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Please keep in mind the year of validity.

FACULTY OF MANAGEMENT,
ECONOMICS AND SOCIAL SCI-
ENCES

UNIVERSITY OF COLOGNE

VICE DEAN OF STUDIES
DEPARTMENT

Valid for students of the
Examination Regulations
2015

(enrolment for
winter semester 2020/21 at
the latest)



MODULE CATALOGUE

INFORMATION SYSTEMS

MASTER OF SCIENCE

IN ACCORDANCE WITH THE EXAMINATION REGULATIONS FOR THE SINGLE MAJOR
MASTER PROGRAMME IN INFORMATION SYSTEMS

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List of abbreviations

AS	Assignment	PRES	Presentation
C	Course	PRP	Project Report
CC	Compulsory course	SI	Studium Integrale
CH	Contact hours (= time spent in class)	SM	Specialisation module
CM	Core module	SPM	Supplementary module
CS	Case study	SPW	Semester period per week
EC	Elective course	SSt	Self-study
ECTS	Credit point (ECTS)	TP	Term paper
OE	Oral examination	TPF	Time required for preparation and follow-up
PCR	Practical component report	TR	Credit points transferred from another university
PO	Portfolio	WL	Workload
PR	Project	WT	Written test

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1 Information Systems

1.1 Content and objectives of the programme

Information Systems is an independent interdisciplinary subject area, which has its roots in computer science and economics, in particular business administration.

Studying Information Systems opens up a wide range of applications for graduates at the interface of business administration and computer science, especially in the planning, development and introduction as well as operation of information systems. In this context, business IT specialists perform a translation function between the business world of thought and language on the one hand and a technically anchored system environment on the other. In particular business computer scientists find fields of activity in the field of the use of information technology which require knowledge of the respective subject areas, in particular business management knowledge. They can therefore be used in a wide range of company areas and industries. Business information technologists can perform corresponding coordinating functions between IT specialists and technical specialists on the application side, whereby consulting services and project management are in the foreground. Due to the high innovation dynamics of IT as well as its inherent innovation potential, business IT specialists are also equipped for entrepreneurial activities (entrepreneurship).

Abilities like the organisation of specific application systems, business process organisation, technical system draft, requirement analysis, organisational implementation, change management, the spreading architectural organisation of the information system landscape as well as the organisation and co-ordination of an internal as well as intercompany information management are obtained. The range of methods includes in particular methods of modelling data, processes, as well as general internal and external structures and corresponding application systems, and depending on the choice of study depth also methods of data analysis (business intelligence, data science) or product and business model innovation.

Master's graduates have built up these skills in depth during their studies and thus aim at higher and more advanced career paths in business and administration. By means of a targeted specialisation, either in an informational or business context, the respective specialist focus is set. Typical topics include, for example, the organisation of the IT function in a company or system analysis and development as well as IT architecture. Central for business informaticians is the application-oriented implementation of mostly formal, quantitative and system analytical methods in addition to the ability to explain phenomena, behaviours of actors as well as interrelationships of the use of IT in organisations (explanation goal of business informatics). Due to the increasing importance of digitized data, there is an increasing demand for

graduates who are familiar with the acquisition, storage, search, distribution, modelling, analysis and visualization of large amounts of data (Business Intelligence, Data Science). Here a broad, predominantly informatically founded method spectrum is to be mastered. In particular it requires the ability to conceive corresponding systems and to guide their development with technical understanding (design goal of business informatics). The spectrum of effects of the graduates ranges from the design of innovative products or processes to business models.

Within the framework of the individual design of the course of studies, the study programme offers students the opportunity to develop different profiles through the targeted selection of specific courses in the main and supplementary areas. In particular, profiling opportunities are offered in the areas of "Business Analytics and Data Science", "Digital Innovation and Entrepreneurship" and "Digital Sustainable Society".

The "Business Intelligence and Data Science" profile focuses on the topics of data science, business analytics, applied machine learning and parts of artificial intelligence. The focus here is on generating value and knowledge from data. We translate real business questions into concrete information systems; we model data, set up abstract models and apply a broad spectrum of modelling and analysis methods. Typically, we answer entrepreneurial questions using algorithmic and heuristic methods, which are either developed as software or programmed by modifying existing information systems. We use corresponding software tools, interpret, visualize and discuss the results in context and evaluate the consequences of the practical implementation of corresponding information systems. For this purpose, we use methods from statistics, econometrics, machine learning and AI for questions in the areas of marketing, finance, energy markets, production and logistics. The profiling of "Business Intelligence and Data Science" thus prepares master students for different career paths in data science and analytics. This includes the classic Data Scientist with strong management competence, consulting roles in digital and data-driven projects and also roles as CEO or Data Scientist of founding companies that plan and decide on the basis of evidence.

