Conten	ts					
structic teger lin This co	Production plans, railway timetables, the assignment of radio frequencies, planning of delivery tours, or the con- struction of an 'optimal' university timetable: these problems – and many more – can be modeled as (mixed-) in- teger linear optimization problems and solved with integer programming methods. This course teaches integer programming methods like branch-and-bound, cutting plane, and decomposition methods. Furthermore, we practice our modeling skills by studying a variety of application examples.					
Intende	ed learning outcomes					
• T te	ompleting the course he students are able to mode eger linear programs). he students are able to apply					
Course	<b>S</b> (type, number of weekly contact hour	s, language — if other than Ge	rman)			
V (2) + Module	Ü (2) e taught in: German and/or En	glish				
	<b>d of assessment</b> (type, scope, lang creditable for bonus)	guage — if other than German,	examination offered — if no	t every semester, informati	on on whether	
lf anno examin prox. 1 <u>9</u> Langua	examination (approx. 60 to 1 unced by the lecturer at the b ation of one candidate each ( 5 minutes per candidate). ge of assessment: German ar ble for bonus	eginning of the course, approx. 20 minutes) or				
Allocat	ion of places					
Additio	nal information					
Focuse	s available for students of the	Master's programme l	nformatik (Computer	Science, 120 ECTS of	redits): IN	
Worklo	ad					
150 h						
Teachiı	ng cycle					
Referre	d to in LPO I (examination regulati	ons for teaching-degree progra	ammes)			
§ 22 II Nr. 3 b)						
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 degree (1 major) Management (2024) Master's degree (1 major) Mathematics (2024) Master's with 1 major Information Systems (2024) Master's degree (1 major) Mathematics (2024) Master's with 1 major Information Systems (2024) Master's with 1 major Information Systems (2024) Master's degree (1 major) Mathematics (2024)						
	,		er (120 ECTS) Information Syst	-		



Master's degree (1 major) Information Systems (2024) Master's degree (1 major) Economathematics (2024) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) Computer Science (2025) Master's degree (1 major) Economathematics (2025) First state examination for the teaching degree Gymnasium Computer Science (2025)

Module coordinator         Module offered by           holder of the Chair of Computer Science XV         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             Networks matter! This holds for technical infrastructures like communication or transportation networks, for information systems and social media in the World Wide Web, but also for various social, economic and biologic al 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 spraeding of epidemics? Which are the most influential actors in a social network? And how can we analyze time series data on systems with dynamic network 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 modularity measures, aggregate statistical characteristics of large networks; for on patter statistical ensembles of complex networks, spectral analysis, as well as the modelling of time varying networks, stochasticin analysis dates for lectures as well as a company	Module title					Abbreviation	
holder of the Chair of Computer Science XV         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             Contents         Networks matter! This holds for technical infrastructures like communication or transportation networks, for information 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 spraeding 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 suggregate statistical characteristics of large networks; 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 anonated sides for lectures as well as a cacompanying git-Repostry of jupyter notebook	Machin	Machine Learning for Networks 1				10-I=MLN1-232-m01	
ECTS         Method of grading         Only after succ. compl. of module(s)           5         numerical grade            Duration         Module level         Other prerequisites           1 semester         graduate            Contents             Networks matter! This holds for technical infrastructures like communication or transportation networks, for information 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 network 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 in the defoundations of graph theory, centrality and modularity transcing function analysis, as well as a accompanying git-Repository of jupyter notebooks, which implement and validate the theoretical concepts covered in the detrues. Students will understand how we can questriatively model the topology of networked systems and how we can quect ect and characterize topological patterns will understand how we can quest their knowledge through weekly exercise sheets. The successful completion of the course erquires to pass a fina	Module coordinator				Module offered by		
numerical grade            Duration         Module level         Other prerequisites           1 semester         graduate            Contents             Networks matter! This holds for technical infrastructures like communication or transportation networks, for information systems and social media in the World Wide Web, but also for various social, economic and biological 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 network 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 modularity 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, The course material consists of annotated slides for lectures as well as a accompanying git-Repository of jupter notebooks, which implement and validate the theoretical concepts covered in the lectures. Students will understand how we can quantitatively model the topology of networks shaped dynamical processes, how statistical fluctuations in degree distridunding of how the structure of networks shaped dyna	holder	of the (	Chair of Computer Scienc	e XV	Institute of Comput	er Science	
Duration         Module level         Other prerequisites           1 semester         graduate	ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)		
1 semester       graduate         Contents         Networks matter! This holds for technical infrastructures like communication or transportation networks, for information 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 wec an 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 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 exam.         Intended learning outcomes       Intended tearning outcomes in 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 un- derstan	5	nume	rical grade				
Contents         Networks matter! This holds for technical infrastructures like communication or transportation networks, for information 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, segregate statistical characteristics of large networks, random graphs and statistical ensembles       of complex networks, specrating function analysis of expected graph properties, scale-free networks, stocha-       stic dynamics in networks, specratia analysis, as well as a accompanying git-Repository of jupyter notebooks,       which implement and validate the theoretical concepts covered in the lectures. Students will understand how we can quan-       their knowledge through weekly exercise sheets. The successful complets will understand how we can quan-       their knowledge through weekly exercise shades on we we and electent will understand how we can quan-       tital regins mow 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 un-       derstanding of how the structure of networks shapes dynamical process	Duratio	n	Module level	Other prerequisites			
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, centality 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 lest and deepen their knowledge through weekly exercise sheets. The successful completion of the course requires to pass a final written exam. <b>Intendel learning outcomes</b> The course will equip participants with statistical network analysis techniques that are needed for the data-dri- ven modelling of complex technical, social, and biological systems. Students will understand how we can quan- titatively model the topology of networked systems, and how we can detect and characterize topological pa	1 seme	ster	graduate				
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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.  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 is creditable for 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 (approx. 15 minutes per candidate). Language of assessment: English	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 their knowledge through weekly exercise sheets. The successful completion of the course requires to pass a final						
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V (2) + Ü (2) Module taught in: English <b>Method of assessment</b> (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for 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 creditable for bonus	ven mo titativel terns. P very lar derstan distribu	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.					
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module is creditable for 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 creditable for bonus	• • •		t in: English				
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		<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)					
Allocation of places	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						

#### 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

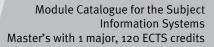
 $\label{eq:result} \textbf{Referred to in LPO I} \hspace{0.1 cm} (\text{examination regulations for teaching-degree programmes})$ 

#### § 22 || Nr. 3 b)

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)
	Master's degree (1 major) Information Systems (2025)
	Master's degree (1 major) Computer Science (2025)
	Master's degree (1 major) Mathematical Data Science (2025)
	Master's degree (1 major) Aerospace Computer Science (2025)
	First state examination for the teaching degree Gymnasium Computer Science (2025)
1	

Module	Module title Abbreviation					
Data So					10-I=DM-232-m01	
Module	coord	inator		Module offered by		
holder	of the (	Chair of Computer Scier	nce X	Institute of Comput	er Science	
ECTS		od of grading	Only after succ. com	· · ·		
5 Duratio	Duration     Module level     Other prerequisites					
Conten		graduate				
Founda model, method	tions in relatio s (clus	nship to data warehou ter- and association m	lefinition of data minin se and OLAP data prep ethods), supervised lea ata types, further learn	rocessing, data visua arning (e. g. Bayes cl	alisation, unsupervis	ed learning
Intende	ed learı	ning outcomes				
ta miniı the kno	ng and wledge	machine learning. The	nd practical knowledge y are able to solve prac e and by using the KDE gorithms.	tical knowledge disc	covery problems with	the help of
Course	<b>S</b> (type, n	umber of weekly contact hour	s, language — if other than Ger	man)		
V (2) +	Ü (2)					
		e <b>essment</b> (type, scope, lang le for bonus)	uage — if other than German, e	examination offered — if no	t every semester, informati	on on whether
lf annoi examin prox. 15	unced ation o 5 minut ge of a	f one candidate each ( es per candidate). ssessment: German an	eginning of the course, approx. 20 minutes) or			
Allocat						
Allocal		naces				
 Additio	nalinf	ormation				
	s availa	able for students of the	Master's programme li	nformatik (Computer	Science, 120 ECTS o	credits): IT,
Worklo	ad					
150 h						
Teachir	ng cycl	9				
Referre	d to in	LPO I (examination regulation	ons for teaching-degree progra	mmes)		
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) Management (2024)						
Master's degree (1 major) Information Systems (2024)						
Master's degree (1 major) Economathematics (2024)						
Master's wi	th 1 majoi	Information Systems (2024)	-	generated 12-Jun-2025 • exa r (120 ECTS) Information Syst	-	page 46 / 216



Master's degree (1 major) Information Systems (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) Computer Science (2025) Master's degree (1 major) Economathematics (2025) Master's degree (1 major) Aerospace Computer Science (2025)



### **Compulsory Electives II: Tracks**

(40 ECTS credits)

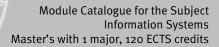
Out of the four tracks, students may select two.



### Track 1: Enterprise Systems

(20 ECTS credits)





# **Core** (10 ECTS credits)

Module title				Abbreviation		
Business Software 1: Management and Implementation of				nformation Sy-	12-M-GPU-242-m01	
stems						
Module				Module offered by		
holder of Information		Chair of Business Mana៖ /stems	gement and Business	Faculty of Managem	nent 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 semes	ster	graduate				
Conten	ts					
busines which f • S d a ca e · S ri lin S a th S ci In addit the ERP	<ul> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ul>					
· · · · · ·		ning outcomes Software 1: Manageme	nt and Implementatio	n of Information Syst	tems" module sims t	to achieve
the follo 1. ERP S stem 2. Integ ons. 3. Selec	owing l Bystem s, their ration	earning outcomes: s - Overview and Differe architectures, and phile of Business Processes: nd Customizing of ERP S	ntiation: Students gai osophies. Participants learn how	n a comprehensive u v ERP systems map a	understanding of var nd optimize busines	rious ERP sy- ss operati-
4. Imple	ementa	eet business needs. Ition of Business Proces ocesses in ERP and low				
		umber of weekly contact hours,		· · · · · · · · · · · · · · · · · · ·	U	
V (2) + Ü (2) Module taught in: German and/or English						
<b>Method of assessment</b> (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for 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 Master's with 1 major Information Systems (2024) JMU Würzburg • generated 12-Jun-2025 • exam. reg. da- page 51 / 216						
			-	r (120 ECTS) Information Syst	-	



Assessment offered: once a year, winter semester 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) Master's degree (1 major) Economathematics (2024) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)

Module	title				Abbreviation	
Business Software 2: Data-driven Business Process Management and Automa- 12-M-ERP-242-mo1						
tion						
Module	coordi	nator		Module offered by		
holder o Informa			gement and Business	Faculty of Managem	nent and Economics	
ECTS	Metho	d of grading	Only after succ. com	pl. of module(s)		
5	numer	ical grade				
Duratio	n	Module level	Other prerequisites			
1 semes	ster	graduate				
Content	Contents					
<ul> <li>B</li> <li>M</li> <li>P</li> <li>P</li> <li>In addit ness Pr</li> </ul>	<ul> <li>Modern Data Management</li> <li>Process Mining</li> </ul>					
			ata-driven Business Pro	ocess Management a	and Automation" aim	is to achieve
<ol> <li>Undeculation</li> <li>the amate</li> <li>Applinage</li> <li>Condeculation</li> <li>Condeculation</li> <li>Condeculation</li> <li>Condeculation</li> <li>Condeculation</li> <li>Condeculation</li> <li>Impletion</li> <li>Impletion</li> <li>Engage</li> <li>Engage</li></ol>	<ul> <li>The module "Business Software 2: Data-driven Business Process Management and Automation" aims to achieve the following learning outcomes:</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>Implementation of Process Automation Solutions: The course equips students with the knowledge and skills to automate business processes using industry-standard 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.</li> <li>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.</li> <li>Development of Professional Competencies: Throughout the course, students will develop a range of professional skills, including critical thinking, problem-solving, teamwork, and effective communication. These com-</li> </ul>					
		umber of weekly contact hour	s, language — if other than Ger	man)		
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 is creditable for bonus) a) written examination (approx. 60 minutes) or						
<ul> <li>b) oral examination (one candidate each: approx. 10 to 15 minutes, groups of 2: approx. 20 minutes, groups of 3: approx. 30 minutes) or</li> <li>c) term paper (15 to 20 pages)</li> <li>Language of assessment: German and/or English</li> </ul>						
Master's wit	th 1 major	Information Systems (2024)	-	generated 12-Jun-2025 • exa r (120 ECTS) Information Syste	-	page 53 / 216



Assessment offered: Once a year, summer semester 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

... ..

Workload

150 h

**Teaching cycle** 

Teaching cycle: summer semester

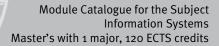
Referred to in LPO I (examination regulations for teaching-degree programmes)

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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) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)





## **Core Electives** (10 ECTS credits)

Master's with 1 major Information Systems (2024)

JMU Würzburg • generated 12-Jun-2025 • exam. reg. data record Master (120 ECTS) Information Systems - 2024

Module	title			Abbreviation			
Profess	sional F	Project Management			10-I=PM-212-m01		
Module	e coord	inator		Module offered by			
holder	of the (	Chair of Computer Scie	nce III	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	n	Module level	Other prerequisites				
1 seme	ster	graduate	We recommend com	pleting module 10-1	=PRJAK in parallel.		
Conten	ts		1	1 0			
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, project management, project portfolio management, PMOs; peculiarities of software projects; agile project management/SCRUM, combination of classic and agile methods.							
Intende	ed lear	ning outcomes					
The stu fession	dents   al proj	possess practically rele ect management. They and review projects.					
Course	<b>S</b> (type, r	number of weekly contact hour	s, language — if other than Ger	man)			
V (4)							
module is written If anno examin prox. 19	Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for 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							
Additio	nal inf	ormation					
Focuse SE,IT,K		able for students of the ,HCI,GE	Master's programme l	nformatik (Computer	Science, 120 ECTS o	credits):	
Worklo	ad						
150 h							
Teachi	ng cycl	e					
Referre	d to in	LPO I (examination regulati	ons for teaching-degree progra	mmes)			
Module		urs in					
Module appears in         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) Mathematics (2022)         Master's degree (1 major) Mathematics (2022)         Master's degree (1 major) Management (2022)         Master's with 1 major Information Systems (2024)         JMU Würzburg • generated 12-Jun-2025 • exam. reg. da-         page 56 / 216							
waster's wi	in 1 majo	minormation Systems (2024)	-	generated 12-Jun-2025 • exa r (120 ECTS) Information Syst	-	page 56 / 216	

Master's degree (1 major) Media Entertainment (2022) Master's degree (1 major) Psychology of digital media (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) Master's degree (1 major) Economathematics (2024) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)

Module	e title			Abbreviation				
Project	- Curre	ent Topics in Computer S	cience		10-I=PRJAK-212-mo	1		
Module	e coord	inator		Module offered by				
Dean o	f Studi	es Informatik (Computer	Science)	cience) Institute of Computer Science				
ECTS	1	od of grading	Only after succ. com	•				
5		rical grade		<u>p</u>				
Duratio		Module level	Other prerequisites					
1 seme		graduate						
Conten			<u></u>					
		a project task (in Teams)	).					
Intende	Intended learning outcomes							
The pro	oject all	lows participants to work	on a problem in com	puter science in tea	ms.			
Course	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)				
P (4)								
		<b>Sessment</b> (type, scope, langua Ile for bonus)	ge — if other than German, e	xamination offered — if no	t every semester, informati	on on whether		
Langua Assess project	project report (10 to 15 pages) and presentation of project (15 to 30 minutes) Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered (Each project is offered one time only. The project will not be repeated; there will not be another project with the same topic. Assessment can, therefore, only be offered for the project offered in the respective semester)							
Allocat		• •		,				
Allocal		Jaces						
		ormation						
Focuse	s availa	able for students of the N LR, HCI, GE	laster's programme Ir	nformatik (Computer	Science, 120 ECTS o	redits): AT,		
Worklo		LK, HCI, GL						
	au							
150 h								
Teachi	ng cycl	e						
Referre	ed to in	LPO I (examination regulation	s for teaching-degree progra	mmes)				
Module	e appea	ars in						
Master	's degr	ee (1 major) Computer Sc	ience (2021)					
Master	's degr	ee (1 major) Computation	al Mathematics (202	2)				
Master	's degr	ee (1 major) Information S	Systems (2022)					
Master	's degr	ee (1 major) Mathematics	5 (2022)					
Master	's degr	ee (1 major) Managemen <sup>-</sup>	t (2022)					
	Master's degree (1 major) Media Entertainment (2022)							
	Master's degree (1 major) Psychology of digital media (2022)							
	Master's degree (1 major) Computer Science (2023)							
	Master's degree (1 major) Computational Mathematics (2024)							
	Master's degree (1 major) Management (2024)							
	-	ee (1 major) Mathematics						
	-	ee (1 major) Information S						
Imaster	s aegr	ee (1 major) Economathe	matics (2024)					
Master's w	ith 1 majo	r Information Systems (2024)	-	generated 12-Jun-2025 • exa	-	page 58 / 216		



Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)

Module	Nodule title				Abbreviation	
Industri	ial Maı	nagement 1			12-M-SBM-242-m01	
Module	coord	inator		Module offered by		
holder o Manage		Chair of Business Manage	ement and Industrial	Faculty of Managem	ient 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 semes	ster	graduate				
Conten	ts					
The course addresses central issues of strategic supply management. The supply function of the company (purchasing, materials management, procurement logistics) and its strategic importance is analysed and basic methods are developed that are relevant in this area. Ecological and social issues are addresses as well as economic issues.						
Intende	d learı	ning outcomes				
gical an ter com are able	Students learn the principles of performance-oriented optimization of all procurement activities, including ecolo- gical and social aspects. They learn how to develop long-term, competitively sensitive potentials for success. Af- ter completion of the module students are able to adequately structure problems in strategic procurement. They are able to accurately classify the tasks of the procurement function and to describe and discuss their strategic importance and can apply essential methods and procedures.					
Courses	<b>5</b> (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)		
V (2) + Ü Module		t in: German and/or Engl	ish			
Method	l of ass	<b>essment</b> (type, scope, langua	ge — if other than German, e	examination offered — if no	t every semester, informati	on on whether
module is	creditab	le for bonus)				
<ul> <li>b) prese</li> <li>c) term</li> <li>d) portf</li> <li>Langua;</li> <li>Assession</li> </ul>	a) written examination (approx. 40 to 60 minutes) or b) presentation (approx. 20 minutes) and term paper (15 to 20 pages), weighted 1:1 or c) term paper (30 to 40 pages) or d) portfolio (approx. 50 hours) Language of assessment: German and/or English Assessment offered: Only when announced in the semester in which the courses are offered creditable for bonus					
Allocati	ion of p	olaces				
Number of places: 20. 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						
Module	can b	e taught in form of E Lear	ning course or as a b	lock.		
		Information Systems (2024)	JMU Würzburg •	generated 12-Jun-2025 • exa r (120 ECTS) Information Syste		page 60 / 216

#### 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

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	
Industr	ial Maı	nagement 3			12-M-SPM-242-m01	
Module	coord	inator		Module offered by		
holder ( Manage		Chair of Business Manage	ement and Industrial	Faculty of Managem	nent 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 semes	ster	graduate				
Conten	ts					
This module will discuss contents and procedures of strategic production management and, in particular, plan- ning and control concepts, especially Lean Production, Total Quality Management und Agile Manufacturing. Fur- thermore, essential issues regarding ecological aspects and their role for industrial companies are diskussed and mathematical models baased on production theory are developed. Students will become familiar with the essentials of strategic production management. Theoretical and analyti- cal models will be used for analysing both economic and ecological issues. In addition, the module will discuss principles of value structure optimisation and will develop competences regarding the development of integra- ted mathematical models.						
Intende	ed leari	ning outcomes				
strategy the mai concep	y struct n strat ts for t	ured and goal-oriented ir	n a global context usi in production mana application situation	ng appropriate meth gement and evaluate is.	wer questions of operations ods. Furthermore, they know e and apply planning and control	
V (2) + l						
		t in: German and/or Engli				
		s <b>essment</b> (type, scope, languag le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether	
b) prese c) term d) portf Langua Assessi credital	entatio paper folio (a ge of a ment o ble for		nd term paper (15 to : /or English			
Allocati						
WA: Should (1) Stud ferentia a. Amon ding to b. When availab ding co c. Amon (2) Any	the nu lents w Il consi ng app the tot n place le plac urses. ng appl remair	ho already have success deration. licants with the same nur al number of ECTS credits s are allocated in accord es, places will be allocate icants with the same ave ing places are available	fully completed cours mber of successfully s achieved in the corr ance with b) and the ed according to the a trage grade, places w to students who have	ses offered by the su completed modules, responding modules number of applicatio verage grade of asse ill be allocated by lo e not yet successfully	ons exceeds the number of essments taken in the correspon-	

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

Module can be taught in form of E Learning course or as a block.

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

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							
Human	Resou	rce Management and Inc	dustrial Relations		12-M-HRM-242-m01		
Module	coord	inator		Module offered by			
holder of the Chair for Human Resource Management and Organisation			e Management and	Faculty of Manager	ment and Economics		
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 semes	ster	graduate					
Content	s						
such as Syllabus Introduc Chapter Chap	ithe d stion: H 1: The 2: Mo 3: Em 4: The 5: Wo 6: The 7: Cre 8: Def 7: Cre 9: Cre 9: Cre 10: Cre	ifferent actors in ndustri luman Resource Manage employment contract tivation ployee resistance agains role of works councils rks councils and the employment behaviour of labour und dentials and signaling mographic challenges of erts (1992), Economics, C anck, Fiedler, Royer (201 chel, Stuttgart Empirische Determinant rift für betriebswirtschaft ear (1995), An Economic eira, Zwick (2010), Works 40-273 g), Theory of Union Barga b6), Personnel Economic dh, Halversson (2008), I vetz, Bloom, Lutz (eds.), and Productivity Growth <b>hing outcomes</b> lectures is to enable stu- results in the area huma	al relations. ement & Industrial Re st reorganisations ployer wage structure ions <sup>7</sup> HRM Organization and Mar 5), Organisation – Th en des Widerstandes tliche Forschung 55, 4 Analysis of Works Co s Councils and the An aining Goals, Princeto s in Imperfect Labour k (2020), Informatior Papers 72(3), 651-67: Productivity consequ Population and Deven (suppl. to Vol. 34), 2 udents to understand an resource managem	elations hagement, Prentice H leorie und Praxis aus s von Mitarbeitern ge 45-59 uncils, in Rogers, Str hatomy of Wages, Inc on University Press, F Market, Oxford Univ n advantages of trair 1. ences of workforce a lopment Review, Pol 238-256 and apply advanced hent and industrial re-	s ökonomischer Sicht, 7. Auflage, egen Innovationen, Schmalen- reeck (eds.), Works Councils, Chi- dustrial and Labor Relations Re-		
		umber of weekly contact hours,	language — if other than Ge	rman)			
V (2) + ĺ Module		t in: English					

ethod of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whet	hor
bulle is creditable for bonus)	iei
written examination (approx. 60 minutes) or	
term paper (approx. 15 pages)	
nguage of assessment: English	
location of places	
Iditional information	
orkload	
o h	
eaching cycle	
aching cycle: summer semester	
eferred to in LPO I (examination regulations for teaching-degree programmes)	
odule appears in	
aster's degree (1 major) Management International (2024)	
aster's degree (1 major) Management (2024)	
aster's degree (1 major) Information Systems (2024)	
aster's degree (1 major) International Economic Policy (2024)	
aster's degree (1 major) Economathematics (2024)	
aster's degree (1 major) Information Systems (2025)	
aster's degree (1 major) International Economic Policy (2025)	
aster's degree (1 major) Management (2025)	
aster's degree (1 major) Management International (2025)	
aster's degree (1 major) Adult Education and Management in Lifelong Education (2025)	
aster's degree (1 major) Applied Human Geography (2025)	
aster's degree (1 major) China Business and Economics (2025)	
aster's degree (1 major) China Language and Economy (2025)	
aster's degree (1 major) Economathematics (2025)	

Master's with 1 major Information Systems (2024)

Module	Module title Abbreviation					
Project	Manag	gement and Control			12-M-PROM-242-mo1	
Module	e coord	inator		Module offered by		
holder of the Chair of Business Management, Controlling and Accounting			ement, Controlling	Faculty of Managen	nent and Economics	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duration Module level Other prerequisites						
1 seme	ster	graduate				
Conten	ts					
pany proje sidered thods a well as	rojects ect man d. The n and inst potent	that are associated with hagement approaches, th hodule covers characteris truments of control and n ial applications of these	significant changes f eoretical foundation stic features and stru nanagement of proje	for those involved. Th s and methods of ch ctures of projects, th cts in various project	g directed towards internal com- nus, alongside classical and agi- ange management are also con- neir possible success factors, me t phases. The theoretical basis as	
Intende	ed learı	ning outcomes				
nesses Further nally, s <b>Course</b> V (2) + Module <b>Methoo</b>	, as we more, t tudent: <b>s</b> (type, n Ü (2) e taugh <b>d of ass</b>	Il as the application pose hey gain competencies in s are able to apply these number of weekly contact hours, I t in: German and/or Engl sessment (type, scope, langua	sibilities and limitation n designing and adva tools and methods in anguage — if other than Ge ish	ons, of commonly us ancing project manag n practical settings. <sup>rman)</sup>	uating the strengths and weak- ed tools and methods in practice gement and controlling. Additio- net every semester, information on whether	
written	examininge of a	le for bonus) nation (approx. 60 minut ssessment: German and, bonus				
Allocat	ion of p	olaces				
Additio	onal info	ormation				
Worklo	ad					
150 h						
Teachi	ng cycl	e				
Teachir	ng cycle	e: winter semester				
Referre	ed to in	LPO I (examination regulation	s for teaching-degree progra	ammes)		
Module	e appea	ars in				
	-	ee (1 major) Management				
	-	ee (1 major) Information S				
	-	ee (1 major) International ee (1 major) Economathe	•	)24)		
mastel	5 uegli		matics (2024)			