The profile "Digital Innovation and Entrepreneurship" focuses on the topics of digitalisation, digital transformation as well as IT- and data-based start-ups. Students learn skills, methods and approaches for the development of digital business models, for example through the application of design thinking and business patterns, learn entrepreneurial basics, can develop their own startup ideas and independently implement digital innovations based on technologies such as artificial intelligence, machine learning or blockchain. The profile "Digital Innovation and Entrepreneurship" trains master students for career paths that have a stronger focus on innovation and entrepreneurship. Supported career goals include roles such as Digital Transformation Programme Manager, Chief Innovation Officer, CEO of start-up companies or consultant roles in the areas of digital business models, process digitization or design-led innovation.

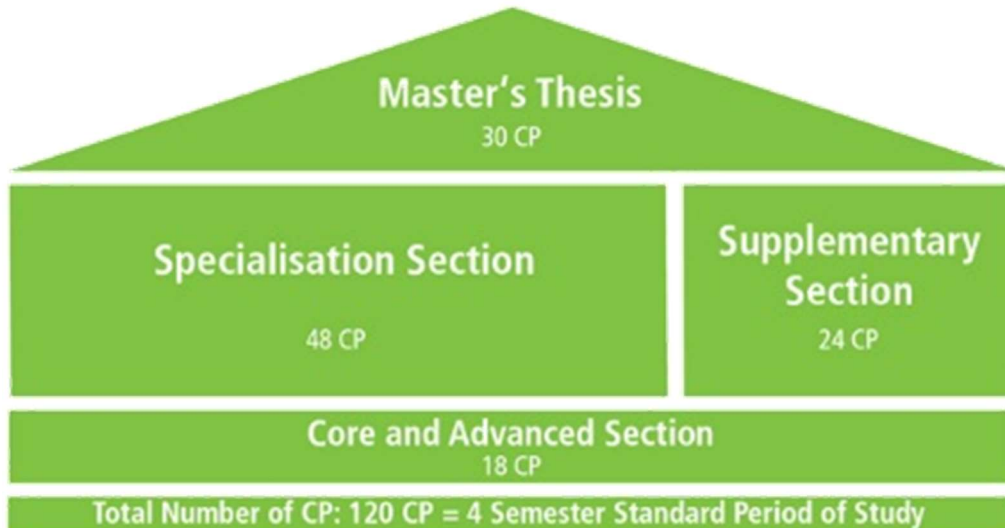
The "Digital Sustainable Society" profile focuses on digitalisation and the transformation to a more sustainable society. Students learn sound methodological skills from the areas of Big Data, Data Science and Machine Learning and at the same time gain deep insights into the topic of sustainability, especially with regard to the energy and mobility system. In addition to theoretical basics, teaching focuses on practical applications. Within the framework of data science projects, students work with real data from the energy (consumption and production data, microgrid transactions, etc.) and mobility industries (car sharing, bike sharing) and thus learn IT-related methods for concrete applications. The "Digital Sustainable Society" profile enables Master's students to pursue careers in the fields of start-up and innovation, for example through new business models in the energy industry or the provision of mobility services. On the other hand, the focus on methodological competencies (in particular data science and machine learning) also makes it possible to work as a data scientist. In addition, the graduates of the profiling programme are excellently equipped for classical consulting roles and industrial activities, especially with regard to digitization and sustainability.

1.2 Requirements

To be accepted on the programme, students must hold a bachelor degree in a relevant area and meet the requirements set out in the "Regulations concerning determination of aptitude" (Ordnung zur Feststellung der besonderen Eignung).

1.3 Programme structure

The programme carries a total of 120 ECTS credits and consists of a core and advanced section (18 ECTS credits), a specialisation section (48 ECTS credits) and a supplementary section (24 ECTS credits). Students complete the programme by submitting a master thesis (30 ECTS credits). The specialisation section enables students to deepen their knowledge in information systems and computer science and to choose specialisation seminars. They can also acquire knowledge from other fields by taking modules in the supplementary section.



A part of the credit points can be achieved abroad at one of the foreign partner universities. For students of the master programme the third semester its recommended (see sample study plan). The application must be provided approx. one year in advance. Further information can be found on the [faculty's website](#).

1.4 Study Abroad Option

The WiSo Faculty offers a broad range of study abroad options within an excellent network of prestigious partner universities worldwide. The so-called Study Abroad Programme (STAP) includes ERASMUS exchanges and provides an opportunity for a single-term stay at one of the WiSo Faculty's partner universities.

Successful STAP applicants benefit from direct contact and organisational support at the partner university and are exempt from paying tuition fees there. The range of universities available depends on the master course on which the student is enrolled – the possible options are listed in the [WiSo EXchange \(WEX\) International Outgoings Portal](#) (access through the student's UoC account only), along with detailed information on each university.

Every year, in addition to the STAP programme, the WiSo Faculty organises an exclusive short-term study option WiSo@NYC which takes place in New York City.

In addition to these options offered by the Faculty, master students can also apply for a non-WiSo exchange, offered by Dezernat 9 – Internationales (Central International Office of the University of Cologne) within the ‘fakultätsübergreifende Partnerschaften’ framework. Further possibilities are going abroad as a freemover (i.e. as a student who organises his or her stay abroad individually) or participating in short courses or summer schools offered under separate terms and conditions.

For all study abroad options, the **International Relations Center** (ZIB WiSo) serves as point of information and advice.

The Faculty’s Study Abroad Programme (STAP):

Master students should plan and submit their application for a term abroad at the beginning of their master course. The STAP main selection round takes place once a year with application deadline 15 January and allows for an application either for fall term or spring term of the following academic year. Detailed information on the selection criteria and the best preparation for a STAP application can be found online in the [STAP Master Application Manual](#). (As an exception, if a certain number of slots are still available for spring term, a secondary STAP selection round will be offered in May, with a limited choice of exchange opportunities):

STAP Master – main selection round (fall term and spring term)



* Alternative offer: if no offer can be given at one of the five preferred universities and if slots at other universities are available.

** End of main selection round. In case any exchange slots become available after 15 March, these slots will be made available in a secondary selection round.

STAP Master – secondary selection round (for spring term only)

Please note: there is no guarantee that a secondary selection round will take place every year, nor should a wide range of exchange opportunities be expected.



* Deadline for handing in TOEFLS/IELTS results (if taken until 1 June): 15 June. ** Alternative offer: if no offer can be given at one of the five preferred universities and if slots at other universities are available.

Credit transfer options from studies abroad:

The WiSo Faculty has put a lot of emphasis on internationalisation in the design of its master courses, offering broad credit transfer options for all kinds of study abroad options. Each master course includes at least one "Studies Abroad" module, with a broad range of courses suitable for credit transfer. In addition, a single course-to-course credit transfer can be considered. For more information on credit transfer rules and regulations, please go to **WiSo Credit Transfer Center** > Information > Studies Abroad. For any questions regarding credit transfer, students can contact the **ZIB WiSo** or the **WiSo Credit Transfer Center**.

1.5 Sample study plan

M.Sc. Information Systems				
Term	EC/ CC	Module	Section	ECT S
1	CC	CM Information Systems I	Core section	6
1	CC	CM Information Systems II	Core section	6
1	CC	CM Digital Transformation	Core section	6
1	EC	Supplementary Module (1/4)	Supplementary section	6
1	EC	SpM Computer Science I	Specialisation section	9
				33
2	EC	Specialisation Module Information Systems (1/3)	Specialisation section	6
2	EC	Specialisation Module Information Systems (2/3)	Specialisation section	6
2	EC	Supplementary Module (2/4)	Supplementary section	6
2	EC	SpM Computer Science II	Specialisation section	9
2	EC	SpM Seminar Information Systems I	Specialisation section	6
				33
3	EC	Supplementary Module (3/4)	Supplementary section	6
3	EC	Supplementary Module (4/4)	Supplementary section	6
3	EC	Specialisation Module Information Systems (3/3)	Specialisation section	6
3	EC	SpM Seminar Information Systems II	Specialisation section	6
				24
4	CC	Master's thesis Information Systems	Master's thesis	30
				30