JMU Würzburg • generated 12-Jun-2025 • exam. reg. data record Master (120 ECTS) Information Systems - 2024

page 66 / 216

Module	Module title				Abbreviation		
Softwa	re Arch	itecture			10-I=SAR-161-m01		
Module	e coord	inator		Module offered by			
holder	of the (	Chair of Computer Scier	nce II	II Institute of Computer Science			
ECTS	Metho	od of grading	Only after succ. con	Only after succ. compl. of module(s)			
5	nume	rical grade					
Duratio		Module level	Other prerequisites				
1 seme	ster	graduate					
Conten		0					
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							
Intende	ed lear	ning outcomes					
		oossess a fundamental n modern software arcl					
Course	<b>S</b> (type, r	number of weekly contact hour	s, language — if other than Gei	rman)			
V (2) +	Ü (2)						
		<b>sessment</b> (type, scope, lang le for bonus)	uage — if other than German,	examination offered — if no	t every semester, informat	on on whether	
lf annoi examin prox. 15 Langua	unced ation c 5 minut ge of a	nation (approx. 60 to 12 by the lecturer at the be of one candidate each ( ces per candidate). ssessment: German an	eginning of the course, approx. 20 minutes) or				
credita							
Allocat		Jiaces					
		ormation		· · · · · ·			
Focuse: SE,IT,ES		able for students of the	Master's programme l	nformatik (Computer	r Science, 120 ECTS (	credits):	
Worklo	ad						
150 h							
Teachir	ng cycl	е					
Referre	d to in	LPOI (examination regulation	ons for teaching-degree progra	mmes)			
§ 22    Nr. 3 b)							
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)							
	-	ee (1 major) Computer S	Science (2018)				
Master's wi	ith 1 majo	r Information Systems (2024)	-	generated 12-Jun-2025 • exa r (120 ECTS) Information Syst	-	page 67 / 216	

#### UNIVERSITÄT WÜRZBURG

Module studies (Master) Computer Science (2019) 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) 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) Master's degree (1 major) Economathematics (2024) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) Computer Science (2025) Master's degree (1 major) Economathematics (2025) First state examination for the teaching degree Gymnasium Computer Science (2025)

Module	title		Abbreviation			
Change	Mana	gement			12-M-CIU-242-m01	
Module	coord	inator		Module offered by		
holder o and Acc		Chair of Business Manage g	ement, Controlling	Faculty of Managem	ent and Economics	
ECTS	ECTS Method of grading Only after succ. compl. of module(s)					
5	numei	rical grade				
Duratio	n	Module level	Other prerequisites			
1 semes	ster	graduate				
Content	is i	<u> </u>	L			
Within the module, theoretical basics of change management are covered. In addition, we present and jointly analyze existing change projects in detail. We try to answer related questions, too. For example, the module discusses how to involve stakeholders in change, what motivates them to embrace change, and whether participation is a universal principle. The module covers projects like merging two departments, restarting a department with team building, conducting an employee survey, or developing a new mission statement. The majority of the projects are taken from the social sector, but can be transferred to industry and SMEs.						
		ning outcomes				
emotion strumer in these	nal rea nts in c e proce	ctions in change process hange processes can be	es. Change processe questioned. Student	s can be critically an s are able to identify	e of resistance and massive alyzed and the use of typical the typical pitfalls and hurdl s well as to create their own s	es
Courses	<b>5</b> (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)		
V (2) + Ü Module		t in: German and/or Engli	ish			
Method	of ass	essment (type, scope, langua	ge — if other than German, e	examination offered — if no	t every semester, information on wheth	ner
module is	creditab	le for bonus)				
b) term Langua	paper ge of a nent o	nination (approx. 60 min (approx. 15 pages) ssessment: German and/ ffered: In the semester in bonus	or English	offered		
Allocati	on of p	olaces				
<ul> <li>Number of places: 16.</li> <li>WA:</li> <li>Should the number of applications exceed the number of available places, places will be allocated as follows:</li> <li>(1) Students who already have successfully completed courses offered by the supervising chair will be given preferential consideration.</li> <li>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.</li> <li>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.</li> <li>c. Among applicants with the same average grade, places will be allocated by lot.</li> <li>(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.</li> </ul>						
Master's wit	h 1 major	Information Systems (2024)		generated 12-Jun-2025 • exa		216

#### 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

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		
-		hip in Software-Ecosy	o, Venture Capital,	12-M-ESE-242-m01		
Private				r		
Module				Module offered by		
holder Informa			agement and Business	Faculty of Managen	nent and Economics	
ECTS         Method of grading         Only after succ. compl. of module(s)						
5	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	Contents					
sensch ware er stems, The mo vers va	aft (Bu ntrepre and sc dule fin lue ma	siness Management ar neurship. Therefore, th ale-up companies. rst provides a foundation nagement, business m	Wirtschaftsinformatik ( nd Economics) who are is module focuses on t on for understanding er odel development, and of practical business n	interested in enterp he intersection of en ntrepreneurship fron l organizational strue	rise thinking, scaling trepreneurship, soft n a theoretical persp ctures. This is follow	g, and soft- ware ecosy- ective. It co- ed by a de-
traction The ma and gen ecosyst	in part in part nerate tems of	measuring success and of this module discuss value through different digital companies and	d performance, and legates to performance, and legates how software-based business models and it the composition of the specially scale-ups. The	al forms. d companies can pos innovative strategies eir strategies. These	sition themselves in s. Students will learn strategies form the f	the market about the foundation
This mo Ir V D S S E	odule in ntroduc 'alue M oaily Do oftware cale-U xit Stra	ncludes the following c tion to Entrepreneursh anagement and Busin ing, KPI, Traction and I e Entrepreneurship: So os: Introduction, Growt tegies	g growth strategies. Va ourse contents, as sum ip, Digital Startup Ecos ess Model Developmen Project-Management ftware-based Value Cha h, Tools and Strategies	imarized below: ystems, and Process t ain		so covered.
Intende	ed learı	ning outcomes				
<ul> <li>The "Entrepreneurship in Software-Ecosystems: Start &amp; Scale Up, Venture Capital, Private Equity, EXIT" module aims to achieve the following learning outcomes:</li> <li>Software-Based Business Models: Students will learn to understand software-based business models, manage daily operations, maintain traction, and implement KPI management.</li> <li>Software Entrepreneurship: After completing the module, students will be able to define software entrepreneurship, analyze its ecosystems, and engage with value-enhancing strategies.</li> <li>Corporate Structures and Growth: Participants will learn to build scalable structures, develop growth strategies, and practically apply scaling tools.</li> <li>Exit Strategies: Students will become familiar with various exit strategies for businesses and assess their advantages.</li> </ul>						
Course	<b>S</b> (type, n	umber of weekly contact hour	s, language — if other than Ger	rman)		
V (2) + Ü (2) Module taught in: German and/or English						
		e <b>ssment</b> (type, scope, lang le for bonus)	guage — if other than German, e	examination offered — if no	ot every semester, informati	ion on whether
		mination (approx. 60 m	inutes) or			
Master's wi	ith 1 majoi	Information Systems (2024)		generated 12-Jun-2025 • exa r (120 ECTS) Information Syst	-	page 71 / 216

UNIVERSITÄT WÜRZBURG

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 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)

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#### Module appears in

Module	e title				Abbreviation		
Selecte	ed Topi	cs in Business Managen	ent and Economics 1		12-M-APW1-161-m01		
Module	e coord	inator		Module offered by			
Dean o mics	Dean of the Faculty of Business Management and Econo- mics				nent and Economics		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)			
5	nume	rical grade					
Duratio		Module level	Other prerequisites				
1 seme		graduate					
	Contents						
• c • a • c	ourses dditior ourses	erves the purpose of trai taken at other German of nal courses offered on a s offered by new Chairs th f the respective Chairs w	or non-German univer short-term basis nat are yet to be inclu	sities ded in the FSB (subj			
Intende	ed lear	ning outcomes					
As a re	sult of a	accrediting multiple kind	ls of modules, a desc	ription of acquired s	kills cannot be given.		
Course	<b>S</b> (type, r	number of weekly contact hours,	language — if other than Ge	rman)			
V (2) +							
a) written examination (approx. 60 to 90 minutes) or 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							
Allocat	ion of p	olaces					
Additio	nal inf	ormation					
Worklo	ad						
150 h							
Teachi	ng cycl	e					
Teachi	ng cycle	e: no courses offered					
Referre	d to in	LPO I (examination regulation	is for teaching-degree progra	ammes)			
Module	e appea	ars in					
		ee (1 major) Business Inf	ormation Systems (2)	016)			
	-	ee (1 major) Business Ma		/			
Master's degree (1 major) China Business and Economics (2016)							
		ee (1 major) Internationa					
	-	ee (1 major) China Langu	- ,	016)			
	-	ee (1 major) Managemen					
	-	ee (1 major) Internationa	•				
	-	ee (1 major) China Busin ee (1 major) China Langu		•			
		r Information Systems (2024)		• generated 12-Jun-2025 • exa	am. reg. da- page 73 / 216		
	-			er (120 ECTS) Information Syst			

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)
Master's degree (1 major) Information Systems (2025)
Master's degree (1 major) International Economic Policy (2025)
Master's degree (1 major) Management (2025)
Master's degree (1 major) China Business and Economics (2025)
Master's degree (1 major) China Language and Economy (2025)

				Abbreviation	
Selected Top	ics in Business Informati	on Systems 1		12-M-AWI1-242-m01	
Module coord	Module coordinator			Module offered by	
Dean of the Fa	Dean of the Faculty of Business Management and Econo- mics			ment and Economics	
	od of grading	Only after succ. cor	npl. of module(s)		
5 nume	erical grade				
Duration	Module level	Other prerequisites	5		
1 semester	graduate				
Contents	1	1			
<ul><li>courses</li><li>addition</li><li>courses</li></ul>	serves the purpose of tra s taken at other German of nal courses offered on a s offered by new Chairs th of the respective Chairs w	or non-German univer short-term basis nat are yet to be inclu	rsities ded in the FSB (subj		
Intended lear	ning outcomes				
As a result of	accrediting multiple kind	ds of modules, a desc	ription of acquired s	kills cannot be given.	
Courses (type,	number of weekly contact hours,	language — if other than Ge	erman)		
	nt in: German and/or Eng alternatively S instead of				
Method of as	coccentration i				
module is credital			examination offered — if no	ot every semester, information on whether	
module is credital a) written exa b) presentatio c) oral examin approx. 30 m	ble for bonus) mination (approx. 60 mi on (15 to 20 minutes) wit nation (one candidate ea inutes) assessment: German and	nutes) or h term paper (approx. ch: approx. 10 to 15 n	. 20 pages), weighte		
a) written exa b) presentatio c) oral examin approx. 30 m Language of a	ble for bonus) mination (approx. 60 mi on (15 to 20 minutes) wit nation (one candidate ea inutes) assessment: German and bonus	nutes) or h term paper (approx. ch: approx. 10 to 15 n	. 20 pages), weighte	d 1:2 or	
module is credital a) written exa b) presentatio c) oral examin approx. 30 m Language of a creditable for	ble for bonus) mination (approx. 60 mi on (15 to 20 minutes) wit nation (one candidate ea inutes) assessment: German and bonus	nutes) or h term paper (approx. ch: approx. 10 to 15 n	. 20 pages), weighte	d 1:2 or	
module is credital a) written exa b) presentatio c) oral examin approx. 30 m Language of a creditable for	ble for bonus) mination (approx. 60 mi on (15 to 20 minutes) wit nation (one candidate ea inutes) assessment: German and bonus <b>places</b>	nutes) or h term paper (approx. ch: approx. 10 to 15 n	. 20 pages), weighte	d 1:2 or	
module is credital a) written exa b) presentatio c) oral examin approx. 30 m Language of a creditable for Allocation of	ble for bonus) mination (approx. 60 mi on (15 to 20 minutes) wit nation (one candidate ea inutes) assessment: German and bonus <b>places</b>	nutes) or h term paper (approx. ch: approx. 10 to 15 n	. 20 pages), weighte	d 1:2 or	
module is credital a) written exa b) presentatio c) oral examin approx. 30 m Language of a creditable for Allocation of	ble for bonus) mination (approx. 60 mi on (15 to 20 minutes) wit nation (one candidate ea inutes) assessment: German and bonus <b>places</b>	nutes) or h term paper (approx. ch: approx. 10 to 15 n	. 20 pages), weighte	d 1:2 or	
module is credital a) written exa b) presentatio c) oral examin approx. 30 m Language of a creditable for Allocation of  Additional inf	ble for bonus) mination (approx. 60 mi on (15 to 20 minutes) wit nation (one candidate ea inutes) assessment: German and bonus <b>places</b>	nutes) or h term paper (approx. ch: approx. 10 to 15 n	. 20 pages), weighte	d 1:2 or	
module is credital a) written exa b) presentatio c) oral examin approx. 30 m Language of a creditable for Allocation of  Additional inf  Workload	ble for bonus) imination (approx. 60 mi on (15 to 20 minutes) wit nation (one candidate ea inutes) assessment: German and bonus places formation	nutes) or h term paper (approx. ch: approx. 10 to 15 n	. 20 pages), weighte	d 1:2 or	
module is credital a) written exa b) presentatio c) oral examin approx. 30 m Language of a creditable for Allocation of  Additional inf  Workload 150 h Teaching cyc	ble for bonus) imination (approx. 60 mi on (15 to 20 minutes) wit nation (one candidate ea inutes) assessment: German and bonus places formation	nutes) or h term paper (approx. ch: approx. 10 to 15 n	. 20 pages), weighte	d 1:2 or	
module is credital a) written exa b) presentatio c) oral examin approx. 30 m Language of a creditable for Allocation of  Additional inf  Workload 150 h Teaching cycl	ble for bonus) imination (approx. 60 mi on (15 to 20 minutes) wit nation (one candidate ea inutes) assessment: German and bonus places formation	nutes) or h term paper (approx. ch: approx. 10 to 15 n l/or English	. 20 pages), weighten ninutes; groups of 2:	d 1:2 or	
module is credital a) written exa b) presentatio c) oral examin approx. 30 m Language of a creditable for Allocation of  Additional inf  Workload 150 h Teaching cycl	ble for bonus) mination (approx. 60 mi on (15 to 20 minutes) wit nation (one candidate ea inutes) assessment: German and bonus places formation	nutes) or h term paper (approx. ch: approx. 10 to 15 n l/or English	. 20 pages), weighten ninutes; groups of 2:	d 1:2 or	
module is credital a) written exa b) presentatio c) oral examin approx. 30 m Language of a creditable for Allocation of  Additional inf  Workload 150 h Teaching cycl	ble for bonus) imination (approx. 60 mi on (15 to 20 minutes) with nation (one candidate ea- inutes) assessment: German and bonus places formation le e: no courses offered LPO I (examination regulation	nutes) or h term paper (approx. ch: approx. 10 to 15 n l/or English	. 20 pages), weighten ninutes; groups of 2:	d 1:2 or	
module is credital a) written exa b) presentation c) oral examina approx. 30 m Language of a creditable for Allocation of  Additional inf  Workload 150 h Teaching cycl Referred to inf  Module apper Master's degr Master's degr Master's degr Master's degr Master's degr Master's degr Master's degr	ble for bonus) imination (approx. 60 mi on (15 to 20 minutes) with nation (one candidate ea- inutes) assessment: German and bonus places formation le e: no courses offered LPO I (examination regulation	nutes) or h term paper (approx. ch: approx. 10 to 15 n l/or English 	. 20 pages), weighten ninutes; groups of 2: ammes)	d 1:2 or	



Master's degree (1 major) China Language and Economy (2025)

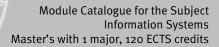
Module	Module title				Abbreviation		
Topics in Enterprise Systems					12-M-TES-242-m01		
Module	coord	inator		Module offered by			
Dean of mics	f the Fa	culty of Business Manag	gement and Econo-	Faculty of Managem	nent and Economics		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)			
5		rical grade		•			
Duratio		Module level	Other prerequisites				
1 semes		graduate					
Contents							
<ul> <li>co</li> <li>a</li> <li>co</li> </ul>	<ul> <li>This module serves the purpose of transferring credits from</li> <li>courses taken at other German or non-German universities</li> <li>additional courses offered on a short-term basis</li> <li>courses offered by new Chairs that are yet to be included in the FSB (subject-specific provisions)</li> <li>The holders of the respective Chairs will ensure that the courses are eligible for credit transfer.</li> </ul>						
Intende	ed learı	ning outcomes					
As a res	sult of a	accrediting multiple kinc	ls of modules, a desc	ription of acquired sl	kills cannot be given		
Course	<b>S</b> (type, n	umber of weekly contact hours,	language — if other than Ge	rman)			
V (2) + l	Ü (2)						
Module	taugh	t in: German and/or Eng	lish				
		s <b>essment</b> (type, scope, langua le for bonus)	age — if other than German,	examination offered — if no	t every semester, informati	ion on whether	
b) writte c) term d) prese Langua	en exai paper entatio ge of a ment o	nination (approx. 60 to g mination (questions con (15 to 20 pages) or n (30 to 45 minutes) ssessment: German and ffered: In the semester in bonus	cerning mathematica /or English		ox. 120 minutes) or		
Allocati	ion of p	olaces					
			-				
Additio	nal inf	ormation					
Worklo	ad						
150 h							
Teachir	ng cycl	٩					
		e: after announcement					
				<b>`</b>			
Referred to in LPO I (examination regulations for teaching-degree programmes)							
Module			. ( )				
	-	ee (1 major) Managemen					
	-	ee (1 major) Information	•				
Master's degree (1 major) Economathematics (2024) Master's degree (1 major) Information Systems (2025)							
Master's degree (1 major) Management (2025)							
Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025)							
		ee (1 major) Economathe		)/			
		r Information Systems (2024)		generated 12-Jun-2025 • exa	ım. reg. da-	page 77 / 216	
	·		-	r (120 ECTS) Information Syst	-		



## Track 2: Business Analytics

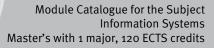
(20 ECTS credits)





# **Core** (10 ECTS credits)

Module	Module title				Abbreviation			
Decision Support Systems 12-M-DSS-242-mo1								
Module	e coord	inator		Module offered by				
holder of the Chair of Business Analytic			ics	Faculty of Managem	ent 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							
The acc	The course discusses advanced approaches for modelling and solving decision problems in business settings. The acquired insights are used to design and implement decision support systems using standard software tools (Python).							
Intende	ed lear	ning outcomes						
• U • Is • S	Inderst solate k solve di	ully completing the count and the structure of class key elements from genera fferent classes of optime ent decision support system	sic business decision al problem description ization problems (line	problems s and convert them to				
Course	<b>S</b> (type, r	number of weekly contact hours,	language — if other than Ger	man)				
V (2) + Module		t in: English						
		sessment (type, scope, langu	age — if other than German.	examination offered — if no	t everv semester, informati	on on whether		
		le for bonus)						
b) oral approx Langua	examir . 30 mi ge of a	ssessment: English		ninutes, groups of 2:	approx. 20 minutes,	, groups of 3:		
credita								
Allocat	ion of p	olaces						
Additio	nal inf	ormation	_					
Worklo	ad							
150 h								
Teachi	ng cycl	e						
Teachir	ng cycle	e: winter semester						
Referre	d to in	LPO I (examination regulation	ns for teaching-degree progra	mmes)				
		· · · · · · · · · · · · · · · · · · ·		·				
Module	e appea	ars in						
Master's degree (1 major) Management International (2024)								
	-	ee (1 major) Artificial Int	-					
	-	ee (1 major) Managemer	-					
Master's degree (1 major) Information Systems (2024)								
	Master's degree (1 major) International Economic Policy (2024)							
	-	ee (1 major) Economathe	•					
	-	ee (1 major) Information		``				
		ee (1 major) Internationa		25) generated 12-Jun-2025 • exa	m reg da	nage %0 / 046		
master S WI	пттпајо	i monitation systems (2024)		r (120 ECTS) Information System		page 80 / 216		



Master's degree (1 major) Management (2025) Master's degree (1 major) Management International (2025) Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)

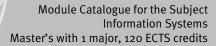
Module	e title				Abbreviation	
Advanc	ed Ope	erations & Logistics Man	agement		12-M-AOLM-182-mc	01
Module coordinator				Module offered by	<u> </u>	
holder of the Chair of Logistics and Quantitative Method			antitative Methods		nent and Economics	
			-	, ,		
ECTS		od of grading	Only after succ. com	ipl. of module(s)		
5		rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
plannir	ng of in	dvanced Operations & Lo tegrated production and se studies.				
Intende	ed lear	ning outcomes				
(i) anal	yze and	ng this course students o d evaluate integrated pro nd apply appropriate met	duction and logistics		istics systems;	
		he consequences of unco cepts and methods to pla				
Course	<b>S</b> (type, r	number of weekly contact hours, I	anguage — if other than Ger	man)		
V (2) + Module		t in: English				
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, informat	ion on whether
b) term	paper ge of a	mination (approx. 60 mir (approx. 15 to 20 pages) ssessment: English bonus	nutes) or			
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad		-			
	au					
150 h			-			
Teachi						
		e: summer semester				
Referre	d to in	LPO I (examination regulation	s for teaching-degree progra	mmes)		
Module	e appea	ars in				
	-	ee (1 major) Managemen				
	•	ee (1 major) International		-		
	-	ee (1 major) China Busing		-		
	-	ee (1 major) China Langu	- , ,	)19)		
	-	ee (1 major) Information S		(0.24)		
	-	ee (1 major) China Busine ee (1 major) China Langu				
	-	ee (1 major) China Langu ee (1 major) Economathe	- ,	721) 		
	-	ee (1 major) Economatine				
		r Information Systems (2024)	•	generated 12-Jun-2025 • exa	am. reg. da-	page 82 / 216
			-	r (120 ECTS) Information Syst	-	

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WÜ	RZBURG

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)
Master's degree (1 major) Information Systems (2025)
Master's degree (1 major) International Economic Policy (2025)
Master's degree (1 major) Management (2025)
Master's degree (1 major) Management International (2025)
Master's degree (1 major) China Business and Economics (2025)
Master's degree (1 major) China Language and Economy (2025)
Master's degree (1 major) Economathematics (2025)

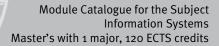
Module	Module title				Abbreviation		
Analytical Information Systems 12-M-BI-242-					12-M-Bl-242-m01		
Module	e coord	inator		Module offered by			
holder	ofthe	Chair of Business Analyti	CS	Faculty of Managem	nent and Economics		
ECTS Method of grading			Only after succ. com				
5		rical grade					
Duratio		Module level	Other prerequisites				
1 seme		graduate					
Conten		giuduate	<u> </u>				
		ovides a comprehensive	introduction to data r	annagement statist	ical mathada and m	achina laar	
ning. Tl	he moc	lule covers topics such as igence, including neural	s SQL, data integratio				
Intende	ed lear	ning outcomes					
• U	Jnderst	and data management, i	ncluding data entry, a	innotation, and man	ipulation.		
		eneral statistical techniqu					
		ely use machine learning		•	cs.		
		number of weekly contact hours, l	anguage — if other than Ger	man)			
V (2) + Module		t in: English					
		<b>Sessment</b> (type, scope, langua ole for bonus)	ge — if other than German, e	examination offered — if no	t every semester, informati	on on whether	
	age of a	nation (approx. 60 minut ssessment: English bonus	es)				
Allocat	ion of <sub>l</sub>	places					
Additio	onal inf	ormation					
Worklo	ad						
150 h							
Teachi	ng cycl	e					
Teachir	ng cycl	e: summer semester					
Referre	ed to in	LPO I (examination regulation	s for teaching-degree progra	mmes)			
Module	e appea	ars in					
		ee (1 major) Managemen	t International (2024)				
	-	ee (1 major) Managemen					
Master	's degr	ee (1 major) Information S	Systems (2024)				
Master's degree (1 major) International Economic Policy (2024)							
Master's degree (1 major) Economathematics (2024)							
Master	Master's degree (1 major) Information Systems (2025)						
		ee (1 major) International		25)			
Master's degree (1 major) Management (2025)							
	Master's degree (1 major) Management International (2025)						
	-	ee (1 major) China Busine		-			
Master	's degr	ee (1 major) China Langu	age and Economy (20	25)			
Master's wi	ith 1 majo	r Information Systems (2024)		generated 12-Jun-2025 • exa (120 ECTS) Information Syst	-	page 84 / 216	





Master's degree (1 major) Economathematics (2025)





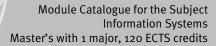
# **Core Electives** (10 ECTS credits)

Master's with 1 major Information Systems (2024)

JMU Würzburg • generated 12-Jun-2025 • exam. reg. data record Master (120 ECTS) Information Systems - 2024

Module	e title		Abbreviation					
Analyti	cal Info	ormation Systems		12-M-BI-242-m01				
Module	e coord	inator		Module offered by				
holder	of the (	Chair of Business Analyt	ics	Faculty of Managen	nent 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						
	Contents							
ning. Tł	he mod	ovides a comprehensive lule covers topics such a igence, including neural	is SQL, data integratio					
Intende	ed lear	ning outcomes						
• L	earn ge	and data management, eneral statistical techniq ely use machine learning	ues for data inspectio	on, exploration, and a	analysis.			
Course	<b>S</b> (type, r	number of weekly contact hours,	language — if other than Ger	man)				
V (2) + Module		t in: English						
		<b>sessment</b> (type, scope, langu le for bonus)	age — if other than German,	examination offered — if no	t every semester, informati	on on whether		
	ige of a	nation (approx. 60 minu ssessment: English bonus	tes)					
Allocat	ion of <b>j</b>	places						
Additio	nal inf	ormation						
Worklo	ad							
150 h								
Teachi	ng cycl	e						
Teachir	ng cycle	e: summer semester						
		LPO I (examination regulation	ns for teaching-degree progra	mmes)				
				,				
Module	e appea	ars in						
-		ee (1 major) Managemer	nt International (2024)					
	-	ee (1 major) Managemer						
Master	's degr	ee (1 major) Information	Systems (2024)					
Master's degree (1 major) International Economic Policy (2024)								
	Master's degree (1 major) Economathematics (2024)							
		ee (1 major) Information		、 、				
	-	ee (1 major) Internationa	-	25)				
Master's degree (1 major) Management (2025)								
	Master's degree (1 major) Management International (2025) Master's degree (1 major) China Business and Economics (2025)							
	-	ee (1 major) China Busin ee (1 major) China Langu		-				
master	5 uegi			·				
Master's wi	ith 1 majo	r Information Systems (2024)	-	generated 12-Jun-2025 • exa r (120 ECTS) Information Syst	-	page 87 / 216		





Master's degree (1 major) Economathematics (2025)

Module title					Abbreviation	
Enterpr	Enterprise Al 12-M-EAI-242-mo1					
Module	e coordi	inator		Module offered by		
holder o prise	of the C	Chair of Business Informa	tics and Al for Enter-	Faculty of Managem	nent and Economics	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	numer	rical grade				
Duratio	n	Module level	Other prerequisites			
1 semes	ster	graduate				
Conten	Contents					
ML Ops ML Ops ML Ops ML Ops ML Ops ML Ops ML Ops Instrast Managi Intende In this o stems i fing and	Introduction to Enterprise AI Business Requirements for AI Systems ML Ops I: Data Engineering ML Ops II: Obtaining Training Data ML Ops II: Data Preprocessing ML Ops III: Data Preprocessing 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. You will refine and test your skills by practicing the theoretical concepts during exercise sessions. This includes					
		umber of weekly contact hours, l	•	• • •		
V (2) + l	Ü (2)	t in: English				
Method module is a) writte	d of ass creditable en exar	-		examination offered — if no	t every semester, information on whether	
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						
allocate (1) Stud ferentia a. Amor	Allocation of places Number of places: 35. 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.					