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M.Sc. Information Systems (Studies Abroad)				
Term	EC/ CC	Module	Section	ECT S
1	CC	CM Information Systems I	Core section	6
1	CC	CM Information Systems II	Core section	6
1	CC	CM Digital Transformation	Core section	6
1	EC	Specialisation Module (1/4)	Specialisation section	6
1	EC	SpM Computer Science I	Specialisation section	9
				33
2	EC	Specialisation Module Information Systems (2/3)	Specialisation section	6
2	EC	SpM Computer Science II	Specialisation section	9
2	EC	SpM Seminar Information Systems I	Specialisation section	6
2	EC	SpM Seminar Information Systems II	Specialisation section	6
				27
3	EC	Supplementary Module Studies Abroad	Supplementary section	24
3	EC	Specialisation Module Studies Abroad in Information Systems (3/3)	Specialisation section	6
				30
4	CC	Master's thesis Information Systems	Master's thesis	30
				30

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M.Sc. Information Systems (including profiles)						
Sem.	Business Analytics and Data Science		Digital Innovation and Entrepreneurship		Digital Sustainable Society	
	Module	CP	Module	CP	Module	CP
1	CM IS I	6	CM IS I	6	CM IS I	6
1	CM IS II	6	CM IS II	6	CM IS II	6
1	CM DT	6	CM DT	6	CM DT	6
1	<i>SUPPLEMENTARY MODULE Statistics & Econometrics</i>	6	<i>SUPPLEMENTARY MODULE Corporate Development</i>	6	<i>SUPPLEMENTARY MODULE Energy Economics</i>	6
1	SM Info	9	SM Info	9	SM Info	9
		33		33		33
2	<i>SUPPLEMENTARY MODULE Statistics & Econometrics</i>	6	<i>SUPPLEMENTARY MODULE Corporate Development</i>	6	<i>SUPPLEMENTARY MODULE Energy Economics</i>	6
2	SM Info	9	SM Info	9	SM Info	9
2	<i>SM IS II: Business Intelligence or SM IS III: Advanced Information Management with Artificial Intelligence</i>	2x6	<i>SM IS II: IT Entrepreneurship or SM IS III: Emerging Electronic Business</i>	6 6	<i>SUPPLEMENTARY MODULE Energy Economics or SM IS II: IT Entrepreneurship</i>	6 6
2	<i>SM Sem IS: Advanced Seminar Information Management oder Advanced Seminar Collaborative Innovation Networks</i>	6	<i>SM Sem IS: Advanced Seminar Information Systems and Digital Technology</i>	6	<i>SM Sem IS: Advanced Seminar Collaborative Innovation Networks</i>	6
		30		30		30
3	<i>SUPPLEMENTARY MODULE Statistics & Econometrics</i>	6	<i>SUPPLEMENTARY MODULE Corporate Development</i>	6	<i>SUPPLEMENTARY MODULE Energy Economics</i>	6
3	<i>SUPPLEMENTARY MODULE Statistics & Econometrics</i>	6	<i>SUPPLEMENTARY MODULE Corporate Development</i>	6	<i>SM IS III: Design Thinking for Digital Innovation</i>	6
3	<i>SM IS I: Advanced Analytics and Applications</i>	6	<i>SM IS I: Digital Strategy and Transformation</i>	6	<i>SM IS I: Sustainable Digital Innovation Lab</i>	6
3	<i>SM Sem IS: Advanced Seminar Information Systems for Sustainable Society oder Advanced Seminar Information Management</i>	6	<i>SM Sem IS: Advanced Seminar Collaborative Innovation Networks or Advanced Seminar Information Systems for Sustainable Society or Advanced Seminar Information Management</i>	6	<i>SM Sem IS: Advanced Seminar Information Systems for Sustainable Society</i>	6
		27		27		27
4	Thesis	30	Thesis	30	Thesis	30
		30		30		30

1.6 Modules with mid-term examinations

Some modules have courses that only run for half a term and usually with twice the normal number of classes. For these modules, the term is divided into two roughly equal halves. In the fall, the mid-term usually ends at the beginning of December; in the spring, it is usually in

the middle or at the end of May. Often, the examinations for these courses are held mid-term, enabling students to reduce their examination load at the end of term.

The information in the campus management system (KLIPS) regarding the dates of courses and examinations is relevant in this context.

2 Support for students

2.1 Calculation of the overall mark

The marks for the individual examination elements are awarded by the respective examiner. The overall mark for the master's examination is calculated from the marks for the subject categories, weighted according to the relation of their credit points to the total credit points possible for the degree. The marks of the subject categories are calculated as the arithmetic mean of the individual marks for examination elements, weighted according to the relation of their credit points to the total volume of credit points of the examination elements of the respective subject area. In the case of end-of-module examinations consisting of several components, the mark for the module is calculated as specified in the annex.

The overall mark for the degree is calculated as the weighted arithmetic mean of the marks for the subject categories and the mark for the master's thesis. On the Information Systems programme, the weighting for the contributions to the overall mark is as follows:

- a) Mark for core and advanced section: 18 of 120 ECTS credits
- b) Mark for specialisation section: 48 of 120 ECTS credits
- c) Mark for supplementary section: 24 of 120 ECTS credits
- d) Mark for master's thesis: 30 of 120 ECTS credits

2.2 Rules for failed attempts

Students may retake module examinations that they have failed. The number of attempts is limited to three per module. Modules offered by faculties other than the Faculty of Management, Economics and Social Sciences ("WiSo Faculty") may be subject to different rules.

After failing an exam three times, the **WiSo Student Service Point (WiSSPo)** provides information regarding the possibility and the requirements to receiving additional resit attempts. If none of the first three examination attempts were failed due to cheating or to an offence, further two resit attempts can be granted at any point of the programme. Students who have accumulated at least 90 credit points can be granted a further additional attempt. If a student fails an examination in the two additional attempts and the extra attempt for students with 90 points or more, they are deemed to have failed the programme at the final attempt. Where a module examination consists of several components, the candidate must obtain a "bestanden" (pass) mark, or at least an "ausreichend (4,0)" (sufficient) mark, in all of the examination components. All components marked "mangelhaft (5,0)" or "nicht bestanden" (fail) must be retaken.

It is not possible to resit module examinations that have already been passed.

A failed master's thesis can be retaken once, with a new topic. Students must register for their second attempt within six months of the result of their first attempt being announced.

2.3 Subject-specific advice and examination advice

The **WiSSPo** provides general advice on studies, including the possibilities available and the requirements, for all programmes offered by the WiSo Faculty. Further services include the issuing of transcripts of records in German and English, ranking certificates and letters of assignment to the appropriate term of the programme and the application for advanced / higher semester. The **WiSSPo** is also the first place to turn to for students with other questions and problems related to their studies. It can be contacted by phone, in person and, of course, e-mail. Please notice the opening hours and contact data on the website.

Subject-specific advice is provided during the designated times by the University's faculty members and associated teaching staff ("akademische Mitarbeiter/innen") involved in the teaching on the programme. The designated times are announced by means of notices in the institutes and on the departments'/institutes' websites.

Legally binding information concerning examinations and examination procedures is provided by the **WiSo Faculty Examination Offices**.

2.4 Other sources of information and advice

"KLIPS 2.0" is the central campus management system of the University of Cologne. At the WiSo faculty, KLIPS 2.0 serves as a student organisation tool. Students should use it as an online course catalogue, for registration and deregistration of courses and examinations, as well as an overview of the complete study programme and calendar. Information on current dates and deadlines of the WiSo faculty, as well as video tutorials and FAQs about KLIPS can be found on the homepage of **WiSo-KLIPS-Support**. If you have further questions, feel free to contact WiSo-KLIPS-Support via **e-mail** (klips-wiso@uni-koeln.de). For account questions, contact the central **KLIPS support**.

International students who study at the WiSo Faculty for part of their programme can turn to the **International Relations Center** ("Zentrum für Internationale Beziehungen" or "ZIB") for help with any questions they have. Cologne University students preparing to study abroad can also contact the ZIB for support. The Center also runs a variety of summer schools, short programmes and Business English courses. The services, courses and people to contact can all be found on the website.

The Faculty's **Credit Transfer Centre** (**Zentrum für die Anrechnung auswärtiger Leistungen**) is responsible for recognising credits accumulated in other institutions. This applies both to credits students have gained at other higher education institutions in Germany or abroad prior to studying at the WiSo Faculty, and to (advance) transfer of credits that students plan to accumulate abroad or have already accumulated abroad as part of a WiSo Faculty programme. This system eliminates the need to make individual inquiries to departments/institutes and examination offices. Students can find out everything they need to know about the transfer process on the website.

The **WiSo Career Service** offers advice and support, in cooperation with other partners, for students from the WiSo Faculty looking for an internship or profession that is right for them. It also helps them as they plan their career and apply for jobs. In addition, the WiSo Career Service organises seminars, presentations and special events in cooperation with employers and external and internal experts. All of the necessary information can be found on the website.