### UNIVERSITÄT WÜRZBURG

b. When places are allocated in accordance with 1.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

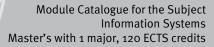
Teaching cycle: summer semester

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) Artificial Intelligence (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			
Operat	ions Research			10-l=0R-232-m01		
Module	e coordinator		Module offered by			
holder	of the Chair of Computer Scie	nce l	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	i			
1 seme	ster graduate					
Conten	ts					
structio teger lin This co	Production plans, railway timetables, the assignment of radio frequencies, planning of delivery tours, or the con- struction of an 'optimal' university timetable: these problems – and many more – can be modeled as (mixed-) in- teger linear optimization problems and solved with integer programming methods. This course teaches integer programming methods like branch-and-bound, cutting plane, and decomposition methods. Furthermore, we practice our modeling skills by studying a variety of application examples.					
Intende	ed learning outcomes					
• T te	ompleting the course he students are able to mode eger linear programs). he students are able to apply					
Course	<b>S</b> (type, number of weekly contact hour	s, language — if other than Ge	rman)			
V (2) + Module	Ü (2) e taught in: German and/or En	glish				
	d of assessment (type, scope, lang creditable for bonus)	guage — if other than German,	examination offered — if no	t every semester, informati	on on whether	
lf anno examin prox. 1 <u>9</u> Langua	examination (approx. 60 to 1 unced by the lecturer at the b ation of one candidate each ( 5 minutes per candidate). ge of assessment: German ar ble for bonus	eginning of the course, approx. 20 minutes) or				
Allocat	ion of places					
Additio	nal information					
Focuse	s available for students of the	Master's programme l	nformatik (Computer	Science, 120 ECTS of	redits): IN	
Worklo	ad					
150 h						
Teachiı	ng cycle					
Referre	d to in LPO I (examination regulati	ons for teaching-degree progra	ammes)			
§ 22    Nr. 3 b)						
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 degree (1 major) Management (2024) Master's degree (1 major) Mathematics (2024) Master's with 1 major Information Systems (2024) Master's with 1 major Information Systems (2024) Master's with 1 major Information Systems (2024)						
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Master's degree (1 major) Information Systems (2024) Master's degree (1 major) Economathematics (2024) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) Computer Science (2025) Master's degree (1 major) Economathematics (2025) First state examination for the teaching degree Gymnasium Computer Science (2025)

Module	title				Abbreviation	
Global Logistics & Supply Chain Management					12-M-GLSC-182-mc	01
Module coordinator				Module offered by	<u> </u>	
			iantitative Methods		ent and Economics	
holder of the Chair of Logistics and Quantitative MethodsFaculty of Management and EconomicsECTSMethod of gradingOnly after succ. compl. of module(s)						>
ECTS		od of grading	Only after succ. com	ipi. of module(s)		
5		rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
	ng of gl	lobal Logistics & Supply obal production network				
Intende	ed learı	ning outcomes				
(i) anal (ii) dev	yze and elop ar luate t	ng this course students d evaluate global produc id apply appropriate me he consequences of unc	ction networks; thods to plan product		s and methods to p	lan uncertain
_		umber of weekly contact hours,	 language — if other than Ger	man)		
V (2) +	Ü (2)	t in: English				
		<b>essment</b> (type, scope, langu	age if other than Cormon	avamination offered if a	t even comoctor informa	tion on whether
		le for bonus)	age — Il other than German, e	examination onered — in no	ot every semester, morma	lion on whether
b) term	paper ge of a	nination (approx. 60 mi (approx. 15 to 20 pages) ssessment: English bonus				
Allocat	ion of p	olaces				
			_			
Additio	nal inf	ormation				
Worklo	ad					
150 h						
Teachi	ng cycl	6				
		e: winter semester				
		LPOI (examination regulation	ns for teaching-degree progra	mmes)		
Module	20002	ore in				
			at (2249)			
	-	ee (1 major) Managemer ee (1 major) Internationa		18)		
	•	ee (1 major) China Busin		-		
	-	ee (1 major) China Langu		•		
	-	ee (1 major) Information	- , ,			
	-	ee (1 major) China Busin		021)		
	-	ee (1 major) China Langı		21)		
	-	ee (1 major) Economathe				
Master		ee (1 major) Information	-	generated 12-Jun-2025 • exa		
						page 93 / 216

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	VERSITÄT
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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)
Master's degree (1 major) Information Systems (2025)
Master's degree (1 major) International Economic Policy (2025)
Master's degree (1 major) Management (2025)
Master's degree (1 major) Management International (2025)
Master's degree (1 major) China Business and Economics (2025)
Master's degree (1 major) China Language and Economy (2025)
Master's degree (1 major) Economathematics (2025)

Module title	Abbreviation					
Topics in Data Science			12-M-ATDS-242-m01			
Module coordinator		Module offered by				
holder of the Chair of Business Inform prise	holder of the Chair of Business Informatics and AI for Enter- prise					
ECTS Method of grading	Only after succ. com	pl. of module(s)				
5 numerical grade						
Duration Module level	Other prerequisites					
1 semester graduate						
Contents						
In this course, students work on adva flow from data collection to data prep teaching approach, students are enab	aration to modeling, e	valuation and deplo	yment. By following a top-down			
Intended learning outcomes						
<ul> <li>As part of the course work, students v</li> <li>1. Becoming familiar with the principl</li> <li>2. Apply machine learning and deep le</li> <li>3. Design, implementation and evaluation Science</li> <li>4. Application of Jupyter notebooks ar</li> <li>5. Understanding of a data-driven &amp; a</li> </ul>	es and frameworks in earning frameworks to ition of key algorithms nd their infrastructure	the research area of structured and unst within an end-to-en (collection, storage,	Data Science. ructured data d workflow in the field of Data			
<b>Courses</b> (type, number of weekly contact hours.						
V (2) + Ü (2) Module taught in: English						
Method of assessment (type, scope, langu	age — if other than German, e	examination offered — if no	t every semester, information on whether			
module is creditable for bonus)						
a) written examination (approx. 60 mi b) term paper (approx. 15 pages) or c) portfolio (approx. 50 hours) Language of assessment: English Assessment offered: In the semester creditable for bonus		offered				
Allocation of places						
Number of places: 35. 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 1.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. <b>Additional information</b>						

### 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

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

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

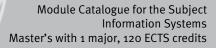
Master's degree (1 major) Information Systems (2024)

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

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

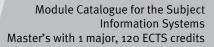
Module	e title				Abbreviation	
Applied	d Data	Science in Business and	Economics		12-M-TE-242-m01	
Module	e coord	inator		Module offered by		
holder mics	ofthe	Chair of Data Science in E	Business and Econo-	Faculty of Managen	nent and Economics	
ECTS	Methe	od of grading	Only after succ. con	pl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts	~	- -			
on, dat pics. A search Intendo	a editii ddition Stude ed lear	ng, and data analysis. Th ally, students will learn a nts that attend this cours <b>ning outcomes</b>	e course will use a pa about existing panel c se should have advan	per-based approach latasets and be led t ced knowledge in st	research designs, data generati- n to introduce and apply these to- co perform their own empirical re- catistics and econometrics.	
		the course, students will ess and economics.	have a comprehensiv	ve understanding of	how to conduct empirical rese-	
Course	<b>S</b> (type, r	number of weekly contact hours,	language — if other than Ger	man)		
V (2) +						
		t in: English				
		<b>Sessment</b> (type, scope, langua ele for bonus)	age — if other than German, o	examination offered — if no	ot every semester, information on whether	
	ige of a	rox. 50 hours) ssessment: English bonus				
Allocat	ion of <sub>l</sub>	places				
Additio	onal inf	ormation				
Worklo	ad					
150 h						
Teachi	ng cycl	e				
	<u> </u>	e: each semester				
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module	e appea	ars in				
exchan	ge pro	gram Business Managerr	ent and Economics (	2022)		
	-	ee (1 major) Managemen	•			
	-	ee (1 major) Information		)		
	-	ee (1 major) Internationa ee (1 major) Economathe		24)		
master	s uegi	ee (1 major) Economatrie	mailes (2024)			

Module title					Abbreviation	
Applied Data Analysis and Machine Learning					12-M-TDS-242-m01	
Module	coord	inator		Module offered by		
		unior Professorship of I Digitization	Microeconomics, esp.	Faculty of Managen	nent 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				
Content	ts					
des an i zed with estimat The cou	introdu h data ion. W ırse wil	s concerned with extrac action to data science a handling in Python, dat e will apply the acquire l be divided into two pa s will be able to work w	nd its application in bu ta visualization, and va d knowledge in topics arts: the lecture where	usiness and econom rrious machine learn from business and e	ics. Participants will ing techniques for p conomics.	be familiari- rediction and
		ning outcomes				
● st ● st	tudents tudents tudents	s learn data handling a s are familiarized with t s gain an understanding	he development and e g of how to apply the ta	valuation of maching aught techniques to		
		umber of weekly contact hours	, language — if other than Ger	man)		
V (2) + l Module		t in: English	_			
		e <b>essment</b> (type, scope, lang le for bonus)	uage — if other than German, o	examination offered — if no	t every semester, informat	on on whether
b) term Langua	paper ge of a ment o	nination (approx. 60 m (approx. 15 pages) ssessment: English ffered: In the semester bonus		offered		
Allocati	ion of p	olaces				
Additio	nal inf	ormation	_			
Worklo	ad					
150 h						
Teachin	ıg cycl	e				
Teachin	ig cycle	e: summer semester				
<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)						
Module						
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)						
		Information Systems (2024)	JMU Würzburg •	generated 12-Jun-2025 • exa r (120 ECTS) Information Syst		page 98 / 216



Master's degree (1 major) Economathematics (2024) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) Management International (2025) Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)

Module title					Abbreviation		
Organizational Economics and Digital Transformation					12-M-OEDT-231-m01		
Module coordinator				Module offered by			
		unior Professorship of Ap man-Machine Interaction	plied Microecono-	Faculty of Managem	nent 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						
econom nomic t as thos nally, th student sights i ses. Intende With thi sights si ses. Sights i ses.	Intended learning outcomes         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.						
• st	tudent	ental and empirical micro s learn how digital transfo number of weekly contact hours, l	ormation impacts org	anizations and their			
V (2) + 1		amper of weekly contact nouls, h	anguage in other than der	many			
		t in: English					
		<b>essment</b> (type, scope, langua le for bonus)	ge — if other than German,	examination offered — if no	t every semester, information on whether		
b) term	paper ge of a	nination (approx. 60 min (approx. 15 pages) ssessment: English bonus	utes) or				
Allocati	ion of p	olaces					
Additio	nal inf	ormation					
Worklo	ad						
150 h	150 h						
Teachir							
Teachir	ıg cycle	e: after announcement					
Referred to in LPO I (examination regulations for teaching-degree programmes)							
Module							
Master's degree (1 major) Management (2018)							



Master's degree (1 major) International Economic Policy (2018) Master's degree (1 major) Information Systems (2019) 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 International (2024) 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) International Economic Policy (2022) Master's degree (1 major) Economathematics (2024)

Module	e title				Abbreviation	
Selecte	ed Topi	cs in Business Mana	gement and Economics 2	2	12-M-APW2-161-m	01
Module	e coord	inator		Module offered by	1	
Dean of mics	f the Fa	aculty of Business Ma	anagement and Econo-	Faculty of 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		0				
• c • a • c	ourses dditior ourses	taken at other Germa nal courses offered of offered by new Chair	transferring credits from an or non-German univer n a short-term basis rs that are yet to be inclu rs will ensure that the cou	sities ded in the FSB (subj		ns)
Intende	ed lear	ning outcomes				
As a res	sult of	accrediting multiple I	kinds of modules, a desc	ription of acquired s	kills cannot be give	n.
			ours, language — if other than Ge			
V (2) +	Ü (2)					
		<b>Sessment</b> (type, scope, la ole for bonus)	anguage — if other than German,	examination offered — if no	ot every semester, informa	tion on whether
d) pres Langua Assess credita	entatio ge of a ment o ble for	bonus	ninutes)	offered		
Allocat	ion of <sub>l</sub>	places				
Additio	nal inf	ormation				
Worklo	ad					
150 h						
Teachir	ng cycl	e				
Teachir	ng cycle	e: no courses offered				
Referre	d to in	LPO I (examination regul	ations for teaching-degree progra	ammes)		
Module	e appea	ars in				
			s Information Systems (2	016)		
			5 Management (2015)			
	-		isiness and Economics (2			
	-		onal Economic Policy (20	-		
	-		nguage and Economy (20	016)		
	-	ee (1 major) Manager				
	-		onal Economic Policy (20			
		ee (1 major) China Bl r Information Systems (2024)	Isiness and Economics (2	2019) • generated 12-Jun-2025 • ex	am, reg. da-	page 102 / 216
				er (120 ECTS) Information Sys		page 102 / 210

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) International Economic Policy (2024)
Master's degree (1 major) Information Systems (2025)
Master's degree (1 major) International Economic Policy (2025)
Master's degree (1 major) Management (2025)
Master's degree (1 major) China Business and Economics (2025)
Master's degree (1 major) China Language and Economy (2025)

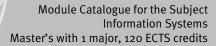
Module title				Abbreviation
Selected Top	oics in Business Informa	tion Systems 2		12-M-AWI2-242-m01
Module coor	dinator		Module offered by	
	Faculty of Business Man	agement and Econo-	Faculty of Managem	ent and Economics
	hod of grading	Only after succ. con	npl. of module(s)	
5 num	erical grade			
Duration	Module level	Other prerequisites	6	
1 semester	graduate			
Contents	3.44440			
<ul> <li>course</li> <li>additie</li> <li>course</li> </ul>	serves the purpose of tr es taken at other German onal courses offered on a es offered by new Chairs of the respective Chairs	or non-German univer a short-term basis that are yet to be inclu	sities ded in the FSB (subje	
Intended lea	rning outcomes			
As a result o	f accrediting multiple kir	nds of modules, a desc	ription of acquired sk	kills cannot be given.
Courses (type	, number of weekly contact hour	s, language — if other than Ge	rman)	
	ht in: German and/or En alternatively S instead o			
	· · · · · · · · · · · · · · · · · · ·		examination offered — if no	t every semester, information on wheth
module is credit		, auge in other than oerman,		
c) oral exam approx. 30 n	ninutes) assessment: German ar	ach: approx. 10 to 15 m		1:2 or approx. 20 minutes; groups o
Allocation o				
	•			
Additional in	oformation			
Workload				
150 h				
Teaching cy				
	cle: no courses offered			
Referred to i	n LPO I (examination regulati	ons for teaching-degree progra	ammes)	
Module app				
-	gree (1 major) Manageme	-		
	gree (1 major) Informatio		`	
-	gree (1 major) Internation	-	)24)	
-	gree (1 major) Informatio gree (1 major) Internatior	• -	лэс)	
-	gree (1 major) Manageme	-	r∠⊃/	
master S ues		ant(202E)		
		-	2025)	
Master's deg	gree (1 major) Manageme gree (1 major) China Busi jor Information Systems (2024)	ness and Economics (2	2025) • generated 12-Jun-2025 • exa	m. reg. da- page 104 /



Master's degree (1 major) China Language and Economy (2025)

Module title					Abbreviation		
Topics	in Busi	ness Analytics	12-M-TBA-242-m01				
Module coordinator				Module offered by			
Dean of mics	f the Fa	iculty of Business Manag	gement and Econo-	Faculty of Managem	nent and Economics		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)			
5		rical grade		· · · · · ·			
Duratio		Module level	Other prerequisites				
1 semes	ster	graduate	 				
Conten	ts		•				
<ul> <li>co</li> <li>a</li> <li>co</li> </ul>	ourses dditior ourses	erves the purpose of trai taken at other German of nal courses offered on a offered by new Chairs th the respective Chairs w	or non-German univer short-term basis nat are yet to be inclu	sities ded in the FSB (subje		15)	
Intende	ed leari	ning outcomes					
As a res	sult of a	accrediting multiple kinc	ls of modules, a desc	ription of acquired sl	kills cannot be given	•	
Courses	<b>5</b> (type, n	number of weekly contact hours,	language — if other than Ge	rman)			
V (2) + İ Module		t in: German and/or Eng	lish				
		<b>sessment</b> (type, scope, langua le for bonus)	age — if other than German,	examination offered — if no	t every semester, informati	on on whether	
b) writte c) term d) prese Langua	en exai paper entatio ge of a ment o	mination (approx. 60 to g mination (questions con (15 to 20 pages) or n (30 to 45 minutes) ssessment: German and ffered: In the semester in bonus	cerning mathematica /or English		ox. 120 minutes) or		
Allocati	ion of p	olaces					
Additio	nal inf	ormation					
Worklo	ad						
150 h							
Teachir	ng cycl	e					
		e: after announcement					
			is for teaching-degree progra	immes)			
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) Economathematics (2024)							
Master's degree (1 major) Information Systems (2025)							
Master's degree (1 major) Management (2025)							
	Master's degree (1 major) China Business and Economics (2025)						
-		ee (1 major) China Langu					
Master's wi	tn 1 majoi	r Information Systems (2024)		e generated 12-Jun-2025 • exa r (120 ECTS) Information Syste		page 106 / 216	





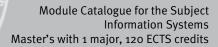
Master's degree (1 major) Economathematics (2025)



## Track 3: Electronic Business

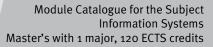
(20 ECTS credits)





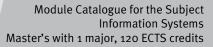
# **Core** (10 ECTS credits)

Module title					Abbreviation	
E-Busir	ness St	rategies			12-M-IBS-242-m01	
Module	e coord	inator		Module offered by		
holder	of the (	Chair of Information Sys	tems Engineering	Faculty of Managem	nent 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 semester graduate						
Conten	ts					
industr appliec dies of	ies and to dig well-kr	rovides an overview of s d value networks. To thi ital innovations and illu nown digital companies	s end, concepts and fr istrated with numerou	ameworks from strat s examples. In the ac	egic technology mar companying exercis	nagement are
		ning outcomes				
<ul> <li>Become familiar with theoretical concepts of strategy development and implementation in the e-business context</li> <li>Understand the strengths and weaknesses of different frameworks and approaches as well as the prerequisites for their meaningful application</li> <li>Apply the concepts to case studies and derive action-oriented recommendations from them</li> <li>Learn how to transfer the concepts to other entrepreneurial situations from their studies or work</li> </ul>						
Course	<b>S</b> (type, r	number of weekly contact hours	, language — if other than Ge	rman)		
V (2) + Module		t in: English				
		<b>Sessment</b> (type, scope, lang Ile for bonus)	uage — if other than German,	examination offered — if no	t every semester, informati	on on whether
b) oral approx	examir . 30 mi Ige of a	ssessment: English		ninutes; groups of 2:	approx. 20 minutes;	; groups of 3:
Allocat	ion of <sub>l</sub>	olaces				
Additio	nal inf	ormation				
Worklo	ad					
150 h						
Teachir	ng cycl	e				
Teachir	ng cycle	e: winter semester				
Referre	d to in	LPO I (examination regulation	ons for teaching-degree progra	ammes)		
Module	e appea	ars in				
Master Master Master Master Master	's degr 's degr 's degr 's degr 's degr	ee (1 major) Manageme ee (1 major) Manageme ee (1 major) Informatior ee (1 major) Internation ee (1 major) Economath ee (1 major) Informatior	nt (2024) n Systems (2024) al Economic Policy (20 ematics (2024) n Systems (2025)	)24) • generated 12-Jun-2025 • exa	-	page 110 / 216
			ta record Maste	er (120 ECTS) Information Syst	ems - 2024	



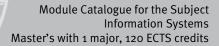
Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) Management International (2025) Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)

Module	e title			Abbreviation		
Mobile	and UI	piquitous Business			12-M-MUS-242-mo1	
Module	e coord	inator		Module offered by		
holder	of the (	Chair of Information Sys	ems Engineering Faculty of Management and Economics			
ECTS	Metho	od of grading	Only after succ. cor	npl. of module(s)		
5	nume	rical grade				
Duration Module level Other prerequisites						
1 semester graduate						
Conten	ts					
applica Basic c	ations ( oncept	rovides an overview of t including mobile comm s and their use in pract g case study texts are an	erce and payment) thr ice are illustrated usin	ough to smart object g numerous example	s in a future "Interne	et of Things".
Intende	ed lear	ning outcomes				
<ul> <li>Understanding the technological foundations and capabilities of mobile and ubiquitous systems and their integration into existing IS infrastructures</li> <li>Analyzing business applications in processes, products/services, and business models</li> <li>Analysis and evaluation of the operational and strategic implications of such technologies from a management perspective</li> <li>Application of the learned concepts to real management challenges based on case studies</li> </ul>						
		number of weekly contact hours				
V (2) + Module		t in: English				
		sessment (type, scope, langu	lage — if other than German,	examination offered — if no	t every semester, informati	on on whether
		le for bonus)	-		· ·	
b) oral approx	examir . 30 mi Ige of a	ssessment: English		ninutes; groups of 2:	approx. 20 minutes;	; groups of 3:
Allocat	ion of p	olaces				
			_			
Additio	nal inf	ormation				
Worklo	ad					
150 h						
Teachi	ng cycl	e				
Teachir	ng cycle	e: summer semester				
Referre	d to in	LPO I (examination regulation	ns for teaching-degree progra	ammes)		
Module						
Master Master Master Master Master	's degr 's degr 's degr 's degr 's degr	ee (1 major) Manageme ee (1 major) Manageme ee (1 major) Informatior ee (1 major) Internation ee (1 major) Economath ee (1 major) Informatior	nt (2024) Systems (2024) al Economic Policy (20 ematics (2024) Systems (2025)		m. reg. da-	page 112 / 216
muster 5 Wi	iai i maju	monitation Systems (2024)	-	er (120 ECTS) Information Syst	-	puze 112 / 210



Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) Management International (2025) Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)





# **Core Electives** (10 ECTS credits)

JMU Würzburg • generated 12-Jun-2025 • exam. reg. data record Master (120 ECTS) Information Systems - 2024

Module title Abbreviation								
Corpora	ate Ent	repreneurship and Inn	ovation		12-M-UGF1-242-mo	1		
Module	e coord	inator		Module offered by				
holder	of the (	Chair of Entrepreneursh	nip and Strategy	and Strategy Faculty of Management and Economics				
ECTS	Metho	od of grading	Only after succ. con	Only after succ. compl. of module(s)				
5	nume	rical grade						
Duratio	n	Module level	Other prerequisites	i i				
1 seme	ster	graduate						
Conten	ts							
<ul> <li>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.</li> <li>(1) Introduction to corporate entrepreneurship</li> <li>(2) Antecedents and forms of corporate entrepreneurship</li> <li>(3) Corporate strategy and corporate entrepreneurship</li> <li>(4) Organizational structure and corporate entrepreneurship</li> <li>(5) Human resource management and corporate entrepreneurship</li> <li>(6) Building supportive organizational cultures</li> <li>(7) Entrepreneurial control systems</li> <li>(8) Entrepreneurial leadership</li> <li>(9) The corporate entrepreneurship</li> <li>(10) The pay-off from corporate entrepreneurship</li> <li>(11) Corporate venture capital</li> <li>(12) Corporate entrepreneurship in nonprofit and government organizations</li> <li>(13) Universities and academic spin-offs</li> </ul>								
	<u> </u>	and Q&A ning outcomes						
<i>Educati</i> • C • E • E	<i>ional al</i> larify t xplain nable s		nd mechanisms behind praise alternative appr	oaches to corporate	entrepreneurship			
Learnin	g outc	omes						
• C • A • N	<ul> <li>On successful completion of this module students will be able to:</li> <li>Create and evaluate concepts related to corporate entrepreneurship</li> <li>Assess the role of corporate entrepreneurship for creating and sustaining competitive advantage</li> <li>Make judgements about the organizational and managerial implications of corporate entrepreneurship</li> <li>Systematically choose between different routes of action</li> </ul>							
		number of weekly contact hour						
V (2) + Module		t in: English						
Method	d of ass	sessment (type, scope, lang le for bonus)	guage — if other than German,	examination offered — if no	t every semester, informat	ion on whether		
b) term c) oral o approx Langua	paper examin . 20 mi ge of a	mination (approx. 60 to (15 to 20 pages) or ation of one candicate nutes, groups of 3 app ssessment: English r Information Systems (2024)	each (approx. 10 to 15 rox. 30 minutes)	minutes) or oral exa		groups of 2		
Master S WI	ai i inaj0	ninonnation systems (2024)	-	r (120 ECTS) Information Syst	-	page 115 / 210		

## 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)
Master's degree (1 major) Information Systems (2025)
Master's degree (1 major) International Economic Policy (2025)
Master's degree (1 major) Management (2025)
Master's degree (1 major) Management International (2025)
Master's degree (1 major) China Business and Economics (2025)
Master's degree (1 major) Economathematics (2025)

Module title					Abbreviation	
Corpor	ate Stra	ategy			12-M-UGF2-182-mo	1
Module	e coord	inator		Module offered by		
holder	of the (	Chair of Entrepreneurshi	p and Strategy	Faculty of Managem	nent 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	i i		
1 seme	ster	graduate				
Conten	ts					
This theory-led and application-oriented module provides you with critical knowledge and skills related to cor- porate strategy—essential for anyone aspiring to take on leadership roles in their future career, may it be in the private or public sector. The module goes beyond basic knowledge about strategic management provided by ba- chelor-level modules. (1) Developing strategies in pursuit of competitive advantage						
<ul> <li>(1) Developing strategies in pursuit of competitive advantage</li> <li>(2) Corporate diversification</li> <li>(3) Vertical integration and outsourcing</li> <li>(4) Mergers &amp; acquisitions</li> <li>(5) Dynamic strategies</li> <li>(6) Cooperative strategies</li> <li>(7) Corporate spin-offs and spin-outs</li> <li>(8) Internationalization strategies (I)</li> <li>(9) Internationalization strategies (II)</li> <li>(10) Strategic change</li> <li>(11) Corporate strategies and new technologies</li> <li>(12) Corporate governance and corporate social responsibility</li> <li>(13) Corporate communication and crisis management</li> <li>(14) Wrap-up and Q&amp;A</li> </ul>						
Intende	ed lear	ning outcomes				
• E • E	Clarify th Explain Enable s	ims he role of corporate stra theoretical concepts an students to critically app students to evaluate the	d mechanisms behind praise alternative appr	oaches to corporate		
Learnir	ng outc	omes				
On suc	cessful	completion of this mod	ule students will be a	ble to:		
• C • N	<ul> <li>Assess the role of corporate strategy for creating and sustaining competitive advantage</li> <li>Create and evaluate concepts related to corporate strategy</li> <li>Make judgements about the organizational and managerial implications of corporate strategy</li> <li>Systematically choose between different routes of action</li> </ul>					
Course	<b>S</b> (type, r	number of weekly contact hours,	, language — if other than Ge	rman)		
V (2) +						
		t in: English				
		<b>sessment</b> (type, scope, langu le for bonus)	age — if other than German,	examination offered — if no	t every semester, informat	ion on whether
b) term c) oral approx	paper examin . 20 mi	mination (approx. 60 to (15 to 20 pages) or ation of one candidate nutes, groups of 3 appro	each (approx. 10 to 15 ox. 30 minutes)	minutes) or oral exa		groups of 2
muster 5 W	in i majo	mormation systems (2024)		r (120 ECTS) Information Syst		puge 11/ / 210

#### Language of assessment: English

Allocation of places

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# 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 Business and Economics (2019)
Mastaria dagrees (1 major) China Language and Francomy (2010)
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)
Master's degree (1 major) Information Systems (2025)
Master's degree (1 major) International Economic Policy (2025)
Master's degree (1 major) Management (2025)
Master's degree (1 major) Management International (2025)
Master's degree (1 major) China Business and Economics (2025)
Master's degree (1 major) Economathematics (2025)

Module	e title				Abbreviation
Digital	Entrep	reneurship and Digital T	ransformation		12-M-UGF3-242-m01
Module	e coord	inator		Module offered by	
holder	of the (	Chair of Entrepreneurship	and Strategy	Faculty of Managem	nent 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					
<ul> <li>This module provides an introduction into digital entrepreneurship and digital transformation.</li> <li>(1) Introduction <ul> <li>(2) Digital business models</li> <li>(3) Identifying and exploiting opportunities for digital entrepreneurship</li> <li>(4) Strategies for creating competitive advantage in digital entrepreneurship</li> <li>(5) Digital marketing for entrepreneurs</li> <li>(6) Crowdfunding for entrepreneurs</li> <li>(7) Design thinking</li> <li>(8) Lean startup</li> <li>(9) Platform ecosystems and online communities</li> <li>(10) Digital strategy and digital transformation</li> <li>(11) The agile organization</li> <li>(12) Crowdsourcing</li> <li>(13) Cyberfraud</li> <li>(14) Wrap-up and Q&amp;A</li> </ul> </li> </ul>					
	<u> </u>	ning outcomes			
cepts a apprais luate th Learnin gital en te and e about t	nd mee se alter ne bour og outco treprer evaluat he orga	chanisms behind digital native approaches to dig ndaries and risks of digita omes: On successful com neurship and digital trans te concepts related to dig	entrepreneurship and ital entrepreneurship al entrepreneurship a ppletion of this modu sformation for creatin gital entrepreneurship ial implications of dig	l digital transformati and digital transform nd digital transform le students will be a g and sustaining cor and digital transfor	rmation. Explain theoretical con- on. Enable students to critically mation. Enable students to eva- ation ble to (1) Assess the role of di- mpetitive advantage, (2) Crea- rmation, (3) Make judgements p and digital transformation, (4)
Course	<b>S</b> (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)	
V (2) + Module	• • •	t in: English			
		s <b>essment</b> (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
b) term c) oral o approx	paper examin . 30 mi			inutes; groups of 2:	approx. 20 minutes; groups of 3:
Allocat	ion of p	olaces			
Additio	nal info	ormation			

## 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)

Supplementary course Supplementary course Entrepreneurship into Action (ZENTRIA) (2025)

Master's degree (1 major) Information Systems (2025)

Master's degree (1 major) International Economic Policy (2025)

Master's degree (1 major) Management (2025)

Master's degree (1 major) Management International (2025)

Master's degree (1 major) China Business and Economics (2025)

Master's degree (1 major) Economathematics (2025)

Module title					Abbreviation	
Market	ing Ana	alytics			12-M-MA-242-m01	
Module	coord	inator		Module offered by		
holder	of the J	unior Professorship of M	arketing Analytics	keting Analytics Faculty of 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	i		
1 seme	ster	graduate				
Conten	ts					
mance automa key me keting a science The cou turn to and me for caus hands-o program	of marl te mar thods a as well urse wil applied asuring sal infe on lear nming	keting activities. In fact, i keting decisions. The goa and specific techniques u as of fundamental ideas l cover fundamentals of d d, real-world marketing a g preferences and demar rence in marketing. The d	t is increasingly pose al of this course is to used in marketing and at the intersection o data science, includi nalytics problems su nd. Emphasis will be course will also delve	sible to use data ana provide students wit alytics. This requires f statistics, economic ng data wrangling an ch as marketing mix placed on data visua e into a few advanced	o gain insights into the perfor- lysis to inform, make, and even th a hands-on understanding of substantive knowledge in mar- cs, psychology, and computer ad data exploration, and will then modeling, market segmentation, ilization and valuable methods d marketing topics. To provide a he covered content using the R	
p • L • D • G	roblem earn to evelop evelop	s. identify the appropriate proficiency in data wran skills in data visualization nds-on experience with t	analytical methods t gling and data explo on and interpretation	o use for specific ma ration techniques. 1 to effectively comm	now to apply them to real-world rketing problems. unicate marketing insights. to solving marketing analytics	
Course	<b>5</b> (type, n	umber of weekly contact hours, l	anguage — if other than Ge	rman)		
V (2) + I Module	• •	t in: English				
		e <b>essment</b> (type, scope, langua le for bonus)	ge — if other than German,	examination offered — if no	t every semester, information on whether	
b) term	paper ge of a	nination (approx. 60 to 1 (15 to 20 pages) ssessment: English bonus	20 minutes) or			
Allocat	ion of p	olaces				
Additio	nal info	ormation				
Worklo	ad					
150 h						
Teachir	ng cycl	e				
		e: summer semester				
L	- /					
Mactor's wi	th 1 major	Information Systems (2024)	MILW/ürzburg	generated 12-lun-2025 • exa	m reg da-	

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)
Master's degree (1 major) Economathematics (2024)
Master's degree (1 major) Information Systems (2025)
Master's degree (1 major) International Economic Policy (2025)
Master's degree (1 major) Management (2025)
Master's degree (1 major) Management International (2025)
Master's degree (1 major) China Business and Economics (2025)
Master's degree (1 major) China Language and Economy (2025)
Master's degree (1 major) Economathematics (2025)

Module	title				Abbreviation	
E-Comn	nerce				12-M-EC1-242-m01	
Module	coordi	nator		Module offered by		
holder o ting	of the C	hair of Business Admin	istration and Marke-	Faculty of Managem	nent and Economics	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)		
5	numer	rical grade				
Duratio	n	Module level	Other prerequisites			
1 semes	ster	graduate				
Conten	ts					
E-commerce is a highly relevant field for almost all types of companies. However, the ecommerce approaches and strategies applied by companies differ strongly depending on the respective firm context (e.g., in terms of industry, types of customers, types of products). In this seminar, students analyze the specific e-commerce strategy of a selected firm. In doing so, they evaluate the strategies' current and future potential and make suggestions for improvements and for addressing future trends. Furthermore, each lecture session will contain short presentations where the students (in groups) will either apply selected lecture topics to real-world business cases or present the core aspects of research articles dealing with e-commerce topics in general.						
Intende	d learr	ing outcomes				
		bles students to gain in ess strategies.	sights into real-life e-c	ommerce strategies	and to train their ab	ilities in as-
Courses	<b>5</b> (type, n	umber of weekly contact hours,	language — if other than Ger	man)		
V (2) + Í Module	• •	t in: English				
		<b>essment</b> (type, scope, langu le for bonus)	age — if other than German, e	examination offered — if no	t every semester, informati	on on whether
b) term	paper ge of a	nination (approx. 60 to (15 to 20 pages) ssessment: English bonus	120 minutes) or			
Allocati	ion of p	laces				
WA: Should (1) Stud ferentia a. Amor ding to b. When availab ding co c. Amor (2) Any supervi with the re-alloc	Number of places: 15.					
Additio	nal info	ormation				
Worklo	ad					
150 h						
Master's wi	th 1 major	Information Systems (2024)	-	generated 12-Jun-2025 • exa r (120 ECTS) Information Syste	-	page 123 / 216

## 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)

	e title				Abbreviation		
Strateg	gic Man	agement of Global Sup	ply Chains		12-M-SMGS-242-m01		
Module	e coord	inator		Module offered by	<u> </u>		
		Chair of Logistics and Q			nent and Economics		
ECTS Method of grading			Only after succ. con				
			Only alter Succ. con				
5		rical grade					
Duratio		Module level	Other prerequisites				
1 seme	ster	graduate					
Conten	ts		-				
	ourse ' les of b				ecome familiar with the basic nave learned working on multiple		
Intende	ed lear	ning outcomes					
(i) can a results,	apply t , and	ng this course students he basic methods and o d the effects of global v	concepts of supply cha		ractical settings and evaluate th		
		number of weekly contact hours					
V (2) +	Ü (2)	t in: English		·			
Method	d of ass		uage — if other than German,	examination offered — if no	ot every semester, information on whether		
	ige of a	nation (approx. 60 minu ssessment: English bonus	utes)				
Allocat	ion of <sub>l</sub>	olaces					
	onal inf						
		ormation					
 Worklo	ad	ormation					
	ad	ormation					
 <b>Worklo</b> 150 h							
 Worklo 150 h Teachin	ng cycl	e					
 Worklo 150 h Teachin Teachin	n <b>g cycl</b> ng cycle	<b>e</b> e: no courses offered	Ins for teaching-degree progra	nmmes)			
 Worklo 150 h Teachin Teachin	n <b>g cycl</b> ng cycle	e	ns for teaching-degree progra	ammes)			
 Worklo 150 h Teachir Teachir Referre	ng cycl ng cycle ed to in	e e: no courses offered LPO I (examination regulatio	ons for teaching-degree progra	ammes)			
 Worklo 150 h Teachin Teachin Referre  Module	ng cycl ng cycle ed to in e appea	e e: no courses offered LPOI (examination regulation ars in					
 Worklo 150 h Teachin Teachin Referre  Module Master	ng cycl ng cycle ed to in e appea 's degr	e e: no courses offered LPO I (examination regulation Irs in ee (1 major) Manageme	nt International (2024)				
 Worklo 150 h Teachin Teachin Referre  Module Master Master	ng cycl ng cycle ed to in e appea 's degr 's degr	e e: no courses offered LPOI (examination regulation ars in	nt International (2024) nt (2024)				
 <b>Worklo</b> 150 h <b>Teachin</b> Teachin <b>Referre</b>  <b>Module</b> Master Master Master	ng cycl ng cycle ed to in e appea 's degr 's degr 's degr	e e: no courses offered LPO I (examination regulation Irs in ee (1 major) Manageme ee (1 major) Manageme	nt International (2024) nt (2024) n Systems (2024)	)			
 <b>Worklo</b> 150 h <b>Teachin</b> Teachin <b>Referre</b>  <b>Module</b> Master Master Master Master	ng cycl ng cyclo d to in e appea 's degr 's degr 's degr 's degr	e e: no courses offered LPO I (examination regulation urs in ee (1 major) Manageme ee (1 major) Manageme ee (1 major) Informatior	nt International (2024) nt (2024) 1 Systems (2024) al Economic Policy (20	)			
 <b>Worklo</b> 150 h <b>Teachin</b> Teachin <b>Referre</b>  <b>Module</b> Master Master Master Master Master Master	ng cycl ng cycle ed to in 's degr 's degr 's degr 's degr 's degr 's degr	e e: no courses offered LPO I (examination regulation ars in ee (1 major) Manageme ee (1 major) Manageme ee (1 major) Information ee (1 major) Internation ee (1 major) Economath ee (1 major) Informatior	nt International (2024) nt (2024) 1 Systems (2024) al Economic Policy (20 ematics (2024) 1 Systems (2025)	) )24)			
 <b>Worklo</b> 150 h <b>Teachin</b> Teachin <b>Referre</b>  <b>Module</b> Master Master Master Master Master Master Master Master	ng cycl ng cycle ed to in 's degr 's degr 's degr 's degr 's degr 's degr 's degr	e e: no courses offered LPO I (examination regulation ars in ee (1 major) Manageme ee (1 major) Manageme ee (1 major) Information ee (1 major) Internation ee (1 major) Information ee (1 major) Information ee (1 major) Information ee (1 major) Information	nt International (2024) nt (2024) a Systems (2024) al Economic Policy (20 ematics (2024) a Systems (2025) al Economic Policy (20	) )24)			
 <b>Worklo</b> 150 h <b>Teachin</b> Teachin Referre  <b>Module</b> Master Master Master Master Master Master Master Master Master Master	ng cyclo ed to in e appea 's degr 's degr 's degr 's degr 's degr 's degr 's degr 's degr	e e: no courses offered LPO I (examination regulation ars in ee (1 major) Manageme ee (1 major) Manageme ee (1 major) Information ee (1 major) Internation ee (1 major) Economath ee (1 major) Informatior	nt International (2024) nt (2024) a Systems (2024) al Economic Policy (20 ematics (2024) a Systems (2025) al Economic Policy (20 nt (2025)	) )24) )25)			



Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)

Module	e title				Abbreviation			
Strateg	gic Man	agerial Accounting			12-M-INST-242-m01			
Module	e coord	inator		Module offered by				
	of the (	Chair of Business Manag	gement, Controlling		nent and Economics			
ECTS Method of grading Only after succ. compl.				npl. of module(s)				
5	nume	rical grade						
Duration Module level Other prerequisites								
1 seme	ster	graduate						
Conten	Its							
enterpr as the Second technic	rises. Fi emerge d, the m ques, ir	cuses on accounting ins rst, it addresses importa- nce of cost and quality a nodule covers analytical astruments of target cost h regard to their theoret	ant drivers of strategi advantages in compe and heuristic technic ting, life cycle cost an	c decisions from a m tition as well as scale ues of planning and alysis, benchmarking	icroeconomic perspe e and experience cur control. In the conte	ctive, such ve effects. xt of these		
		ning outcomes		·····				
quirem the cou and lim	ents co urse, th nitation	ents acquire an understa oncerning instruments of ey are able to analyze ar s, of prevalent instrume retences in the design ar	f decision-making and nd evaluate the streng nts of strategic corpo	d behavior control in gths and weaknesses rate management us	enterprises. Upon co s, as well as fields of ed in practice. Additi	mpletion of application		
Course	<b>S</b> (type, r	umber of weekly contact hours,	language — if other than Ge	rman)				
V (2) +	Ü (2)							
Module	e taugh	t in: German and/or Eng	lish					
		<b>sessment</b> (type, scope, langu le for bonus)	age — if other than German,	examination offered — if no	ot every semester, information	on on whether		
b) term Langua	i paper	mination (approx. 60 mi (approx. 15 pages) ssessment: German and bonus						
Allocat	ion of <b>j</b>	olaces	_					
Additio	onal inf	ormation						
			_					
Worklo	ad							
150 h								
Teachi	ng cycl	e						
		e: summer semester						
		LPO I (examination regulation	ns for teaching-degree progra	ammes)				
			0					
Module	e appea	urs in						
Master	's degr	ee (1 major) Managemer	nt (2024)					
	-	ee (1 major) Information	•					
	-	ee (1 major) Internationa	•	024)				
Master	-	ee (1 major) Economathe	•					
	'c d ~~~	oo la moior) intormation	Suctome (coor)					
Master	-	ee (1 major) Information		• generated 12-Jun-2025 • exa	n na da Tr	page 127 / 216		

Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)

Module	e title				Abbreviation	
Selecte	ed Topi	cs in Business Mana	agement and Economics 3	3	12-M-APW3-161-mc	)1
Module	e coord	inator		Module offered by		
Dean of mics	f the Fa	culty of Business M	anagement and Econo-	Faculty of Management and Economics		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade		•		
Duratio		Module level	Other prerequisites	:		
1 seme:		graduate		•		
Conten		glauuale				
• c • a • c	ourses dditior ourses	taken at other Germ nal courses offered c offered by new Cha	f transferring credits from nan or non-German univer on a short-term basis irs that are yet to be inclu rs will ensure that the cou	sities ded in the FSB (subj		ns)
Intende	ed lear	ning outcomes				
As a res	sult of a	accrediting multiple	kinds of modules, a desc	ription of acquired s	kills cannot be giver	۱.
			ours, language — if other than Ge	• •	-	
V (2) +		,				
b) writt c) term d) prese Langua	en exa paper entatio ge of a ment o	(approx. 15 to 20 pa n (approx. 30 to 45 ssessment: German ffered: In the semes	concerning mathematica ges) or minutes)		ox. 120 minutes) or	
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad					
150 h						
Teachir	ıg cvcl	e				
		e: no courses offered	1			
			llations for teaching-degree progra	ammes)		
				2		
Module	e appea	urs in				
Master	's degr	ee (1 major) Busines	s Information Systems (2	016)		
	-		s Management (2015)			
	-		usiness and Economics (2			
	-		ional Economic Policy (20	-		
	-		anguage and Economy (20	016)		
	-	ee (1 major) Manage		10)		
	-		ional Economic Policy (20 usiness and Economics (2			
		r Information Systems (2024)		• generated 12-Jun-2025 • ex	am. reg. da-	page 129 / 21
	U			er (120 ECTS) Information Sys		

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)
Master's degree (1 major) Information Systems (2025)
Master's degree (1 major) International Economic Policy (2025)
Master's degree (1 major) Management (2025)
Master's degree (1 major) China Business and Economics (2025)
Master's degree (1 major) China Language and Economy (2025)

Modul	e title				Abbreviation
Select	ed Topi	ics in Business Inforr	nation Systems 3		12-M-AWI3-242-m01
Modul	e coord	linator		Module offered by	1
Dean o mics	of the Fa	aculty of Business Ma	anagement and Econo-	Faculty of Manager	ment and Economics
ECTS	Meth	od of grading	Only after succ. co	mpl. of module(s)	
5	nume	rical grade			
Durati	on	Module level	Other prerequisites	5	
1 seme	ester	graduate			
•	odule s courses addition courses	taken at other Germ nal courses offered o offered by new Chai	transferring credits from an or non-German univer n a short-term basis rs that are yet to be inclu rs will ensure that the co	rsities ded in the FSB (subj	
Intend	led lear	ning outcomes			
As a re	esult of	accrediting multiple	kinds of modules, a desc	ription of acquired s	kills cannot be given.
Course	es (type, I	number of weekly contact h	ours, language — if other than Ge	erman)	
Course Metho module	e type: a od of as is credital	ole for bonus)	d of V + Ü anguage — if other than German,	examination offered — if n	ot every semester, information on whether
b) pres c) oral approx Langu	sentatio examir x. 30 mi	nation (one candidate inutes) assessment: German	with term paper (approx e each: approx. 10 to 15 r		d 1:2 or approx. 20 minutes; groups of 3:
Alloca	tion of	places			
Additi	onal inf	ormation			
Workl	oad				
150 h					
Teachi	ing cycl	le			
Teachi	ing cycl	e: no courses offered			
Referr	ed to in	LPOI (examination regu	lations for teaching-degree progr	ammes)	
Modul	e appe	ars in			
	-	ree (1 major) Informat ree (1 major) Informat	,		

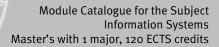
Module title					Abbreviation	
Topics in Electronic Business					12-M-TEB-242-m01	
Module coordinator				Module offered by		
Dean of mics	f the Fa	culty of Business Manag	gement and Econo-	Faculty of Managem	nent and Economics	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5		rical grade		•		
Duratio		Module level	Other prerequisites			
1 semes		graduate				
Conten		5.444446				
<ul> <li>co</li> <li>a</li> <li>co</li> </ul>	ourses dditior ourses	erves the purpose of tra taken at other German o al courses offered on a offered by new Chairs th the respective Chairs w	or non-German univer short-term basis nat are yet to be inclue	sities ded in the FSB (subje		15)
Intende	ed learı	ning outcomes				
As a res	sult of a	accrediting multiple kinc	ls of modules, a desc	ription of acquired sl	kills cannot be given	I <b>.</b>
Courses	<b>S</b> (type, n	umber of weekly contact hours,	language — if other than Ge	rman)		
V (2) + l	Ü (2)					
Module	taugh	t in: German and/or Eng	lish			
		<b>essment</b> (type, scope, langua le for bonus)	age — if other than German,	examination offered — if no	t every semester, informati	ion on whether
b) writte c) term d) prese Langua	en exai paper entatio ge of a ment o	nination (approx. 60 to g mination (questions con (15 to 20 pages) or n (30 to 45 minutes) ssessment: German and ffered: In the semester in bonus	cerning mathematica /or English		ox. 120 minutes) or	
Allocati	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad					
150 h						
Teachir	ng cycl	٩				
		e: 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) Economathematics (2024)						
Master's degree (1 major) Leonomatiematics (2024) Master's degree (1 major) Information Systems (2025)						
Master's degree (1 major) Management (2025)						
Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025)						
		ee (1 major) Economathe		2/		
		Information Systems (2024)		generated 12-Jun-2025 • exa	m. reg. da-	page 132 / 216
			ta record Maste	r (120 ECTS) Information Syst	ems - 2024	



# Track 4: Artificial Intelligence

(20 ECTS credits)





# **Core** (10 ECTS credits)

Module title				Abbreviation			
Enterpr	Enterprise Al 12-M-EAI-242-mo1						
Module	e coordi	inator		Module offered by			
holder o prise	holder of the Chair of Business Informatics and AI for Enter- prise						
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)			
5	numer	rical grade					
Duratio	on	Module level	Other prerequisites				
1 semes	ster	graduate					
Conten	Contents						
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: Modeling & Evaluation ML Ops VI: Deployment 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. You will refine and test your skills by practicing the theoretical concepts during exercise sessions. This includes							
		umber of weekly contact hours, l	anguage — if other than Ger	man)			
V (2) + ĺ Module		t in: English					
Method module is a) writte b) term	<b>d of ass</b> creditable en exar paper	essment (type, scope, language le for bonus) nination (approx. 60 min (approx. 15 pages) or	utes) or		t every semester, information on whether		
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							
	· · · ·						
allocate (1) Stud ferentia a. Amor	Allocation of places Number of places: 35. 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.						