The **WiSo IT Service** runs regular courses dealing with standard software and field-specific programmes.

Students who are having difficulties with their studies or their personal lives can seek help from the **Psychosocial Counselling Service** run by the Kölner Studentenwerk. In addition to counselling, it also provides advice on writing and learning skills plus support for pregnant students and students who have children.

A further service is **Nightline** Köln, the listening and information helpline run by students for students at all of Cologne's institutions of higher education.

The WiSo student council represents the interests of all students from the WiSo faculty. In addition to advice from fellow students it also provides a variety of useful services for studying at the WiSo faculty. Any information can be found at **wiso-buero.de** or by directly writing an email to **wiso-buero@uni-koeln.de**.

3 Curriculum and module descriptions

3.1 Core and advanced section

In accordance with section 33(1), No. 1 of the Examination Regulations, the examination candidate must obtain 18 ECTS credits in the core and advanced section.

Group	Module	ECTS	CC/EC	Required ECTS
Core and advanced section Information Systems	CM Information Systems I	6	CC	18
	CM Information Systems II	6	CC	
	CM Digital Transformation	6	CC	

3.2 Specialisation section

In accordance with section 33(1), No. 2 of the Examination Regulations, the examination candidate must obtain 48 ECTS credits in the specialisation section.

Group	Module	ECTS	CC/EC	Required ECTS
Specialisation Information Systems	SpM Information Systems I	6	EC	18
	SpM Information Systems II	6	EC	
	SpM Information Systems III	6	EC	
	SpM Digital Strategy and Marketing	6	EC	
	Specialisation Module Studies Abroad I	6	EC	
Schwerpunkt Informatik	SpM Computer Science I	9	CC	18
	SpM Computer Science II	9	CC	
Specialisation Computer Sciences	SpM Seminar Information Systems I	6	EC	12
	SpM Seminar Information Systems II	6	EC	
	Specialisation Module Seminar Computer Science	6	EC	

3.3 Supplementary section

In accordance with section 33(1), No. 3 of the Examination Regulations, the examination candidate must obtain 24 ECTS credits in a sub-group of the supplementary section.

Group	Module	ECTS	CC/ EC	Required ECTS
Accounting and Taxation	SpM Taxation I	6	EC	24
	SpM Taxation II	6	EC	
	SpM Controlling I	6	EC	
	SpM Controlling II	6	EC	
	SpM Accounting I	6	EC	
	SpM Accounting II	6	EC	
	SpM Selected Issues in Accounting & Taxation I	6	EC	
	SpM Selected Issues in Accounting & Taxation II	6	EC	
	SpM Advanced Accounting	6	EC	
Business Research	Specialisation Module Research in Finance (Research Track)	6	EC	24
	Specialisation module Selected Issues in Corporate Development II	6	EC	
	CM Advanced Mathematics	6	EC	
	CM Selected Methods in Economics	6	EC	
	AM Computational Methods ¹	6	EC	
	CM Advanced Microeconomics I	6	EC	
	CM Advanced Microeconomics II	6	EC	
	CM Advanced Macroeconomics I	6	EC	
	CM Advanced Macroeconomics II	6	EC	
	CM Advanced Econometrics I	6	EC	
	CM Advanced Econometrics II	6	EC	
	Corporate Development	SpM Business Ethics	6	
SpM Strategic Development		6	CC	

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	SpM Strategic Human Resource Management	6	CC	
	SpM Strategic Management	6	CC	
Design & Behavior	CM Microeconomics (Business Administration)	6	EC	24
	SpM Market Design and Behaviour II	6	EC	
	SpM Market Design and Behaviour IV	6	EC	
	Specialisation Module Behavioral Economics	6	EC	
	CM Selected Methods in Economics	6	EC	
	SpM Market Design and Mechanism Design	6	EC	
Energy Economics	Specialisation Module Seminar in Energy, Resource and Environmental Economics	6	EC	24
	SuM Energy and Climate Change I	6	EC	
	SuM Energy and Climate Change III	6	EC	
	SuM Energy and Climate Change IV	6	EC	
	Specialisation module Competition Policy	6	EC	
Finance	Specialisation Module Financial Theory	12	EC	24
	Specialisation Module Financial Institutions Management	12	EC	
	Specialisation Module Finance 2	6	EC	
	Specialisation Module Finance 5	6	EC	
	Specialisation module Finance 7	6	EC	
	Specialisation module Finance 8	6	EC	
	Specialisation Module Value-Based Management in Insurance	6	EC	
	Specialisation Module Selected Issues in Finance I (6 LP)	6	EC	
Growth, Labor and Inequality in the Global Economy	CM Macroeconomics	6	EC	24
	SpM Markets and Economic Policy I	6	EC	
	SpM Markets and Economic Policy IV	6	EC	
	SpM Markets and Economic Policy III	6	EC	
	SpM Markets and Economic Policy V	6	EC	