# UNIVERSITÄT WÜRZBURG

b. When places are allocated in accordance with 1.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: summer semester

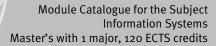
Referred to in LPO I (examination regulations for teaching-degree programmes)

#### Module appears in

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

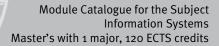
Module title					Abbreviation	
Analytical Information Systems					12-M-BI-242-m01	
Module	e coord	inator		Module offered by		
holder of the Chair of Business Analytics			cs	Faculty of Managem	nent and Economics	
ECTS Method of grading Only after succ. compl. of module(s)						
5	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten		3	<u>.</u>			
ning. Tł	he mod	ovides a comprehensive i lule covers topics such as igence, including neural	s SQL, data integratio			
Intende	ed lear	ning outcomes				
• L	earn ge	and data management, i eneral statistical techniqu ely use machine learning	ues for data inspectio	n, exploration, and a	analysis.	
Course	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)		
V (2) + Module		t in: English				
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, informati	on on whether
	ge of a ble for		es)			
Additio	nal inf	ormation				
Worklo	ad					
150 h						
Teachi						
		e: summer semester				
Referre	d to in	LPO I (examination regulations	s for teaching-degree progra	mmes)		
Module						
	-	ee (1 major) Management				
	-	ee (1 major) Management				
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 degree (1 major) Information Systems (2025)						
	-	-	•	25)		
	Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025)					
Master's degree (1 major) Management (2025) Master's degree (1 major) Management International (2025)						
	Master's degree (1 major) Management international (2025) Master's degree (1 major) China Business and Economics (2025)					
	-	ee (1 major) China Langu		-		
Master's wi	ith 1 majo	r Information Systems (2024)	_	generated 12-Jun-2025 • exa	-	page 137 / 216





Master's degree (1 major) Economathematics (2025)



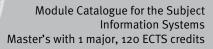


# **Core Electives** (10 ECTS credits)

Master's with 1 major Information Systems (2024)

JMU Würzburg • generated 12-Jun-2025 • exam. reg. data record Master (120 ECTS) Information Systems - 2024

Module title				Abbreviation		
Computer Vision 1					10-Al=CV1-242-m01	
Module coordinator				Module offered by		
holder	of the (	Chair of Computer Scienc	e IV	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					
basics taught. Topics image a Actual	as well include and vid models	as the most recent appro e data representation, im- eo understanding, deep	baches to image repro age acquisition, resto learning and generati e learning as well as	esentation, image pr pration and enhance ive methods and app	eld of computer vision. Important rocessing and image analysis are ment, features, object modeling, plications. grounds are presented and their	
		ning outcomes				
to inde • O a • G	<ul> <li>Students have fundamental knowledge of problems and techniques in the field of computer vision and are able to independently identify and apply suitable methods for concrete problems.</li> <li>Overview of the most important concepts of image representation, image analysis, machine learning and algorithms from Computer Vision</li> <li>Gaining experience through home assignments, practical computer and programming exercises</li> <li>Providing a sound solid background knowledge for the advanced Computer Vision 2 course</li> </ul>					
Course	<b>S</b> (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)		
V (2) + Module		t in: English				
		<b>eessment</b> (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether	
lf anno examin prox. 15	unced l ation o 5 minut ge of a	of one candidate each (ap res per candidate). ssessment: English	inning of the course,		tion may be replaced by an oral in groups of 2 candidates (ap-	
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Workload						
150 h						
Teaching cycle						
	Teaching cycle: every year, summer semester					
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module	 Module appears in					
		ee (1 major) Artificial Inte	lligence & Extended F	Reality (2024)		
	-	ee (1 major) Artificial Inte	•			



Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) Economathematics (2024) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) Mathematical Data Science (2025) Master's degree (1 major) Economathematics (2025)

Module title					Abbreviation	
Topics in Data Science					12-M-ATDS-242-m01	
Module	coord	inator		Module offered by		
holder o prise	holder of the Chair of Business Informatics and AI for Enter- prise					
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					
flow fro	m data	collection to data prepa	ration to modeling, e	valuation and deploy	vers the entire data science work- yment. By following a top-down odels from the beginning.	
Intende	ed learn	ning outcomes				
1. Beco 2. Apply 3. Desig Scier 4. Appli	ming fa y mach gn, imp nce ication		s and frameworks in t arning frameworks to ion of key algorithms I their infrastructure (	the research area of structured and unst within an end-to-en (collection, storage,	Data Science.	
		umber of weekly contact hours, l		•		
V (2) +	Ü (2)	t in: English				
Method	l of ass	essment (type, scope, langua	ge — if other than German, e	examination offered — if no	t every semester, information on whether	
module is	creditab	le for bonus)				
b) term c) portf Langua	paper olio (ap ge of a ment o	nination (approx. 60 min (approx. 15 pages) or oprox. 50 hours) ssessment: English ffered: In the semester in bonus		offered		
Allocat	ion of p	olaces				
Number of places: 35. 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 1.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. <b>Additional information</b>						

### 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

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		
Market	Marketing Analytics				12-M-MA-242-m01		
Module	coord	inator		Module offered by			
holder of the Junior Professorship of Marketing Anal			Marketing Analytics	Faculty of Managen	nent and Economics		
ECTS	Metho	od of grading	Only after succ. cor	npl. of module(s)			
5	nume	rical grade					
Duratio	n	Module level	Other prerequisites	;			
1 semes	ster	graduate					
Conten	ts						
mance automa key met keting a science The cou turn to a and me	Marketing analytics involves the collection, management, and analysis of data to gain insights into the perfor- mance of marketing activities. In fact, it is increasingly possible to use data analysis to inform, make, and even automate marketing decisions. The goal of this course is to provide students with a hands-on understanding of key methods and specific techniques used in marketing analytics. This requires substantive knowledge in mar- keting as well as of fundamental ideas at the intersection of statistics, economics, psychology, and computer science. The course will cover fundamentals of data science, including data wrangling and data exploration, and will then turn to applied, real-world marketing analytics problems such as marketing mix modeling, market segmentation, and measuring preferences and demand. Emphasis will be placed on data visualization and valuable methods for causal inference in marketing. The course will also delve into a few advanced marketing topics. To provide a						
		language.					
Intende	ed leari	ning outcomes					
p • Lu • D • G	<ul> <li>Develop proficiency in data wrangling and data exploration techniques.</li> <li>Develop skills in data visualization and interpretation to effectively communicate marketing insights.</li> </ul>						
Courses	<b>5</b> (type, n	umber of weekly contact hours	, language — if other than Ge	rman)			
V (2) + Í Module		t in: English					
		<b>eessment</b> (type, scope, lang le for bonus)	uage — if other than German,	examination offered — if no	ot every semester, informati	on on whether	
b) term	paper ge of a	nination (approx. 60 to (15 to 20 pages) ssessment: English bonus	120 minutes) or				
Allocati	ion of p	olaces					
Additional information							
Workload							
150 h							
Teaching cycle							
Teachin	ng cycle	e: summer semester					
Master's wi	th 1 majoı	r Information Systems (2024)	-	• generated 12-Jun-2025 • exa er (120 ECTS) Information Syst	-	page 144 / 216	

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)
Master's degree (1 major) Economathematics (2024)
Master's degree (1 major) Information Systems (2025)
Master's degree (1 major) International Economic Policy (2025)
Master's degree (1 major) Management (2025)
Master's degree (1 major) Management International (2025)
Master's degree (1 major) China Business and Economics (2025)
Master's degree (1 major) China Language and Economy (2025)
Master's degree (1 major) Economathematics (2025)

Module	e title				Abbreviation
Applied	d Data	Science in Business and	Economics		12-M-TE-242-m01
Module	e coord	inator		Module offered by	
holder mics	ofthe	Chair of Data Science in I	Business and Econo-	Faculty of Managen	nent and Economics
ECTS	Methe	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				
on, dat pics. A search Intendo	a editii ddition Stude ed lear	ng, and data analysis. Th ally, students will learn a nts that attend this cours <b>ning outcomes</b>	e course will use a pa about existing panel c se should have advan	per-based approach latasets and be led t ced knowledge in st	research designs, data generati- n to introduce and apply these to- co perform their own empirical re- catistics and econometrics. how to conduct empirical rese-
		ess and economics.			now to conduct empirical rese-
Course	<b>S</b> (type, r	number of weekly contact hours,	language — if other than Ger	man)	
V (2) +		the Frederic			
		t in: English			
		<b>Sessment</b> (type, scope, langua ele for bonus)	age — if other than German, o	examination offered — if no	ot every semester, information on whether
	ige of a	rox. 50 hours) ssessment: English bonus			
Allocat	ion of <sub>l</sub>	places			
Additio	onal inf	ormation			
Worklo	ad				
150 h					
Teachi	ng cycl	e			
Teachi	ng cycl	e: each semester			
Referre	ed to in	LPOI (examination regulation	s for teaching-degree progra	mmes)	
Module	e appea	ars in			
exchan	ge pro	gram Business Manager	ent and Economics (	2022)	
	-	ee (1 major) Managemen	•		
	-	ee (1 major) Information		<b>`</b>	
	-	ee (1 major) Internationa	•	24)	
master	s uegr	ee (1 major) Economathe	matics (2024)		

Module	e title		Abbreviation				
Statist	ical Ne	twork Analysis		10-I=SNA-232-m01			
Module	e coord	inator		Module offered by			
holder of the Chair of Computer Science XV				Institute of Computer Science			
ECTS	TS Method of grading Only		Only after succ. compl. of module(s)				
5	nume	rical grade					
Duratio	on	Module level	Other prerequisites				
1 semester graduate							
Contents							
Networ	Networks matter! This holds for technical infrastructures like communication or transportation networks, for in-						

Networks matter! This holds for technical infrastructures like communication or transportation networks, for information systems and social media in the World Wide Web, but also for various social, economic and biological 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 network 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, stochastic dynamics in networks, spectral analysis, as well as the modelling of time-varying networks. The course material 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 exam.

#### Intended learning 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.

**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 is creditable for 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

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## Additional information

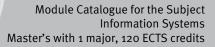
Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): IN

Master's with 1 major Information Systems (2024)	JMU Würzburg • generated 12-Jun-2025 • exam. reg. da-	page 147 / 216
	ta record Master (120 ECTS) Information Systems - 2024	

Workload
150 h
Teaching cycle
<b>Referred to in LPO I</b> (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)
Master's degree (1 major) Information Systems (2025)
Master's degree (1 major) Management (2025)
Master's degree (1 major) Computer Science (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)
Master's degree (1 major) Aerospace Computer Science (2025)

Module	e title			Abbreviation			
Machin	Machine Learning for Natural Language Processing 10-I=NLP-212-mo1						
Module	e coord	inator		Module offered by			
holder of the Chair of Computer Science			nce X	X Institute of Computer 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						
ents sta ground almost beddin ke CNN training applica <b>Intende</b> The par and are <b>Course</b> V (2) + <b>Methoo</b> written If anno examin	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 background, 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 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) + Ü (2)  Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus) written examination (approx. 60 to 120 minutes) If announced by the lecturer at the beginning of the course, the written examination in groups of 2 candidates (approx. 15 minutes per candidate).						
Allocat							
Additio	nal inf	ormation					
	s availa	able for students of the	Master's programme l	nformatik (Computer	Science, 120 ECTS o	credits):	
Worklo	ad						
150 h							
Teachi	ng cycl	e					
Referre	d to in	LPO I (examination regulation	ons for teaching-degree progra	immes)			
§ 22							
Module appears in							
Module studies (Master) Computer Science (2019) Master's degree (1 major) Computer Science (2021) Master's degree (1 major) Computational Mathematics (2022) Master's degree (1 major) Information Systems (2022)							
		ee (1 major) Mathemati	cs (2022)				
Master's wi	ith 1 majo	r Information Systems (2024)		generated 12-Jun-2025 • exa r (120 ECTS) Information Syst		page 149 / 216	

## UNIVERSITÄT WÜRZBURG



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) Master's degree (1 major) Economathematics (2024) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) Computer Science (2025) Master's degree (1 major) Mathematical Data Science (2025) Master's degree (1 major) Economathematics (2025) First state examination for the teaching degree Gymnasium Computer Science (2025)

Module title					Abbreviation			
Multilingual NLP					10-I=MNLP-232-mo	1		
Module	e coord	inator		Module offered by				
holder	ofthe	Chair of Computer Scie	nce XII	Institute of Comput	ter Science			
ECTS	Methe	od of grading	Only after succ. con	npl. of module(s)				
5	nume	rical grade						
Duratio	on	Module level	Other prerequisites	5				
1 seme	ster	graduate						
Conten	Contents							
of-spee on spa ge Moc transla transfe pics: cu	ech, syr ces (ak lels. Ma tions, p r to zer urse of	the world: language fa ntax. Alphabets (scripte a cross-lingual word er achine translation. Mul parallel corpora. Cross- o-shot and few-shot tra multilinguality, modula r generation, multi-sou	s), encoding, and langun beddings). Transform tilingual resources: un lingual transfer: from w ansfer with multilingua arization and language	age identification. Ner architecture and F labeled corpora, lexi vord alignment and la l Transformer-based adaptation, multilin	Aultilingual word rep Pretrained (multilingu co-semantic network abel projection, over language models. A	resentati- ual) Langua- ks and word MT-based dvanced to-		
		ning outcomes						
and als from di transfe solve p	so get a fferent r for va ractica	acquire theoretical and in insight into cutting e languages in shared re rious NLP tasks. Upon l NLP problems regardl performance for any c	dge research in (multil presentation spaces th successful completion ess of the language of	ingual) NLP. They wil hat enable semantic of the course, the st the text data, and to	ll learn how to represe comparison and cro udents will be well-e	sent texts ss-lingual equipped to		
Course	<b>S</b> (type, r	number of weekly contact hour	s, language — if other than Ge	rman)				
V (2) + Module	• •	t in: German and/or En	glish					
		s <b>essment</b> (type, scope, lang le for bonus)	uage — if other than German,	examination offered — if no	ot every semester, informat	ion on whether		
If anno examin prox. 1	unced ation o 5 minut ge of a	nation (approx. 60 to 1 by the lecturer at the b of one candidate each ( tes per candidate). ssessment: German ar bonus	eginning of the course, approx. 20 minutes) or					
Allocat	ion of <sub>l</sub>	olaces						
Additio	nal inf	ormation						
	-							
Worklo	ad							
150 h								
Teaching cycle								
Teachi	ng cycl	e: every year, summer s	semester					
Referre	ed to in	LPO I (examination regulati	ons for teaching-degree progra	ammes)				
§ 22 II Nr. 3 b)								
Module	e appea	ars in						
Master	's degr	ee (1 major) Informatio	n Systems (2019)					
Master's w	ith 1 majo	r Information Systems (2024)		<ul> <li>generated 12-Jun-2025</li> <li>exactly exactly exactl</li></ul>		page 151 / 216		

Master's degree (1 major) Information Systems (2022)
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)
Master's degree (1 major) Information Systems (2025)
Master's degree (1 major) Management (2025)
Master's degree (1 major) Computer Science (2025)
Master's degree (1 major) Mathematical Data Science (2025)
Master's degree (1 major) Economathematics (2025)
First state examination for the teaching degree Gymnasium Computer Science (2025)

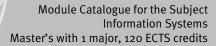
Module	e title				Abbreviation	
Selecte	ed Topi	cs in Business Mana	gement and Economics 4	•	12-M-APW4-161-m01	_
Module	e coord	inator		Module offered by		
Dean o mics	f the Fa	aculty of Business Ma	anagement and Econo-		nent and Economics	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duration Module level Other prerequisites						
1 seme	ster	graduate				
Conten		0				
• c • a • c	ourses dditior ourses	taken at other Germ nal courses offered o offered by new Chai	transferring credits from an or non-German univer n a short-term basis rs that are yet to be inclu s will ensure that the cou	sities ded in the FSB (subj		
Intende	ed lear	ning outcomes				
As a res	sult of	accrediting multiple	kinds of modules, a desc	ription of acquired s	kills cannot be given.	
			ours, language — if other than Ge		-	
V (2) +		· · ·				
			anguage — if other than German,	examination offered — if no	ot every semester, information on whe	ther
module is	s creditab	le for bonus)				
d) pres Langua Assess credita	entatio ge of a ment o ble for	bonus	ninutes)	offered		
Allocat	ion of <sub>l</sub>	olaces				
Additio	nal inf	ormation				
Worklo	ad					
150 h						
Teachi	ng cycl	e				
Teachir	ng cycle	e: no courses offered				
			ations for teaching-degree progra	ammes)		
Module	e appea	ars in				
Master	's degr	ee (1 major) Busines	s Information Systems (2	016)		
	-	· · ·	s Management (2015)			
	-		isiness and Economics (a			
	-		onal Economic Policy (20	-		
	-		nguage and Economy (20	016)		
	-	ee (1 major) Managei		10)		
	-		onal Economic Policy (20 Isiness and Economics (2			
		r Information Systems (2024)		• generated 12-Jun-2025 • ex	am. reg. da- page 153	/ 21
				er (120 ECTS) Information Sys		,

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)
Master's degree (1 major) Information Systems (2025)
Master's degree (1 major) International Economic Policy (2025)
Master's degree (1 major) Management (2025)
Master's degree (1 major) China Business and Economics (2025)
Master's degree (1 major) China Language and Economy (2025)

Modul	e title				Abbreviation	
Select	Selected Topics in Business Information Systems 4 12-M-AWI4-242-mo1					
Modul	e coord	linator		Module offered by	I	
Dean of the Faculty of Business Management and Econo- mics			anagement and Econo-	Faculty of Manager	nent and Economics	
ECTS	Meth	od of grading	Only after succ. co	mpl. of module(s)		
5	nume	rical grade				
Durati	on	Module level	Other prerequisites	5		
1 seme	ester	graduate				
Conte	nts					
• ;	additioı courses	nal courses offered o offered by new Chai	an or non-German univer n a short-term basis rs that are yet to be inclu rs will ensure that the co	ded in the FSB (subj		
Intend	led lear	ning outcomes				
As a re	esult of	accrediting multiple	kinds of modules, a desc	ription of acquired s	kills cannot be given.	
Course	<b>es</b> (type, i	number of weekly contact h	ours, language — if other than Ge	erman)		
Course Metho	e type: a od of as	It in: German and/or alternatively S instea <b>sessment</b> (type, scope, la ble for bonus)	d of V + Ü	examination offered — if n	ot every semester, information on whether	
a) writ b) pres c) oral approx Langua	ten exa sentatic examir x. 30 mi	mination (approx. 6c on (15 to 20 minutes) nation (one candidate nutes) assessment: German	with term paper (approx e each: approx. 10 to 15 r		d 1:2 or approx. 20 minutes; groups of 3:	
Alloca	tion of	places				
Additi	onal inf	ormation				
Workl	oad					
150 h						
Teaching cycle						
Teachi	ing cyci	e				
		<b>e</b> e: no courses offered				
Teachi	ing cycl	e: no courses offered	lations for teaching-degree progr	ammes)		
Teachi	ing cycl	e: no courses offered		ammes)		
Teachi <b>Referr</b> e	ing cycl	e: no courses offered LPO I (examination regu		ammes)		

Module title					Abbreviation		
Topics in Artificial Intelligence					12-M-TAI-242-m01		
Module	coord	inator		Module offered by			
Dean of mics	f the Fa	culty of Business Manag	Faculty of Managem	Faculty of 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					
Contents							
• ci • a • ci	ourses dditior ourses	erves the purpose of trar taken at other German o hal courses offered on a s offered by new Chairs th f the respective Chairs wi	r non-German univer hort-term basis at are yet to be inclue	sities ded in the FSB (subje		15)	
Intende	ed lear	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	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Ge	rman)			
V (2) + Module		t in: German and/or Engl	ish				
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German,	examination offered — if no	t every semester, informati	on on whether	
c) term d) prese Langua	paper entatio ge of a ment o	mination (questions cond (15 to 20 pages) or n (30 to 45 minutes) ssessment: German and, ffered: In the semester ir bonus	/or English		ox. 120 minutes) or		
Allocat	ion of p	olaces					
Additio	nal inf	ormation					
Worklo	ad						
150 h							
Teachir	ng cycl	e					
· · · · · ·		e: after announcement					
			s for teaching-degree progra	ummes)			
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) Management (2024) Master's degree (1 major) Information Systems (2024)							
Master's degree (1 major) Economathematics (2024)							
Master's degree (1 major) Information Systems (2025)							
Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025)							
-		ee (1 major) China Langu r Information Systems (2024)		025) 9 generated 12-Jun-2025 • exa	m reg da-	page 156 / 216	
muster 5 WI	i majoi		· · · · · ·	r (120 ECTS) Information Syste	•	page 130 / 210	





Master's degree (1 major) Economathematics (2025)



#### Module Catalogue for the Subject Information Systems Master's with 1 major, 120 ECTS credits

# **Compulsory Electives III: Seminar**

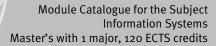
(10 ECTS credits)

Module	e title				Abbreviation	
Advanc	ed Sen	ninar: Marketing Strate	ЗУ		12-M-MSS-242-m01	
Module	e coord	inator		Module offered by		
holder ting	of the (	Chair of Business Admin	istration and Marke-	- · · ·	nent and Economics	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
10						
Duratio	Duration Module level Other prerequisites					
1 seme	ster	graduate				
Conten	ts					
tured p keting	aper and str	students will acquire in nd to present the results ategic management.				
	. <u> </u>	vary according to topic				
After co	ompleti	ng the course "Marketin the fundamentals of sc				
2. integ	grate el	aborated content in a sc entations independently	ientific thesis;			
-		umber of weekly contact hours,		rman)		
S (2)						
		t in: German and/or Eng				
		<b>essment</b> (type, scope, langu le for bonus)	age — if other than German,	examination offered — if no	t every semester, information c	on whether
		o to 25 pages) and prese ssessment: German and		ninutes), weighted 2	1	
Allocat	ion of p	olaces				
among ber of p	uld the all app places v	number of applications licants irrespective of th vill be allocated in the s ney become available.	neir subjects. (2) Place	es on all courses of t	he module with a restric	cted num-
Additio	nal inf	ormation				
Worklo	ad					
300 h						
Teachi	ng cycl	e				
		e: each semester				
Referre	d to in	LPO I (examination regulation	ns for teaching-degree progra	ammes)		
Module						
	-	ee (1 major) Managemer				
	-	ee (1 major) Information ee (1 major) Economathe	• •			
	-	ee (1 major) Information				
		Information Systems (2024)	JMU Würzburg	• generated 12-Jun-2025 • exa	-	age 159 / 216
			ta record Maste	r (120 ECTS) Information Syst	ems - 2024	

Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)

Module	e title				Abbreviation	
Advanc	ed Sen	ninar: Industrial Mana	gement		12-M-SI-242-m01	
Module coordinator				Module offered by		
holder Manage		Chair of Business Mana	agement and Industrial	-	nent and Economics	
ECTS		od of grading	Only after succ. con	pl. of module(s)		
10	10 numerical grade					
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
			eminar papers on select papers will have to be p		l of industrial manag	gement. The
Intende	ed lear	ning outcomes				
ten con Throug determ	tribution h the le ined tin	on to the topic of Indus ecture, students learn t me frame and to defen	y based further develop strial Management, which o present selected cont d the findings in the con s, language — if other than Ger	ch complies with the ent of their housewo urse of a critical, scie	principles of scient ork in a suitable forn	ific work.
S (2) Module	taugh	t in: German and/or Er	glish			
Method	d of ass		guage — if other than German, o	examination offered — if no	t every semester, informat	ion on whether
b) term	paper		resentation (approx. 20 resentation (approx. 45 nd/or English			
Allocat	-		<b></b>			
among ber of p	uld the all app places v	licants irrespective of	is exceed the number o their subjects. (2) Place same procedure. (3) A	es on all courses of t	he module with a res	stricted num
Additio	nal inf	ormation				
Worklo	ad					
300 h			_			
Teachir						
		e: each semester				
Referre	d to in	LPOI (examination regulation	ons for teaching-degree progra	mmes)		
Module			ant(anal)			
Master'	's degr	ee (1 major) Managemo ee (1 major) Informatio ee (1 major) Internatior		24)		
	0		, (			





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

Module	Module title Abbreviation				
Advanc	ed Sen	ninar: Financial Accountin	ng		12-M-SER-242-m01
Module	coord	inator		Module offered by	
holder ting	of the (	Chair of Business Manage	ement and Accoun-	Faculty of Managem	nent 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				
academ Studen lowing • Fi • C • S • R • C • V • D • A	<ul> <li>Corporate Disclosure</li> <li>Sustainability Reporting</li> <li>Reporting Standard Setting</li> <li>Capital Markets</li> </ul>				
		te Governance ning outcomes			
• lo • Fi	dentify ind rele	ion of this module, stude and motivate an econom evant scientific literature a scientific discussion b	ic research question and interpret and an	alyze it with regard to	
Course	<b>S</b> (type, n	umber of weekly contact hours, l	anguage — if other than Ger	rman)	
S (2)					
Module	taugh	t in: German and/or Engli	ish		
		s <b>essment</b> (type, scope, langua; le for bonus)	ge — if other than German, o	examination offered — if no	t every semester, information on whether
		o to 25 pages) and preser ssessment: German and/		ninutes) (weighted 2:	1)
Allocat	ion of p	olaces			
WA1: (1) Sho among ber of p ted by l	<ul> <li>10 places.</li> <li>WA1: <ul> <li>(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.</li> </ul> </li> <li>Additional information</li> </ul>				
Worklo	ad				
300 h					

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) Economathematics (2024)

Master's degree (1 major) Information Systems (2025)

Master's degree (1 major) Management (2025)

Master's degree (1 major) China Business and Economics (2025)

Master's degree (1 major) China Language and Economy (2025)

Master's degree (1 major) Economathematics (2025)

Module title					Abbreviation	
Advanc	ed Sen	ninar: Corporate Financ	e		12-M-SBL-242-m01	
Module	e coord	inator		Module offered by	adula offered by	
		Chair of Business Mana	gement and Corporate		nent and Economics	
Finance		enan of Business Mana	Sement and corporate	racatly of Manager		
ECTS Method of grading Only after succ. compl. of module(s)						
10	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	its					
studen ture-ba Intende Studen	ts work ised, er <b>ed lear</b> i its acqu	held as a seminar. Top independently on the npirical or by working in ning outcomes uire in-depth knowledge	respective problems ar ndependently with forn  e in important areas of	nd prepare a term pa nal models. A paper application in banki	oper. This can be stro on the topic is to be ing management the	ongly litera- given. ory, corpo-
		nd valuation. Students subject areas, to prepa	•		· ·	
		umber of weekly contact hours		·		
S (2)						
Module	e taugh	t in: German and/or En	glish			
		<b>essment</b> (type, scope, lang le for bonus)	uage — if other than German, e	examination offered — if no	ot every semester, informat	ion on whether
		o to 25 pages) and pres ssessment: German an		inutes), weighted 2	:1	
Allocat	ion of p	olaces				
among ber of p	uld the all app	number of application licants irrespective of t will be allocated in the ney become available.	heir subjects. (2) Place	s on all courses of t	he module with a res	stricted num-
Additio	onal inf	ormation				
Worklo	ad					
300 h						
Teachi	ng cycl	e				
Teachi	ng cycle	e: each semester				
Referre	ed to in	LPO I (examination regulation	ons for teaching-degree progra	mmes)		
Module	e appea	ars in				
	's degr	ee (1 major) Manageme ee (1 major) Informatior ee (1 major) Internation	n Systems (2024) al Economic Policy (20	24)		
Master Master Master Master	's degr 's degr	ee (1 major) Economath ee (1 major) Informatior ee (1 major) Internation	n Systems (2025) al Economic Policy (20	25)		
Master Master Master Master Master	's degr 's degr 's degr	ee (1 major) Informatior	n Systems (2025) al Economic Policy (20 nt (2025)	25) generated 12-Jun-2025 • exa		page 165 / 216



Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)

Module title					Abbreviation	
Advanc	ed Ser	ninar: Analytical Tax Re	search		12-M-SSL-242-m01	
Module	e coord	inator		Module offered by		
		Chair of Business Manag	gement and Business		nent and Economics	
Taxatio			F	, ,		
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)		
10		rical grade				
Duratio	Duration Module level Other prerequisites					
1 seme		graduate				
arch pa Althou	semina apers ir gh the	ar, current problems of ta n German and/or English seminar will be held in ( t prefers this to German	n language. German, individual ser			
Intend	ed lear	ning outcomes				
• t • t	o analy o ident o formu	inar, students are able ze a complex issue in ta ify problems and to sug ulate and to defend thei	gest solutions, r analysis and suggest	ed solutions.		
	<b>S</b> (type, 1	number of weekly contact hours	, language — if other than Ger	rman)		
S (2) Module	a taugh	t in. Cormon and /or End	rlich			
		t in: German and/or Eng				
		<b>sessment</b> (type, scope, langu ble for bonus)	lage — If other than German,	examination offered — if no	ot every semester, information	on whether
		o to 25 pages) and presessment: German and		ninutes), weighted 2	:1	
Allocat	ion of	places				
among ber of p	uld the all app places	e number of applications olicants irrespective of t will be allocated in the s hey become available.	heir subjects. (2) Place	es on all courses of t	he module with a restri	cted num-
· ·		ormation				
Worklo	ad					
300 h						
Teachi	ng cycl	e				
Teachi	ng cycl	e: each semester				
Referre	ed to in	LPO I (examination regulatio	ns for teaching-degree progra	immes)		
Module	e appea	ars in				
Master Master Master	's degr 's degr 's degr	ee (1 major) Manageme ee (1 major) Information ee (1 major) Economath ee (1 major) Information ee (1 major) Manageme	Systems (2024) ematics (2024) Systems (2025)			
Master's w	ith 1 majo	r Information Systems (2024)	-	generated 12-Jun-2025 • exa		age 167 / 216
			ta record Maste	r (120 ECTS) Information Syst	tems - 2024	



Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)

Modul	Module title				Abbreviation	
Advan	ced Ser	ninar: Enterprise System	S		12-M-ES-242-m01	
Modul	e coord	inator		Module offered by		
		Chair of Business Manage ystems	ement and Business	Faculty of Managen	nent and Economics	
ECTS	Methe	od of grading	Only after succ. con	npl. of module(s)		
10	nume	rical grade				
Duratio	on	Module level	Other prerequisites	5		
1 seme	ster	graduate				
Conter	Its					
arch ar their ov The fol	nd prac wn rese lowing	tice in the field of informa earch papers and subseq	ation systems. This m uently present and di re covered in the sem	odule is designed for scuss them.	that are relevant for both rese- or students preparing to write of contents vary individually de-	
• F r	Process nodele	and Data Modeling: Stud d in companies.	dents learn how busi	·	underlying data structures are	

- Augmented Business Process Management (BPM): Advanced study in augmented BPM systems that utilize artificial intelligence to optimize and adapt business processes.
- Hyperautomation: Integration of Robotic Process Automation (RPA) and AI to automate complex business processes.
- 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:

- 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)

Master's with 1 major Information Systems (2024)	I
	L

### 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 is creditable for 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)

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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)

Master's degree (1 major) Information Systems (2025)

Master's degree (1 major) International Economic Policy (2025)

Master's degree (1 major) Management (2025)

Master's degree (1 major) China Business and Economics (2025)

Master's degree (1 major) China Language and Economy (2025)

Master's degree (1 major) Economathematics (2025)

Module	e title				Abbreviation	
Advand	ced Ser	ninar: Topics in Personn	el Economics and Org	ganizational Theory	12-M-SPO-242-mo	1
Module	e coord	inator		Module offered by		
holder Organi:		Chair for Human Resourc	e Management and	Faculty of Managem	nent and Economics	5
ECTS Method of grading Only after succ. compl. of module(s)						
10	nume	rical grade		• • • •		
Duratio		Module level	Other prerequisites			
1 seme		graduate				
Conten		Siduate				
Studen	nts will	write a seminar paper or gement and organisatio				uman re-
Intend	ed lear	ning outcomes				
		learn to handle, write in management and orgar	•	and discuss current r	esearch literature i	n the area hu-
Course	<b>S</b> (type, 1	number of weekly contact hours,	language — if other than Ge	rman)		
S (2) Module	e taugh	t in: English				
		S <b>essment</b> (type, scope, langu ole for bonus)	age — if other than German,	examination offered — if no	t every semester, informa	tion on whether
tes), w	eighteo	pprox. 20 pages) and pr l 1:1 Issessment: English	esentation with sub-p	resentation including	g discussion (appro	x. 50 minu-
Allocat						
among ber of p	uld the all app	e number of applications blicants irrespective of th will be allocated in the s hey become available.	neir subjects. (2) Place	es on all courses of t	he module with a re	stricted num-
		ormation				
Worklo	ad					
	au		_			
300 h			_			
Teachi						
		e: each semester				
Referre	ed to in	LPO I (examination regulatio	ns for teaching-degree progra	ammes)		
Module	e appea	ars in				
Master	's degr	ee (1 major) Managemer	nt (2024)			
	-	ee (1 major) Information	-			
Master	's degr	ee (1 major) Internationa	al Economic Policy (20	024)		
	-	ee (1 major) Economath				
	-	ee (1 major) Information		,		
	-	ee (1 major) Internationa		925)		
	-	ee (1 major) Managemer				
waster	-	ee (1 major) China Busir				
Master'r w	ith 1 main	r Information Systems (2024)	IMIT Mürzburg	• generated 12-Jun-2025 • exa	am reg da-	page 171 / 216



Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)

Module title Abbreviation				Abbreviation	
Advanc	ed Sen	ninar: Entrepreneurship a		12-M-SAS-242-m01	
Module	coord	inator		Module offered by	
holder	of the C	Chair of Entrepreneurship	and Strategy	Faculty of Managem	nent and Economics
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
10	ľ	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme		graduate			
Conten					
		elop seminar papers on va ne key insights from their		omain of entreprene	urship, strategy, and innovation
Intende	ed learr	ning outcomes			
• E • E • E <i>Learnin</i> On succ • D • A • E	<ul> <li>Engage in comprehensive academic reasoning</li> </ul>				
S (2) Module	taught	t in: German and/or Engli	ich		
Method	l of ass	<b>essment</b> (type, scope, langua		examination offered — if no	t every semester, information on whether
term pa Langua	per (ap ge of a	le for bonus) oprox. 20 pages) and pres ssessment: German and/ ffered: Once a year, winte	or English	inutes), weighted 2:	1
Allocat	ion of p	olaces			
WA1: (1) Shor among ber of p	<ul> <li>10 places.</li> <li>WA1:</li> <li>(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.</li> </ul>				
Additio	Additional information				
Worklo	ad				
300 h					
Teachir	ng cycl	e			
Teachir	ng cycle	e: each semester			

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

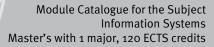
#### Module appears in

Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) Economathematics (2024) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)

Module title Abbreviation						
Advanc	ed Sen	ninar: Managerial Acco	unting		12-M-AUAS-242-mc	91
Module coordinator Module offered by						
holder of the Chair of Business Management, Controlling Faculty of Management and Economics and Accounting						
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
10	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 semes	ster	graduate				
Content						
tured pa countin	aper ar g. Stuc	students will acquire i nd to present the result lents independently an work. They present, di	s of their work by mean alyze a selected topic	ns of relevant topics and write a seminar	in the field of manag	gerial ac-
Intende	ed learn	ning outcomes				
<ul> <li>a</li> <li>cc</li> <li>fL</li> <li>in</li> <li>in</li> </ul>	nswer onduct urther s ntegrate ndepen	on of the seminar, stuc complex questions fror scientific literature res ccientific methods to ar e acquired results into dently create presentat anner and effectively c	n the field of manageri earch in a targeted ma iswer questions; scientific papers; tions and lectures in wl	anner and understan	d its contents as we	
Courses	<b>5</b> (type, n	umber of weekly contact hours	s, language — if other than Ge	rman)		
S (2) Module	taugh	t in: German and/or En	glish			
		s <b>essment</b> (type, scope, lang le for bonus)	uage — if other than German,	examination offered — if no	t every semester, informati	ion on whether
Langua	ge of a ment o	; to 20 pages) and pres ssessment: German an ffered: Once a year, su bonus	d/or English	iinutes), weighted 2:	1	
Allocati	ion of p	olaces				
WA1: (1) Shou among ber of p ted by l	10 places.					
Additio	nal inf	ormation				
Worklo	ad					
300 h			_			
	Teaching cycle					
		e: each semester				
Referre	d to in	LPO I (examination regulation	ons for teaching-degree progra	ammes)		
 Module	appea	irs in				
		Information Systems (2024)	-	• generated 12-Jun-2025 • exa r (120 ECTS) Information Syst	-	page 175 / 216

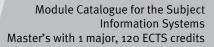
Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024) Master's degree (1 major) International Economic Policy (2024) Master's degree (1 major) Economathematics (2024)

Module title Abbreviation						
Busine	ss Ana	lytics			12-M-BUA-242-m01	
Module	e coord	inator		Module offered by		
holder	of the (	Chair of Business Analy	tics	Faculty of Managen	nent 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					
tured te manag stems a Studen	erm pap ement as well	students will acquire i ber and to present the r decision models and m as analytical informations on current topics usin	esults of their work wit ethods and their appli on systems and quantit	h the help of relevar cation in the develor tative methods of da	nt topics in the field oment of decision-su ta analysis.	of business Ipport sy-
on. Intende	ed lear	ning outcomes				
The mo • S • Ir • Ir	dule p icientifi mpleme ntegrat	rovides students with k c literature entation of methods in ion of developed result g presentations and lec	code s in scientific papers			
Course	<b>S</b> (type, n	umber of weekly contact hours	, language — if other than Ger	rman)		
S (2) Module	e taugh	t in: German and/or En	glish			
		s <b>essment</b> (type, scope, lang le for bonus)	uage — if other than German, o	examination offered — if no	t every semester, informati	on on whether
		o to 25 pages) and pres ssessment: German an		ninutes), weighted 2	:1	
Allocat			<u>,                                    </u>			
among ber of p	uld the all app places v	number of application licants irrespective of t vill be allocated in the ney become available.	heir subjects. (2) Place	es on all courses of t	he module with a res	stricted num-
Additio	nal inf	ormation				
Worklo	ad					
300 h	300 h					
Teaching cycle						
Teachir	Teaching cycle: each semester					
Referre	d to in	LPO I (examination regulation	ons for teaching-degree progra	mmes)		
Module	e appea	ars in				
	-	ee (1 major) Manageme ee (1 major) Informatior	•			
Master's wi	ith 1 majoi	r Information Systems (2024)		generated 12-Jun-2025 • exa r (120 ECTS) Information Syst		page 177 / 216



Master's degree (1 major) International Economic Policy (2024) Master's degree (1 major) Economathematics (2024) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)

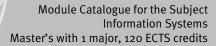
Module title Abbreviation							
Semin	ar: App	lied Analytics in Logistic	cs & Supply Chain Ma	nagement	12-M-LSCM-242-mc	01	
Modul	e coord	inator		Module offered by			
holder	of the	Chair of Logistics and Qu	antitative Methods	Faculty of Managen	nent and Economics		
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)			
10	nume	rical grade					
Durati	Duration Module level Other prerequisites						
1 seme	1 semester graduate						
Conte	nts						
They s founde compa of qua nicatic blems access <b>Intend</b> The ma potent minar	upport ed and i nies be ntitativo n syste have b to nec ed lear ain obje ial solu learn al	planning approaches are decision makers in takin relevant information. Ma ecause they considerably e planning methods has ms: Advanced tools are een integrated in standa essary data has substan <b>ning outcomes</b> ective of this seminar is t tions. Planning procedu pout actual planning pro	ig important strategic, ny of these decisions / influence today's as been strongly suppor available at low costs rd software, the user tially progressed (i.e.	, tactical, and operat have significant imp well as tomorrow's of ted by the developm s, versatile methods friendliness has imp through ERP system ants with diverse qua- ve real problems in c	ional decisions by p bact on the competit costs and revenues. Thent of information a to model and solve p roved, and last but r s).	roviding well- iveness of The adoption nd commu- blanning pro- not least: the roblems and nts in this se-	
		mpanies address these					
S (2)	S (type, i	number of weekly contact hours,	language — if other than Ge	rman)			
	e taugh	t in: German and/or Eng	lish				
		<b>Sessment</b> (type, scope, langu		examination offered — if no	ot every semester, informat	ion on whether	
		le for bonus)	_				
		o to 25 pages) and prese ssessment: German and		ninutes), weighted 2	:1		
Alloca	tion of	places					
amonរ្ ber of ted by	ould the g all app places lot as t	number of applications olicants irrespective of th will be allocated in the s hey become available.	neir subjects. (2) Place	es on all courses of t	he module with a res	stricted num-	
Additi	onal inf	ormation	_				
	_						
Workle	bad						
300 h		_					
· · · · · ·	ng cycl						
		e: each semester					
Referr	ed to in	LPO I (examination regulation	ns for teaching-degree progra	ammes)			
	e appea		(202)				
	-	ee (1 major) Managemer ee (1 major) Information					
Master's v	/ith 1 majo	r Information Systems (2024)	-	e generated 12-Jun-2025 • exa er (120 ECTS) Information Syst	-	page 179 / 216	



Master's degree (1 major) International Economic Policy (2024) Master's degree (1 major) Economathematics (2024) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)

Modul	e title				Abbreviation	
Econor	nic and	Business Ethics			12-M-WUE-242-mo	1
Modula	e coord	inator		Module offered by		
		Chair of Business Manag	ement and Business		nent and Economics	
Taxatic						
ECTS	Methe	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	Its					
		ar, students will gain an c orruption, ethcial theorie			siness and economy	ı, e. g. leader
Intend	ed lear	ning outcomes				
ethcial and un	proble dersta	n scientific methods the m in business and/or ec ndable way und he/she s number of weekly contact hours,	onomiy. He/she shou should discuss the ar	ld be able to presen guments with other p	t a complex problen	n in an clear
• •	e taugh	t in: German and/or Eng	lish			
		<b>sessment</b> (type, scope, langua ble for bonus)	age — if other than German,	examination offered — if no	t every semester, informat	ion on whether
		o to 25 pages) and prese		ninutes), weighted 2	:1	
		ssessment: German and	/or English			
Allocat		places				
among ber of µ	uld the all app	e number of applications blicants irrespective of th will be allocated in the sa hey become available.	eir subjects. (2) Place	es on all courses of t	he module with a re	stricted num-
		ormation				
			-			
Worklo	ad					
	au					
300 h			-			
Teachi						
		e: each semester				
Referre	ed to in	LPO I (examination regulation	s for teaching-degree progra	mmes)		
Modul	e appea	ars in				
	-	ee (1 major) Managemen				
	-	ee (1 major) Information	•			
	-	ee (1 major) Internationa		24)		
	-	ee (1 major) Economathe				
	-	ee (1 major) Information		)		
	-	ee (1 major) Internationa		25)		
	-	ee (1 major) Managemen ee (1 major) China Busin	-	1025)		
		r Information Systems (2024)		generated 12-Jun-2025 • exa	am, reg. da-	page 181 / 216
				r (120 ECTS) Information Syst		,,,,

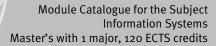




Master's degree (1 major) Economathematics (2025)

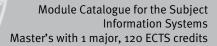
Module	title				Abbreviation	
Practica	al Sem	inar: Economic Journali	sm		12-M-SWJ-242-m01	
Module	coord	inator		Module offered by		
holder	of the I	Professorship of Econom	nic Journalism	Faculty of Managem	nent and Economics	
ECTS	Metho	od of grading	Only after succ. com			
10		rical grade		•		
Duratio		Module level	Other prerequisites			
1 semes	ster	graduate				
Conten		0				
their pla ledge o as well ment co Intende	aceme f econo as to s ompan ed lear	acquire an in-depth insi nts at company or other omics journalism. Stude ubmit proof of regular a y is to be submitted. ning outcomes	institution at which the ents will be required to ttendance and particip	ey will have an oppo prepare a practical pation. In addition, a	ortunity to gain an in report on the placem a certificate issued b	-depth know- ient module y the place-
		trengthens practical con journalism.	petences and encour	ages work experienc	es. It prepares for th	e career start
Courses	<b>S</b> (type, r	number of weekly contact hours,	, language — if other than Ger	man)		
S (2) Module	e taugh	t in: German and/or Eng	lish			
Method	l of ass	sessment (type, scope, langu	age — if other than German, e	examination offered — if no	t every semester, informati	on on whether
		le for bonus)				
		bservation visit, includir ssessment: German and		ox. 40 pages)		
Allocati	ion of <b>j</b>	olaces				
among ber of p	uld the all app laces v	number of applications dicants irrespective of the will be allocated in the s hey become available.	neir subjects. (2) Place	s on all courses of th	he module with a res	stricted num-
Additio	nal inf	ormation				
Worklo	ad					
300 h						
Teachir	ıg cycl	e				
Teachin	ng cycle	e: each semester				
		LPO I (examination regulatio	ns for teaching-degree progra	mmes)		
				-		
Module	appea	ars in				
		ee (1 major) Managemei	nt (2024)			
		ee (1 major) Information				
	-	ee (1 major) Economath				
	-	ee (1 major) Information				
	-	ee (1 major) Managemei				
	-	ee (1 major) China Busir		-		
	-	ee (1 major) China Langu	- , ,		um roa da	2220 482 / 24/
master S WI	ur i majo	r Information Systems (2024)		generated 12-Jun-2025 • exa r (120 ECTS) Information Syst		page 183 / 216





Master's degree (1 major) Economathematics (2025)

Module	title				Abbreviation	
Project	Modul	: Journalism in Econom	c Policy		12-M-WPJ-242-m01	
Module	coord	inator		Module offered by		
holder	of the F	Professorship of Econon	nic Journalism	Faculty of Managem	nent 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	i		
1 semes	ster	graduate				
Conten	ts					
ny med these to kes for ons will topic th	ia user opics b good e l first b iemselv	nalism is often regarde s can relate to: The focu e presented in a way th conomic reporting? Whe e answered using exam yes. The seminar is ther nalism and Business Co	is is on market develo at is clear, easy to und at research options an ples from various med natically oriented towa	pments and (econon derstand, and yet as id forms of presentat dia. Subsequently, th ards current research	nic) political condition precise as possible? ion are available? Su re students will work projects/projects o	ons. How can What ma- uch questi- on the main f the Chair of
		ning outcomes				
they will present pics in in respo	ll have tation c reportionse to	the terminology, topic an overview of selected of economic journalism. ng. After completing the previously generated r ct as well as specific me	areas of application. The students learn sc seminar, students are esearch questions and	They master the rese ientific methods to b e able to independer d thus evaluate journ	earch and the differe break down complex htly examine journali alistic work. Therefo	nt forms of economic to- istic products
Courses	<b>S</b> (type, n	umber of weekly contact hours	, language — if other than Ge	rman)		
S (2) Module	taugh	t in: German and/or Eng	lish			
		e <b>essment</b> (type, scope, langu le for bonus)	age — if other than German,	examination offered — if no	t every semester, informati	on on whether
items w Langua	/ith a d ge of a ment o	record of research activ uration of 3 minutes ea ssessment: German and ffered: In the semester bonus	ch, audio/video forma d/or English	t or text format appr		approx. 3
Allocati	ion of p	olaces				
among ber of p ted by l	uld the all app blaces v ot as th	number of applications licants irrespective of tl vill be allocated in the s ney become available.	neir subjects. (2) Place	es on all courses of the	he module with a res	stricted num-
Additio	nal inf	ormation				
			_			
Worklo	ad					
300 h						
Teachir	ng cycl	9				
Teachin	ng cycle	e: after announcement				
Referre	d to in	LPO I (examination regulatio	ns for teaching-degree progra	ammes)		
Master's wi	th 1 major	Information Systems (2024)		• generated 12-Jun-2025 • exa r (120 ECTS) Information Syst		page 185 / 216



# 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) Master's degree (1 major) Information Systems (2025) Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) Economathematics (2025)

Master's with 1 major Information Systems (2024)

Project:       Selected Topics in Business Management and Econor in the Faculty of Business Management and Econor incs       Module offered by         Dean of the Faculty of Business Management and Econor incs       Faculty of Management and Econories         Beam of the Faculty of Business Management and Econor incs       Faculty of Management and Econories         Beam of the Faculty of Business Management and Econories       Faculty of Management and Econories         Beam of the Faculty of Business Management and Econories       Faculty of Management and Econories         Beam of the Faculty of Business Management and Econories       Faculty of Management and Econories         Beam of the Faculty of Business Management and Econories       Faculty of Management and Econories         Beam of the Faculty of Business Management and Econories       Faculty of Management and Econories         Duration       Module level       Other prerequisites         1 semester       (and the formation or non-German universities	Module	e title				Abbreviation
Dean of the Faculty of Business Management and Economics       Faculty of Management and Economics         mics       Faculty of Management and Economics         ECTS       Method of grading       Only after succ. compl. of module(s)         0       numerical 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          - diditional courses offered on a short-term basis          - courses tiken at other German or non-German universities          - courses offered by new Chairs shat 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 learning outcomes          S (a)       Module taught in: German and/or English         Method of assessment: German and/or English          Matchie for bonus          Altocation of places          to places.          WA:       (3) Should the number of applications exceed the number of available places, places will be allocated by lot arong all applicants i	Project	: Selec	ted Topics in Business I	Management and Ecor	nomics I	12-M-APS-242-m01
mics          Method of grading       Only after succ. compl. of module(s)         10       numerical grade          Duration       Module level       Other prerequisites         1 semester       graduate          Contents       Image: State at the optimized of the prerequisites          Contents           Concess taken at other German or non-German universities           - ourses 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 learning outcomes           As a result of accrediting multiple kinds of modules, a description of acquired skills cannot be given.          Courses (ype, number of weekly contact hours, language – if other than German, examination offered – if not every semester, information on whet module is creditable for honus)          Module taught in: German and/or English           Method of faces	Module	e coord	nator		Module offered by	
10       numerical 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 learning outcomes         As a result of accrediting multiple kinds of modules, a description of acquired skills cannot be given.         Courses (ype, number of weekly contact hours, language – if other than German, examination offered – if not every semester, information on whet module is creditable for bonus)         Retime paper (approx. 20 pages) and presentation (approx. 20 minutes); (weighted 2:1)         Language of assessment (Serman and/or English         Allocation of places         10 places.         WA:         10 shuld 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 r beor of places will be allocated of the same procedure. (3) A waiting list will be maintained a		f the Fa	culty of Business Mana	gement and Econo-	Faculty of Managen	nent and Economics
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	ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
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 will ensure that the courses are eligible for credit transfer.       Intended learning outcomes         As a result of accrediting multiple kinds of modules, a description of acquired skills cannot be given.       Courses (type, number of weekly contact hours, language – if other than German)         S (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 whet module is creditable for bonus)         term paper (approx. 20 pages) and presentation (approx. 20 minutes); (weighted 2:1)         tanguage of assessment: German and/or English         Assessment Offered: In the semester in which the course is offered         creditable for bonus         Allocation of places         to places.         WA:         (1) Should the number of applications exceed the number of available places, places will be allocated by lot among all applicated in the same procedure. (3) A waiting list will be maintained and places re-alloted by lot as they become available.         Additional information	10	nume	rical grade			
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 learning outcomes As a result of accrediting multiple kinds of modules, a description of acquired skills cannot be given. Courses (type, number of weekly contact hours, language – if other than German) S (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 whet module is creditable for bonus) term paper (approx. 20 pages) and presentation (approx. 20 minutes); (weighted 2:1) Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered creditable for bonus Allocation of places 10 places. WAt: (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 r ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allo ted by lot as they become available. Additional information	Duratio	on	Module level	Other prerequisites		
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. Intendel learning outcomes  As a result of accrediting multiple kinds of modules, a description of acquired skills cannot be given. Courses (type, number of weekly contact hours, language — if other than German) S (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 whet module is creditable for bonus) term paper (approx. 20 pages) and presentation (approx. 20 minutes); (weighted 2:1) Language of assessment: German and/or English Assessment offered. In the semester in which the course is offered creditable for bonus 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 r ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allou ted by lot as they become available. Additional information	1 seme	ster	graduate			
<ul> <li>courses taken at other German or non-German universities</li> <li>additional courses offered on a short-term basis</li> <li>courses offered by new Chairs that are yet to be included in the FSB (subject-specific provisions)</li> <li>The holders of the respective Chairs will ensure that the courses are eligible for credit transfer.</li> </ul> Intended learning outcomes As a result of accrediting multiple kinds of modules, a description of acquired skills cannot be given. Courses (type, number of weekly contact hours, language – if other than German) S (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every senester, information on whet module is creditable for bonus) term paper (approx. 20 pages) and presentation (approx. 20 minutes); (weighted 2:1) Language of assessment: German and/or English Atlocation of places Note: a second offered: In the semester in which the course is offered creditable for bonus Allocation of 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 r ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allo ted by lot as they become available. Additional information	Conten	ts				
As a result of accrediting multiple kinds of modules, a description of acquired skills cannot be given. Courses (type, number of weekly contact hours, language — if other than German) S (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 whet module is creditable for bonus) term paper (approx. 20 pages) and presentation (approx. 20 minutes); (weighted 2:1) Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered creditable for bonus Allocation of places NA1: () 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 r ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allo ted by lot as they become available. Additional information	• c • a • c	ourses ddition ourses	taken at other German ( al courses offered on a offered by new Chairs tl	or non-German univer short-term basis hat are yet to be inclue	ded in the FSB (subj	
Courses (type, number of weekly contact hours, language – if other than German) S (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 whet module is creditable for bonus) term paper (approx. 20 pages) and presentation (approx. 20 minutes); (weighted 2:1) Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered creditable for bonus 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 r ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allo ted by lot as they become available. Additional information	Intende	ed learr	ing outcomes			
S (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 whet module is creditable for bonus) term paper (approx. 20 pages) and presentation (approx. 20 minutes); (weighted 2:1) Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered creditable for bonus 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 r ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-alloc ted by lot as they become available. Additional information  Workload 300 h Teaching cycle Teaching cycle: after announcement Referred to in LPO 1 (examination regulations for teaching-degree programmes)  Module appears in Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024)	As a re	sult of a	accrediting multiple kind	ds of modules, a desc	ription of acquired s	kills cannot be given.
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 whet module is creditable for bonus) term paper (approx. 20 pages) and presentation (approx. 20 minutes); (weighted 2:1) Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered creditable for bonus 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 or ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allou ted by lot as they become available. Additional information Workload 300 h 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)	Course	<b>S</b> (type, n	umber of weekly contact hours,	language — if other than Ger	rman)	
Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whet module is creditable for bonus)         term paper (approx. 20 pages) and presentation (approx. 20 minutes); (weighted 2:1)         Language of assessment: German and/or English         Assessment offered: In the semester in which the course is offered         creditable for bonus         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 r ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allowed by lot as they become available.         Additional information            Workload         300 h         Teaching cycle         Teaching cycle         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)		e taugh	t in: German and/or Eng	lish		
module is creditable for bonus) term paper (approx. 20 pages) and presentation (approx. 20 minutes); (weighted 2:1) Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered creditable for bonus Allocation of places It oplaces. 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 r ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allo ted by lot as they become available. Additional information			=		examination offered — if no	ot every semester, information on whether
Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered creditable for bonus 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 r ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allou ted 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)						
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 r ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-alloc ted 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)	Langua Assess	ige of a ment o	ssessment: German and ffered: In the semester i	l/or English		ed 2:1)
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 r ber of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-alloc ted 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)	Allocat	ion of p	laces	_		
 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)	WA1: (1) Sho among ber of p ted by	uld the all app places v lot as th	licants irrespective of the vill be allocated in the s ney become available.	neir subjects. (2) Place	es on all courses of t	he module with a restricted num
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)	Additio	nal info	ormation			
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)						
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)	Worklo	ad				
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)	300 h					
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)	Teachi	ng cycl	9			
 <b>Module appears in</b> Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024)		<u> </u>				
Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024)	Referre	d to in	LPO I (examination regulation	ns for teaching-degree progra	mmes)	
Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024)						
Master's degree (1 major) Information Systems (2024)	Module	e appea	rs in			
		-	· -	-		
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Master's degree (1 major) International Economic Policy (2024) Master's degree (1 major) Economathematics (2024)	Master	's degre	e (1 major) Internationa			

JMU Würzburg • generated 12-Jun-2025 • exam. reg. data record Master (120 ECTS) Information Systems - 2024

page 187 / 216

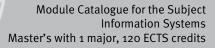
Master's with 1 major Information Systems (2024)

	e title				Abbreviation
Project	: Selec	ted Topics in Business I	Management and Eco	nomics II	12-M-APS2-242-m01
Module	e coord	inator		Module offered by	
Dean o mics	of the Fa	aculty of Business Mana	gement and Econo-	Faculty of Manager	ment and Economics
ECTS	Metho	od of grading	Only after succ. cor	npl. of module(s)	
10	nume	rical grade			
Duratio	on	Module level	Other prerequisites	<b>i</b>	
1 seme	ster	graduate			
Conten	Its		•		
• c • a • c The ho	ourses additior ourses lders of	erves the purpose of tra taken at other German of nal courses offered on a offered by new Chairs th f the respective Chairs w	or non-German univer short-term basis hat are yet to be inclu	sities ded in the FSB (subj	
		ning outcomes	_		
		accrediting multiple kind		<u> </u>	kills cannot be given.
	<b>S</b> (type, r	number of weekly contact hours,	language — if other than Ge	rman)	
S (2) Modula	o tough	t in: German and/or Eng	lich		
		-		and the afferred if a	- +
		le for bonus)	age — If other than German,	examination offered — If n	ot every semester, information on whether
	apei (al	$p_{10}$ , $z_{0}$ $p_{ages}$ and $p_{10}$		$\cap$ miniitoci iwoighta	d 2·1)
Assess	ment o	ssessment: German and ffered: In the semester i	l/or English	o minutes); (weighte offered	ed 2:1)
	ment o ble for	ssessment: German and ffered: In the semester i bonus	l/or English		ed 2:1)
Assess credita Allocat 10 plac WA1: (1) Sho among ber of p ted by	ion of p ces. uld the all app places v lot as th	ssessment: German and ffered: In the semester i bonus blaces number of applications blicants irrespective of th will be allocated in the s hey become available.	l/or English n which the course is exceed the number c neir subjects. (2) Place	offered of available places, p es on all courses of t	places will be allocated by lot
Assess credita Allocat 10 plac WA1: (1) Sho among ber of p ted by	ion of p ces. uld the all app places v lot as th	ssessment: German and ffered: In the semester i bonus blaces number of applications blicants irrespective of th will be allocated in the s	l/or English n which the course is exceed the number c neir subjects. (2) Place	offered of available places, p es on all courses of t	places will be allocated by lot the module with a restricted num
Assess credita Allocat 10 plac WA1: (1) Sho among ber of p ted by	ion of p ces. uld the all app places v lot as th	ssessment: German and ffered: In the semester i bonus blaces number of applications blicants irrespective of th will be allocated in the s hey become available.	l/or English n which the course is exceed the number c neir subjects. (2) Place	offered of available places, p es on all courses of t	places will be allocated by lot the module with a restricted num
Assess credita Allocat 10 plac WA1: (1) Sho among ber of p ted by Additic	ment o ble for ion of p ces. uld the all app places v lot as the onal inf	ssessment: German and ffered: In the semester i bonus blaces number of applications blicants irrespective of th will be allocated in the s hey become available.	l/or English n which the course is exceed the number c neir subjects. (2) Place	offered of available places, p es on all courses of t	places will be allocated by lot the module with a restricted num
Assess credita Allocat 10 plac WA1: (1) Sho among ber of p ted by Additio	ment o ble for ion of p ces. uld the all app places v lot as the onal inf	ssessment: German and ffered: In the semester i bonus blaces number of applications blicants irrespective of th will be allocated in the s hey become available.	l/or English n which the course is exceed the number c neir subjects. (2) Place	offered of available places, p es on all courses of t	places will be allocated by lot the module with a restricted num
Assess credita Allocat 10 plac WA1: (1) Sho among ber of p ted by Additio  Worklo 300 h	ment o ble for ion of p ees. all app places v lot as th onal info	ssessment: German and ffered: In the semester i bonus blaces number of applications blicants irrespective of th will be allocated in the s hey become available. ormation	l/or English n which the course is exceed the number c neir subjects. (2) Place	offered of available places, p es on all courses of t	places will be allocated by lot the module with a restricted num
Assess credita Allocat 10 plac WA1: (1) Sho among ber of p ted by Additio  Worklo 300 h Teachin	ment o ble for ion of p ces. uld the all app places v lot as th onal info pad	ssessment: German and ffered: In the semester i bonus blaces number of applications blicants irrespective of th will be allocated in the s hey become available. ormation	l/or English n which the course is exceed the number c neir subjects. (2) Place	offered of available places, p es on all courses of t	places will be allocated by lot the module with a restricted num
Assess credita Allocat 10 plac WA1: (1) Sho among ber of p ted by Additio  Worklo 300 h Teachin Teachin	ment o ble for ion of p ces. uld the all app places v lot as th onal info pad	ssessment: German and ffered: In the semester i bonus blaces number of applications blicants irrespective of th will be allocated in the s hey become available. ormation	l/or English n which the course is exceed the number of neir subjects. (2) Place ame procedure. (3) A	offered of available places, p es on all courses of f waiting list will be n	places will be allocated by lot the module with a restricted num
Assess credita Allocat 10 plac WA1: (1) Sho among ber of p ted by Additio  Worklo 300 h Teachin Teachin	ment o ble for ion of p ces. uld the all app places v lot as th onal info pad	ssessment: German and ffered: In the semester i bonus blaces number of applications blicants irrespective of th will be allocated in the s hey become available. ormation e e: after announcement	l/or English n which the course is exceed the number of neir subjects. (2) Place ame procedure. (3) A	offered of available places, p es on all courses of f waiting list will be n	places will be allocated by lot the module with a restricted num
Assess credita Allocat 10 plac WA1: (1) Sho among ber of p ted by Additio  Worklo 300 h Teachin Referre 	ment o ble for ion of p ces. uld the all app places v lot as th onal info pad	ssessment: German and ffered: In the semester i bonus blaces number of applications blicants irrespective of th will be allocated in the s hey become available. ormation e e: after announcement LPO I (examination regulation	l/or English n which the course is exceed the number of neir subjects. (2) Place ame procedure. (3) A	offered of available places, p es on all courses of f waiting list will be n	places will be allocated by lot the module with a restricted num
Assess credita Allocat 10 plac WA1: (1) Sho among ber of p ted by Additio  Worklo 300 h Teachin Teachin Referre  Module	ment o ble for ion of p ces. uld the all app places v lot as the palaces	ssessment: German and ffered: In the semester i bonus places number of applications plicants irrespective of th will be allocated in the s hey become available. ormation e e e: after announcement LPO I (examination regulation ars in ee (1 major) Managemer	d/or English n which the course is exceed the number of neir subjects. (2) Place ame procedure. (3) A ns for teaching-degree progra	offered of available places, p es on all courses of f waiting list will be n	places will be allocated by lot the module with a restricted num
Assess credita Allocat 10 plac WA1: (1) Sho among ber of p ted by Additio  Worklo 300 h Teachin Referre  Master Master	ment o ble for ion of p ies. uld the all app places v lot as th onal info onal info onal info onal info e appea d to in	ssessment: German and ffered: In the semester i bonus places number of applications plicants irrespective of th will be allocated in the s hey become available. ormation e e: after announcement LPO I (examination regulation ars in ee (1 major) Managemer ee (1 major) Information	d/or English n which the course is exceed the number of ame procedure. (2) Place ame procedure. (3) A ns for teaching-degree progra	offered of available places, p es on all courses of f waiting list will be n ammes)	places will be allocated by lot the module with a restricted num
Assess credita Allocat 10 plac WA1: (1) Sho among ber of p ted by Additio  Worklo 300 h Teachin Teachin Referre  Master Master Master	ment o ble for ion of p ies. uld the all app olaces v lot as th onal info pad ng cycle ed to in e appea d's degre d's degre	ssessment: German and ffered: In the semester i bonus places number of applications plicants irrespective of th will be allocated in the s hey become available. ormation e e e: after announcement LPO I (examination regulation ars in ee (1 major) Managemer	d/or English n which the course is exceed the number of heir subjects. (2) Place ame procedure. (3) A ns for teaching-degree progra ht (2024) Systems (2024) al Economic Policy (20	offered of available places, p es on all courses of f waiting list will be n ammes)	places will be allocated by lot the module with a restricted num

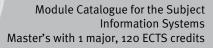
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page 188 / 216

Module	e title				Abbreviation	
Interna	tional	Economics 1			12-M-ATIÖ1-242-mo	1
Module	e coord	inator		Module offered by		
holder	of the C	Chair of International Ec	onomics	Faculty of Managem	nent 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					
de, and stems; Literatu	topics Cities Global	in international econor Outsourcing, Offshorin ization and the Environ articles and/or monog	ng and Multinational Fi ment; Trade, Multinati	rms; Competition of	Locations, Jurisdicti	ons and Sy-
Intende	ed learr	ning outcomes				
learn a	nd app and re	rrent cutting-edge rese ly research methods. Th search both in written a eers.	ne seminar style of the	course teaches then	n to present their ow	n seminar
Course	<b>S</b> (type, n	umber of weekly contact hours	, language — if other than Ger	rman)		
S (2) Module	e taugh	t in: English				
		essment (type, scope, lang le for bonus)	uage — if other than German, o	examination offered — if no	t every semester, informati	on on whether
		pprox. 15 pages) and pr ssessment: English	esentation (approx. 40	minutes) with thesi	s paper (1 page) (we	ighted 3:1)
Allocat	ion of p	olaces				
among ber of p	uld the all app places v	number of application licants irrespective of t vill be allocated in the ney become available.	heir subjects. (2) Place	es on all courses of th	ne module with a res	stricted num-
Additio	nal inf	ormation				
Worklo	ad					
300 h						
Teachi	ng cycl	e				
Teachir	ng cycle	e: after announcement				
Referre	d to in	LPOI (examination regulation	ns for teaching-degree progra	immes)		
Module	e appea	rs in				
Master	's degre	ee (1 major) Manageme ee (1 major) Informatior ee (1 major) Internation	Systems (2024)	24)		
Master's wi	ith 1 major	Information Systems (2024)	-	generated 12-Jun-2025 • exa r (120 ECTS) Information Syst	-	page 189 / 216



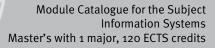
Module	title				Abbreviation	
Interna	tional	Economics 2			12-M-ATIÖ2-242-mc	)1
Module	coord	inator		Module offered by		
holder	of the C	Chair of International E	conomics	Faculty of Managem	nent and Economics	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
10	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
de, and stems;	topics Cities Global	; Outsourcing, Offshori	mics and economic geo ng and Multinational Fi ment; Trade, Multinati or monographs.	rms; Competition of	Locations, Jurisdicti	ons and Sy-
		ning outcomes				
Drawing learn ar	g on cu nd app and re	rrent cutting-edge rese ly research methods. T search both in written	arch, students are ena he seminar style of the and in oral form. Stude	course teaches then	n to present their ow	n seminar
Course	<b>S</b> (type, n	umber of weekly contact hour	s, language — if other than Ger	rman)		
S (2) Module	e taugh	t in: English				
		s <b>essment</b> (type, scope, lang le for bonus)	uage — if other than German, o	examination offered — if no	t every semester, informati	on on whether
		oprox. 15 pages) and p ssessment: English	resentation (approx. 40	minutes) with thesi	s paper (1 page) (we	ighted 3:1)
Allocat	ion of p	olaces				
among ber of p	uld the all app blaces v	licants irrespective of	s exceed the number o heir subjects. (2) Place same procedure. (3) A	es on all courses of th	ne module with a res	stricted num-
Additio	nal inf	ormation				
Worklo	ad					
300 h						
Teachir	ng cycl	e				
Teachir	ng cycle	e: after announcement				
Referre	d to in	LPO I (examination regulati	ons for teaching-degree progra	mmes)		
Module	e appea	rs in				
Master' Master' Master'	's degre 's degre 's degre	ee (1 major) Manageme ee (1 major) Informatio ee (1 major) Internatior ee (1 major) Economati	n Systems (2024) al Economic Policy (20 nematics (2024)	24) generated 12-Jun-2025 • exa	m reg da-	page 191 / 216
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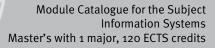
Master's degree (1 major) Information Systems (2025) Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)

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Module	e title				Abbreviation	
Interna	tional I	Economics 3			12-M-ATIÖ3-242-mc	)1
Module	e coordi	inator		Module offered by		
holder	of the C	Chair of International Eco	onomics	Faculty of Managem	nent 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					
de, and stems; Literatu	topics Cities; Globali	in international econon Outsourcing, Offshorin ization and the Environr articles and/or monogr	g and Multinational Fi nent; Trade, Multinati	rms; Competition of	Locations, Jurisdicti	ons and Sy-
		ning outcomes	•			
Drawing learn a	g on cu nd app and res	rrent cutting-edge resea ly research methods. Th search both in written a	e seminar style of the	course teaches then	n to present their ow	n seminar
Course	<b>S</b> (type, n	umber of weekly contact hours,	language — if other than Ger	man)		
S (2) Module	e taugh	t in: English				
		e <b>ssment</b> (type, scope, langu le for bonus)	age — if other than German, o	examination offered — if no	t every semester, informati	on on whether
		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				
among ber of p	uld the all app places v	number of applications licants irrespective of th vill be allocated in the s ney become available.	eir subjects. (2) Place	es on all courses of th	ne module with a res	stricted num-
Additio	nal info	ormation				
Worklo	ad					
300 h			_			
Teachi	ng cycl	e				
Teachir	ng cycle	e: after announcement				
Referre	d to in	LPOI (examination regulation	ns for teaching-degree progra	mmes)		
Module	e appea	rs in				
Master	's degre	ee (1 major) Managemer ee (1 major) Information ee (1 major) Internationa	Systems (2024)	24)		
Master's wi	ith 1 major	Information Systems (2024)	-	generated 12-Jun-2025 • exa r (120 ECTS) Information Syst	_	page 193 / 216



Module	e title				Abbreviation	
Semina	ar: Inte	rnational Economics			12-M-AMTIÖ-242-m	01
Module	e coord	inator		Module offered by		
holder	of the (	Chair of International Ec	onomics	Faculty of Managem	nent 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					
de, and stems; Literatu	topics Cities Global	in international econor Outsourcing, Offshorin ization and the Environ	ng and Multinational Fi ment; Trade, Multinati	rms; Competition of	Locations, Jurisdicti	ons and Sy-
		articles and/or monog				
Drawin learn a	g on cu nd app and re	ning outcomes rrent cutting-edge rese ly research methods. Th search both in written a reers.	ne seminar style of the	course teaches then	n to present their ow	n seminar
Course	<b>S</b> (type, n	umber of weekly contact hours	, language — if other than Ge	rman)		
S (2) Module	e taugh	t in: English				
		s <b>essment</b> (type, scope, lang le for bonus)	uage — if other than German,	examination offered — if no	t every semester, informati	on on whether
		oprox. 15 pages) and pr ssessment: English	esentation (approx. 40	minutes) with thesi	s paper (1 page) (we	ighted 3:1)
Allocat	ion of p	olaces				
among ber of p	uld the all app places v	number of application licants irrespective of t vill be allocated in the ney become available.	heir subjects. (2) Place	es on all courses of th	ne module with a res	stricted num-
Additio	nal inf	ormation				
Worklo	ad					
300 h						
Teachi	ng cycl	9				
Teachi	ng cycle	e: each semester				
Referre	d to in	LPO I (examination regulation	ons for teaching-degree progra	immes)		
Module	e appea	irs in				
Master Master Master	's degro 's degro 's degro	ee (1 major) Manageme ee (1 major) Informatior ee (1 major) Internation Information Systems (2024)	al Economic Policy (20 JMU Würzburg	generated 12-Jun-2025 • exa	_	page 195 / 216
			ta record Maste	r (120 ECTS) Information Syst	ems - 2024	



Module	title				Abbreviation	
		ninar: Industrial Organ	zation		12-M-SIO-242-mo1	
Module	coord	inator		Module offered by		
holder	of the (	Chair of Industrial Econ	omics	Faculty of Managem	nent 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					
their ad and wri	lvisor, te a pa	vers selected advanced will choose a topic and per on this research qu orally to an audience.	formulate a research q	uestion. Then they a	are expected to cond	uct research
Intende	ed leari	ning outcomes				
<ol> <li>perfo</li> <li>critic</li> <li>desc</li> <li>sugg</li> </ol>	orm a si ally ass ribe the est futi	ng the course "Semina urvey of the scientific li sess the economic moc e economic mechanism ure research directions; ir findings to an audien	terature on a given top lels and their findings i is underlying importan	ic; n the literature;		
Course	<b>S</b> (type, n	umber of weekly contact hours	, language — if other than Ger	man)		
S (2)		t in: English				
		<b>essment</b> (type, scope, lang le for bonus)	uage — if other than German, e	examination offered — if no	t every semester, informati	on on whether
		oprox. 20 pages) and p ssessment: English	resentation (approx. 20	o minutes); (weighte	d 2:1)	
Allocat	ion of p	olaces				
among ber of p ted by l	uld the all app places v ot as tl	number of application licants irrespective of t will be allocated in the ney become available.	heir subjects. (2) Place	s on all courses of t	he module with a res	stricted num-
Additio	nal inf	ormation				
Worklo	ad					
300 h						
Teachir						
		e: each semester				
Referre	d to in	LPO I (examination regulation	ons for teaching-degree progra	mmes)		
Module						
Master' Master'	s degr s degr	ee (1 major) Manageme ee (1 major) Informatior ee (1 major) Internation ee (1 major) Economath	n Systems (2024) al Economic Policy (20	24)		
Master's wi	th 1 major	r Information Systems (2024)		generated 12-Jun-2025 • exa r (120 ECTS) Information Syst	-	page 197 / 216

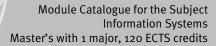
Module	title				Abbreviation
Advanc	ed Sen	ninar: Labour Economics			12-M-SWOSP-242-mo1
Module	coord	inator		Module offered by	
holder	of the C	Chair of Labour Economic	S	Faculty of Managem	nent and Economics
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
10	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 semes	ster	graduate			
Content	ts				
people' allow st The rect	s socia tudents urring t	l behavior and social pre s to acquire the necessar	ferences. We will rea y empirical tools to co e origins of social col	d and discuss scien onduct an empirical nesion and social pre	n empirical study to understand tific methodological papers that thesis. eferences, the role of the family
Intende	ed learn	ning outcomes			
ses on t	the acc		s - mostly related to e		ir of Labour Economics. It focu- cal tools - in order to understand
Courses	<b>5</b> (type, n	umber of weekly contact hours, la	anguage — if other than Ger	man)	
S (2) Module	taugh	t in: English			
		s <b>essment</b> (type, scope, languag le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether
	•	o to 25 pages) and preser ssessment: English	ntation (approx. 20 m	inutes), weighted 2:	1
Allocati	ion of p	olaces			
among ber of p	uld the all app laces v	licants irrespective of the	eir subjects. (2) Place	s on all courses of th	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					
Teachin	ng cycl	9			
Teachin	ng cycle	e: after announcement			
Referre	d to in	LPOI (examination regulations	for teaching-degree progra	mmes)	
Module	appea	irs in			
Master' Master'	s degre s degre	ee (1 major) Management ee (1 major) Information S ee (1 major) International ee (1 major) Economather	Systems (2024) Economic Policy (201	24)	

	e title				Abbreviation	
Advand	ced Ser	ninar: Public Finance			12-M-SV5-242-mo	1
Module	e coord	inator		Module offered by	<u> </u>	
		Chair of Public Finance		Faculty of Managen	nent and Economic	s
ECTS	1	od of grading	Only after succ. con	· · · · · · · · · · · · · · · · · · ·		-
10		rical grade				
Duratio		Module level	Other prerequisites			
1 seme		graduate				
Conten		giauuale				
				- dia	a an muhlia finana	
		re in-depth understandin : journal articles in Germ			es on public financ	e using scien-
Intend	ed lear	ning outcomes				
(ii) crea (iii) dea (iv) pre	ate, pre al with epare b	e acquired knowledge an esent and defend a scier the working papers of o eter for the processing o	tific paper; ther participants; f the master's thesis.		s of scientific work	;
	es (type, i	number of weekly contact hours	, language — if other than Ger	man)		
S (2) Module	e taugh	t in: English				
		sessment (type, scope, langu	age — if other than German.	examination offered — if no	t every semester, informa	ation on whether
		ble for bonus)	,		,	
Langua	age of a	o to 25 pages) and prese issessment: English iffered: Once a year, sun		ninutes), weighted 2	:1	
Allocat		· ·	_			
	ould the gall app	e number of applications plicants irrespective of tl				ted by lot
ber of p		will be allocated in the s hey become available.	-			estricted num-
ber of p ted by	lot as t		-			estricted num-
ber of p ted by	lot as t	hey become available.	-			estricted num-
ber of p ted by	lot as t onal inf	hey become available.	-			estricted num-
ber of p ted by Additic	lot as t onal inf	hey become available.	-			estricted num-
ber of p ted by Additic  Worklo	lot as t onal inf oad	hey become available. formation	-			estricted num-
ber of p ted by Additic  Worklo 300 h Teachi	lot as t onal inf oad ng cycl	hey become available. formation	-			estricted num-
ber of j ted by Additio  Worklo 300 h Teachi Teachi	lot as t onal inf oad ng cycl	hey become available. formation e e: each semester	ame procedure. (3) A	waiting list will be m		estricted num-
ber of j ted by Additio  Worklo 300 h Teachi Teachi	lot as t onal inf oad ng cycl	hey become available. formation	ame procedure. (3) A	waiting list will be m		estricted num-
ber of p ted by Additic  Worklo 300 h Teachi Teachi	lot as t onal inf oad ng cycl ed to in	hey become available. formation e e: each semester LPOI (examination regulatio	ame procedure. (3) A	waiting list will be m		estricted num-
ber of j ted by Additic  Worklo 300 h Teachi Teachi Referre  Module	lot as t onal inf oad ng cycl ed to in e appea	hey become available. formation e e: each semester LPO I (examination regulation ars in ee (1 major) Management	ns for teaching-degree progra	waiting list will be m		estricted num-
ber of j ted by Additic  Worklo 300 h Teachi Teachi Referre  Modulo Master Master	lot as t onal inf oad ng cycl ed to in e appea r's degr	hey become available. formation e e: each semester LPO I (examination regulation ars in ee (1 major) Management ee (1 major) Information	ns for teaching-degree progra nt (2024) Systems (2024)	waiting list will be m		estricted num-
ber of p ted by Additic  Worklo 300 h Teachi Teachi Referre  Modulo Master Master Master	lot as t onal inf oad ng cycl ed to in e appea r's degr r's degr r's degr	hey become available. formation e e e: each semester LPO I (examination regulation ars in ee (1 major) Management ee (1 major) Information ee (1 major) Internation	ns for teaching-degree progra ns for teaching-degree progra nt (2024) Systems (2024) al Economic Policy (20	waiting list will be m		estricted num-
ber of y ted by Additic  Worklo 300 h Teachi Teachi Referre  Modulo Master Master Master Master	lot as t onal inf oad ng cycl ed to in e appea r's degr r's degr r's degr	hey become available. formation e e: each semester LPO I (examination regulation ars in ee (1 major) Management ee (1 major) Information ee (1 major) Information ee (1 major) Economath	ns for teaching-degree progra nt (2024) Systems (2024) al Economic Policy (20 ematics (2024)	waiting list will be m		estricted num
ber of j ted by Additic  Worklo 300 h Teachi Teachi Referre Master Master Master Master Master Master	lot as t onal inf oad ng cycl ed to in e appea d's degr d's degr d's degr d's degr	hey become available. formation e e e: each semester LPO I (examination regulation ars in ee (1 major) Management ee (1 major) Information ee (1 major) Information ee (1 major) Economath ee (1 major) Information	ns for teaching-degree progra ns for teaching-degree progra nt (2024) Systems (2024) al Economic Policy (20 ematics (2024) Systems (2025)	waiting list will be m mmes) 24)		estricted num-
ber of p ted by Additic  Worklo 300 h Teachi Teachi Referre  Modulo Master Master Master Master Master	lot as t onal inf oad ng cycl ed to in e appea r's degr r's degr r's degr r's degr r's degr	hey become available. formation e e: each semester LPO I (examination regulation ars in ee (1 major) Management ee (1 major) Information ee (1 major) Information ee (1 major) Economath	ns for teaching-degree progra ns for teaching-degree progra nt (2024) Systems (2024) al Economic Policy (20 ematics (2024) Systems (2025) al Economic Policy (20	waiting list will be m mmes) 24)	aintained and plac	estricted num

Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)

Module title					Abbreviation	
Advanced Seminar: Econometrics				12-M-SOE-242-m01		
Module	e coord	inator		Module offered by		
holder	of the (	Chair of Econometrics		Faculty of Managem	nent 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		<u>ı</u>			
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	ed lear	ning outcomes				
		able to analyze independ ne results orally and in w				me. They
Course	<b>S</b> (type, r	number of weekly contact hours,	language — if other than Ger	man)		
S (2) Module	e taugh	t in: English				
		<b>sessment</b> (type, scope, langu le for bonus)	age — if other than German, e	examination offered — if no	t every semester, informati	on on whether
		pprox. 15 pages) and pre ssessment: English	sentation (approx. 20	minutes); (weighted	d 2:1)	
Allocat	ion of <b>j</b>	olaces				
among ber of p ted by l	uld the all app places v lot as t	number of applications blicants irrespective of th will be allocated in the s hey become available. ormation	neir subjects. (2) Place	es on all courses of th	he module with a res	stricted num-
			_			
Worklo	ad					
300 h						
Teachir	ng cvcl	e				
		e: each semester				
		LPO I (examination regulation	ns for teaching-degree progra	mmes)		
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)						
Master's degree (1 major) Information Systems (2025)						
	-	ee (1 major) Internationa		25)		
	-	ee (1 major) Managemer		,		
		ee (1 major) China Busin				
		ee (1 major) China Langu		9 <b>25)</b> generated 12-Jun-2025 • exa	ım. reg. da-	page 201 / 216
			-	r (120 ECTS) Information Syst	-	page 201 / 210



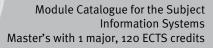


Master's degree (1 major) Economathematics (2025)

Module title					Abbreviation	
Semina	ar: Mac	roeconomics and Quant	itative Economic Res	earch	12-M-MEW-242-m01	
Modul	e coord	linator		Module offered by		
head o	f the W	ork Group of Empirical E	conomics	Faculty of Man	agement and Economics	
ECTS	1	od of grading	Only after succ. cor	· · ·	-	
10	1	rical grade		<u></u>	,	
Duratio		Module level	Other prerequisites	;		
1 seme	ester	graduate	 			
Conter	nts		1			
	antitat				ecific problems of macroe Idents may select one, is a	
Intend	ed lear	ning outcomes				
(ii) crea (iii) dea (iv) pre (v) alre	ate, pre al with pare b ady ap	esent and defend a scien the working papers of of etter for the processing of ply methodological know	tific paper; her participants; of the master's thesis wledge in econometri	cs/programming	iques of scientific work;	
	S (type, 1	number of weekly contact hours,	language — if other than Ge	rman)		
S (2) Maduli	o to u o h	tin. English				
		t in: English	_			
		<b>SeSSMent</b> (type, scope, langu ble for bonus)	age — if other than German,	examination offered	— if not every semester, informatio	n on whether
		o to 25 pages) and prese	entation (approx, 20 r	ninutes), weight	red 2:1	
		ssessment: English				
Allocat	tion of	places				
among ber of <sub>l</sub>	ould the all app places	olicants irrespective of th	neir subjects. (2) Plac	es on all course	es, places will be allocated s of the module with a rest be maintained and places	ricted num
		ormation				
			_			
Worklo	had					
300 h						
-	ng cycl	ρ				
Teaching cycle: each semester Referred to in LPO I (examination regulations for teaching-degree programmes)						
Modul	e appea	ars in				
Master Master	's degr 's degr	ee (1 major) Managemer ee (1 major) Information ee (1 major) Internation	Systems (2024)	024)		
Master	's degr	ee (1 major) Economath	ematics (2024)			
waster		ee (1 major) Information	Systems (2025)			
A a a b a b		r Information Systems (2024)	18.811.18.7** 1	<ul> <li>generated 12-Jun-202</li> </ul>	in a success start of a	page 203 / 21

Master's degree (1 major) International Economic Policy (2025) Master's degree (1 major) Management (2025) Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) China Language and Economy (2025) Master's degree (1 major) Economathematics (2025)

Module title					Abbreviation		
Semina	ar: Stra	tegic Incentive Design			12-M-ATC-242-m01		
Module	e coord	inator		Module offered by			
holder formati		Chair for Economics, Co nomics	ontract Theory and In-	Faculty of Managen	nent 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 semester graduate							
Conten	ts						
theory, helpful	contra , the co	overs varying classical ct theory or behavioral ourse is intended in par d "Contract Theory".	economics. As a solid	understanding of the	e corresponding bas	ics will be	
Intende	ed lear	ning outcomes					
• r( • c • r(	eading ritically elating	ng the course students and understanding the analyzing and discuss the results of different ng their insights both v	oretical or experiment sing the results of resea research articles to ea	al research articles, arch articles, ch other,	ommon scientific sta	indards.	
Course	<b>S</b> (type, r	umber of weekly contact hour	s, language — if other than Ge	rman)			
S (2) Module	e taugh	t in: English					
		<b>eessment</b> (type, scope, lang le for bonus)	uage — if other than German,	examination offered — if no	t every semester, informat	ion on whether	
	•	o to 25 pages) and pres ssessment: English	sentation (approx. 20 n	ninutes), weighted 2	:1		
Allocat	ion of <sub>l</sub>	olaces					
<ul> <li>10 places.</li> <li>WA1:</li> <li>(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.</li> </ul>							
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)							
Module appears in							
Master Master	's degr 's degr	ee (1 major) Manageme ee (1 major) Information ee (1 major) Internation ee (1 major) Economath	n Systems (2024) al Economic Policy (20	24)			
Master	Master's degree (1 major) Economathematics (2024)         aster's with 1 major Information Systems (2024)         JMU Würzburg • generated 12-Jun-2025 • exam. reg. da-         page 205 / 216						



Seminar: E-Business Strategies       12-M-SEBS-242-mo1         Module coordinator       Module offered by         holder of the Chair of Information Systems Engineering       Faculty of Management and Economics         ECTS       Method of grading       Only after succ. compl. of module(s)         10       numerical grade          Duration       Module level       Other prerequisites          1 semester       graduate           Contents         In this course, students will acquire important knowledge and skills that will enable them to prepare a well-structure drem paper and to present the results of their work with the help of relevant topics in E-Business.         Interded Learning outcomes         Academic literature review         •       Creating presentations and talks         Courses (ype, number of weeky contach aust, language – if other than German, examination	Module title					Abbreviation
holder of the Chair of Information Systems Engineering Faculty of Management and Economics  ECTS Method of grading Only after succ. compl. of module(s)  10 Inumerical grade Duration Module level Other prerequisites  1 semester graduate Contents  In this course, students will acquire important knowledge and skills that will enable them to prepare a well-structured term paper and to present the results of their work with the help of relevant topics in E-Business. Intended learning outcomes  - Academic literature review - Integration of developed results in scientific papers - Creating presentations and talks  Courses (pre, number of weekly contact hours, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonu2  S (2) Module taught in: German and/or English Method of paces  term paper (20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1 Language of assessment (week, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonu2  term paper (20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1 Language of assessment offered: Once a year, winter semester  Allocation of places to places. WA: (3) Should he 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 among all applicants irrespective of their subjects. (2) Places on all courses of the module with a restricted number of 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 among all applican	Semina	r: E-Bu	siness Strategies			12-M-SEBS-242-m01
ECTS       Method of grading       Only after succ. compl. of module(s)         10       numerical grade       -         Duration       Module level       Other prerequisites         1 semester       graduate       -         Contents       -       -         In this course, students will acquire important knowledge and skills that will enable them to prepare a well-structure term paper and to present the results of their work with the help of relevant topics in E-Business.         Intended learning outcomes       -         •       Academic literature review         •       Integration of developed results in scientific papers         •       Creating presentations and talks         Courses (type, number of weekly contact hours, language – if other than German)       S (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 is creditable for bonus)         term paper (20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1       Language of assessment (serman and/or English         Allocation of places       -       -         10 places.       -       -         WAri:       (3) Should the number of applications exceed the number of available places, places will be allocated by lot arong all applicants irrespective of their subjects. (2) Places on all cou	Module	coord	inator		Module offered by	
10       numerical grade          Duration       Module level       Other prerequisites         1 semester       graduate          Contents           In this course, students will acquire important knowledge and skills that will enable them to prepare a well-structured tem paper and to present the results of their work with the help of relevant topics in E-Business.         Intended learning outcomes          • Academic literature review       •         • Integration of developed results in scientific papers       -         • Creating presentations and talks       Courses (type, number of weekly contact hours, language – if other than German)         S (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 is creditable for bonus)         term paper (20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1         Language of assessment: German and/or English         Assessment offered: Once a year, winter semester         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:	holder	of the C	Chair of Information Syste	ems Engineering	Faculty of Managem	nent and Economics
Duration         Module level         Other prerequisites           1 semester         graduate            Contents            In this course, students will acquire important knowledge and skills that will enable them to prepare a well-structured term paper and to present the results of their work with the help of relevant topics in E-Business.           Intended learning outcomes            • Academic literature review            • Integration of developed results in scientific papers            • Creating presentations and talks            Courses (type, number of weekly contact hours, language – if other than German)         S           S (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 is creditable for bonus)           term paper (20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1         Language of assessment: German and/or English           Assessment offered: Once a year, winter semester         Allocation of places           VA1:	ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
1 semester       graduate          Contents          In this course, students will acquire important knowledge and skills that will enable them to prepare a well-structured term paper and to present the results of their work with the help of relevant topics in E-Business.         Intendel learning outcomes          • Academic literature review       • Integration of developed results in scientific papers         • Creating presentations and talks       Courses (type, number of weekly contact hours, language if other than German)         S (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 is creditable for 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         top places.         WA:         (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 applications exceed the number of available places, 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	10	nume	rical grade			
Contents In this course, students will acquire important knowledge and skills that will enable them to prepare a well-structured term paper and to present the results of their work with the help of relevant topics in E-Business. Intendel learning outcomes Academic literature review Integration of developed results in scientific papers Correating presentations and talks Courses (type, number of weekly contact hours, language – if other than German) S (2) Module taught in: German and/or English Method of assessment (type, scope, language – if other than German, examination offerd – if not every senester, information on whether module is creditable for bonus) term paper (20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1 Language of assessment: German and/or English Assessment offered: Once a year, winter semester Allocation of places to places. WA: (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 goo h Teaching cycle Teaching cycle Teaching cycle and and places for teaching-degree programmes) Module appears in Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024)	Duratio	n	Module level	Other prerequisites		
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 E-Business. Intended learning outcomes • Academic literature review • Integration of developed results in scientific papers • Creating presentations and talks Courses (type, number of weekly contact hours, language – if other than German) S (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 is certilable for bonus) term paper (20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1 Language of assessment: German and/or English Assessment offered: Once a year, winter semester 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 	1 semes	ster	graduate			
tured term paper and to present the results of their work with the help of relevant topics in E-Business. Intended learning outcomes  Academic literature review  Integration of developed results in scientific papers Creating presentations and talks  Courses (type, number of weekly contact hours, language – if other than German) S (2) Module taught in: German and/or English Method of assessment (type, scope, language – if other than German, examination offered – if not every senester, information on whether module is creditable for bonus) term paper (20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1 Language of assessment: German and/or English Aksessment offered: Once a year, winter semester 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-alloca- ted by lot as they become available. Additional information Courses Creating cycle: each semester Referred to in LPO 1 (examination for teaching-degree programmes) Cuestion Master's degree (1 major) Management (2024) Master's degree (1 major) formation Systems (2024)	Contents					
Academic literature review     Integration of developed results in scientific papers     Creating presentations and talks Courses (type, number of weekly contact hours, language – if other than German) S (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 is creditable for bonus) term paper (20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1 Language of assessment: German and/or English Assessment offered: Once a year, winter semester 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 Federic to in LPO1 (examination regulations for teaching-degree programmes) Module appears in Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024)						
Integration of developed results in scientific papers     Creating presentations and talks Courses (type, number of weekly contact hours, language – if other than German) S (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 is creditable for bonus) term paper (20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1 Language of assessment: German and/or English Assessment offered: Once a year, winter semester Allocation of places I op 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 Referred to in LPO1 (examination regulations for teaching-degree programmes) Module appears in Moster's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024)	Intende	d learr	ning outcomes			
S (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 is creditable for borus) term paper (20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1 Language of assessment: German and/or English Assessment offered: Once a year, winter semester 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: each semester Referred to in LPO I (examination for teaching-degree programmes)  Module appears in Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024)	• In	itegrati	ion of developed results i	n scientific papers		
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 is creditable for bonus) term paper (20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1 Language of assessment: German and/or English Assessment offered: Once a year, winter semester Allocation of places I o 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's degree (1 major) Information Systems (2024)	Courses	<b>S</b> (type, n	umber of weekly contact hours, la	anguage — if other than Ger	man)	
module is creditable for bonus) term paper (20 to 25 pages) and presentation (approx. 20 minutes), weighted 2:1 Language of assessment: German and/or English Assessment offered: Once a year, winter semester 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's degree (1 major) Information Systems (2024)		taught	t in: German and/or Engli	sh		
Language of assessment: German and/or English Assessment offered: Once a year, winter semester 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's degree (1 major) Information Systems (2024)				ge — if other than German, e	examination offered — if no	t every semester, information on whether
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's degree (1 major) Information Systems (2024)	Langua	ge of a	ssessment: German and/	or English	iinutes), weighted 2:	1
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's degree (1 major) Information Systems (2024)	Allocati	on of p	olaces			
 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)	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-					
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)	Additio	nal info	ormation			
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)						
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)	Worklo	ad				
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)	300 h					
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)	Teachin	ig cycl	9			
 <b>Module appears in</b> Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024)	Teaching cycle: each semester					
Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024)	Referred to in LPO I (examination regulations for teaching-degree programmes)					
Master's degree (1 major) Management (2024) Master's degree (1 major) Information Systems (2024)						
Master's degree (1 major) Information Systems (2024)	Module appears in					
	Master'	s degre	ee (1 major) Information S	Systems (2024)		

Module title					Abbreviation
Semina	ır: Topi	cs in Economics and Ethi	cs of Artificial Intelli	gence	12-M-TEE-242-m01
Module	e coord	inator		Module offered by	
		unior Professorship of Ap man-Machine Interaction		Faculty of Managen	nent 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				
<ul> <li>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 Al 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.</li> <li>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, moral dilemmas, and the potential impacts of increasingly powerful AI on business and society.</li> <li>Intended learning outcomes</li> <li>With this seminar,</li> <li>students learn how to present research in a structured manner, both orally and in writing.</li> <li>students will be equipped to understand and reflect on advanced current theoretical and empirical economic studies, especially in the domain of human-machine interaction.</li> <li>students will learn to incorporate ethical concerns in their economic decision-making processes.</li> <li>students will be able to classify and relate specialized knowledge from behavioral economics, business</li> </ul>					
Courses	<b>S</b> (type, n	umber of weekly contact hours, l	anguage — if other than Gei	rman)	
S (2) Module	e taugh	t in: English			
Method	l of ass		ge — if other than German,	examination offered — if no	ot every semester, information on whether
term pa	aper (15	; to 20 pages) and preser ssessment: English	ntation (approx. 30 m	inutes); (weighted 6	60:40)
Allocation of places					
<ul> <li>10 places.</li> <li>WA1:         <ul> <li>(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.</li> </ul> </li> <li>Additional information</li> </ul>					
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

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)

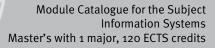
Module title Abbreviatio					Abbreviation
Resear	ch Sem	inar in Applied Data Scie	ence		12-M-RS-242-m01
Module	e coord	inator		Module offered by	<u> </u>
holder mics	of the (	Chair of Data Science in B	usiness and Econo-	Faculty of Managen	nent and Economics
ECTS	S Method of grading Only after succ. compl. of module(s)				
10	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	graduate			
Conten	Its				
own id	eas for		arch designs, data ge	neration, data prepa	urse will learn to develop their aration and data analysis. Stu- econometrics.
Intend	ed lear	ning outcomes			
analyz	e these		pendently using sem	inar-based methods	citing literature; they learn to s and to present them both orally pants.
Course	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)	
S (2) Module	e taugh	t in: English			
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether
		o to 25 pages) and prese ssessment: English	ntation (approx. 20 m	ninutes), weighted 2	:1
Allocat	ion of <sub>l</sub>	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.					he module with a restricted num-
Additio	onal inf	ormation			
Worklo	ad				
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	
Enterp	rise Al a	and Urban Analytics			12-M-UAAI-242-mo	1
Module	e coord	inator		Module offered by		
	ofthe	Chair of Business Inform	natics and Al for Enter-	-	nent and Economics	
prise ECTS	Moth	od of grading	Only after succ. com	and of module(s)		
10		rical grade				
Duratio		Module level	Other prerequisites			
1 seme		graduate				
des bo areas c site.	th meth of energ	ddresses advanced que nodological questions fr gy, mobility, and smart c	om the fields of AI & D	ata Science and do	nain-specific questi	ons from the
		<b>ning outcomes</b> stance of the chair, stud		wastion according t	a ccientific standard	c at a Ma
		d to communicate the r				S al a Ma-
		number of weekly contact hours	·			
S (2)				-		
Module	e taugh	t in: English				
		<b>sessment</b> (type, scope, langu ole for bonus)	age — if other than German, e	examination offered — if no	ot every semester, informat	ion on whether
		o to 25 pages) and pres- ssessment: English	entation (approx. 20 m	iinutes), weighted 2	:1	
Allocat	ion of <sub>l</sub>	places				
among ber of p	uld the all app	number of applications plicants irrespective of t will be allocated in the s hey become available.	heir subjects. (2) Place	es on all courses of t	he module with a res	stricted num-
Additio	onal inf	ormation				
Worklo	ad					
300 h						
Teachi	ng cycl	e				
Teachi	ng cycl	e: each semester				
Referre	ed to in	LPO I (examination regulatio	ns for teaching-degree progra	mmes)		
Module	e appea	ars in				
Master	's degr	ee (1 major) Manageme	nt (2024)			
Master Master	's degr 's degr	ee (1 major) Information ee (1 major) Internation ee (1 major) Economath	al Economic Policy (20 ematics (2024)	24)		
	-	ee (1 major) Information ee (1 major) Internation	• -	25)		
	-	ee (1 major) Manageme	•	-,.		
	-	r Information Systems (2024)	JMU Würzburg •	generated 12-Jun-2025 • ex	-	page 211 / 216
			ta record Maste	r (120 ECTS) Information Sys	ems - 2024	

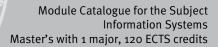


Master's degree (1 major) China Business and Economics (2025) Master's degree (1 major) Economathematics (2025)

Module title					Abbreviation	
Seminar: International Climate Policy					12-M-ICP-242-m01	
Module	coord	inator		Module offered by		
		unior Professorship of Qu ironmental Economics	uantitative Interna-	Faculty of Managem	nent 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 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.						
Intende	d learr	ning outcomes				
<ul> <li>knowledge of key challenges of climate policy in a globalized world</li> <li>reading and understanding state-of-the art research articles</li> <li>reproducing key theoretic and econometric arguments of research articles</li> <li>contextualization and critical assessment of research articles</li> </ul>						
Courses	<b>5</b> (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)		
S (2) Module	taugh	t in: English				
		<b>essment</b> (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	t every semester, informati	on on whether
		o to 25 pages) and presen ssessment: English	ntation (approx. 20 m	iinutes), weighted 2:	1	
Allocati	ion of p	olaces				
<ul> <li>10 places.</li> <li>WA1:</li> <li>(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.</li> </ul>					tricted num-	
Additio	nal info	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 degre	ee (1 major) Management ee (1 major) Information S ee (1 major) International	Systems (2024)	24)		
			-	-	m rog da	
master's wi	ui i major	Information Systems (2024)	-	generated 12-Jun-2025 • exa r (120 ECTS) Information Syste	-	page 213 / 216







# **Thesis** (30 ECTS credits)

JMU Würzburg • generated 12-Jun-2025 • exam. reg. data record Master (120 ECTS) Information Systems - 2024

Module title					Abbreviation	
Master Thesis Information Systems					12-WI-MA-192-m01	
Module	coord	inator		Module offered by		
Dean of mics	,				nent and Economics	
ECTS	Metho	od of grading	Only after succ. com	npl. of module(s)		
30	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 semes	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 (further) development of a theoretical model.					Irawing on the subject-specific practice. This thesis may either e on a certain topic or may, as is ments, e. g. new algorithms de-	
-	-	ning outcomes				
problen nal scie fession	n withi entific s al prac ognize	n a specified period auto tandards in writing. Stud tice, critically analyze an	nomously and to doc ents are able to unde d assess the relevand	ument the results in erstand relevant con ce to their own speci	ased work to solve a particular accordance with the professio- tributions to research and pro- fic questions. They can assess efore also the need to retrain	
Courses	<b>5</b> (type, n	umber of weekly contact hours, la	anguage — if other than Ger	man)		
No cour	rses as	signed to module				
		e <b>essment</b> (type, scope, languag le for bonus)	ge — if other than German, e	examination offered — if no	t every semester, information on whether	
		s (approx. 60 to 80 page ssessment: German and/				
Allocati	ion of p	olaces				
Additio	nal inf	ormation				
Time to	compl	ete: 6 months				
Worklo	ad					
900 h						
Teaching cycle						
Teaching cycle: each semester						
<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)						
Module appears in						
Master' Master'	s degre s degre	ee (1 major) Information S ee (1 major) Information S ee (1 major) Information S ee (1 major) Information S	Systems (2022) Systems (2024)			