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	SpM Market Design and Behaviour III	6	EC	
Markets & Institutions	CM Microeconomics (Business Administration)	6	EC	24
	Specialisation module Competition Policy	6	EC	
	SpM Media Economics	6	EC	
	CM Health Economics III	6	EC	
	SpM Market Design and Behaviour III	6	EC	
	SpM Market Design and Mechanism Design	6	EC	
Medienmanagement	SuM Media and Technology Management - Enterprises, Markets, and Strategies	6	EC	24
	SuM Media and Technology Management - Selected Issues I	6	EC	
	SuM Media and Technology Management - Selected Issues II	6	EC	
	SuM Media and Technology Management - Research and Publications	6	EC	
	SpM Media Economics	6	EC	
Statistics & Econometrics	SpM Empirical Methods and Data Analysis I	6	EC	24
	SpM Empirical Methods and Data Analysis III	6	EC	
	SpM Empirical Methods and Data Analysis IV	6	EC	
	SpM Empirical Methods and Data Analysis V	6	EC	
	Specialisation Module Seminar Statistics and Econometrics	6	EC	
	CM Econometrics ²	6	EC	
	AM Empirical Methods	6	EC	
Supply Chain Management	SpM Supply Chain Strategy	6	EC	24
	SpM Supply Chain Innovation	6	EC	
	SpM Selected Issues in Behavioural Supply Chain Management	6	EC	
	SpM Supply Chain Operations	6	EC	
	Specialisation Module Operative Supply Chain Planning	6	EC	

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	Specialisation Module Project Management	6	EC	
	SpM Selected Issues in Supply Chain Management	6	EC	
Wirtschaftsgeographie	SuM Economic Geography I	6	CC	24
	SuM Economic Geography II	6	CC	
	SuM Economic Geography III	6	CC	
	SuM Economic Geography IV	6	CC	
Studies Abroad	Studies Abroad I (Master)	12	CC	24
	Studies Abroad II (Master)	12	CC	

¹ No examination registration possible, if the core module Methods (1289BMMe00) has already been passed.

² No examination registration possible, if the core module Econometrics I (1314BMEc01) has already been passed.

3.4 Extracurricular course programme

In addition to their regular studies Master's students have the opportunity to take part in extracurricular courses, in which both academic and vocational skills are taught. Thus it can have an academic and a professional orientation, which serve the development of professional competences. The extracurricular course programme intends to promote and impart competences that go beyond specialist knowledge or concern basic scientific or personal attitudes: scientific curiosity, systematic and analytical thinking, dealing with complexity, solution-orientation and other skills, e.g. the ability to work in a team and foreign language skills.

The extracurricular course programme is offered jointly by the faculties and the Professional Centre of the University of Cologne and enables students to pursue their own additional interests, to gain insights into other subjects and faculties, to attend events of social importance, to acquire professionally relevant skills and to attend language courses. In addition, students are offered learning and study aids as part of the extracurricular programme, e.g. for scientific work or literature research. Extracurricular courses are not credited, but the participation is noted on the transcript of records.

3.5 Master's thesis

The master's thesis, which carries 30 ECTS credits, is written towards the end of the programme. It is intended to show that the student is capable of conducting academic work on and reflecting on a specific problem related to the subject matter covered on the programme, using the necessary methods and within a specified period.

The topic of the master's thesis on the Health Economics programme must come from the core and advanced section or the specialisation section.

Group master's theses are also permitted provided a clear distinction between and assessment of each candidate's contribution is possible. Objective criteria that make a clear distinction possible, such as sections, page numbers or topics, are used to indicate which student made which contribution. The total workload required of each group member must exceed the requirements for individual masters' theses to an appropriate extent. The difficulty and content of a group thesis must meet the same requirements as for theses undertaken individually and independently. The contribution made by each individual must meet the requirements for masters' theses.

To register to do their master's thesis, students must have accumulated a minimum of 60 ECTS credits. They may take no longer than six months to write the thesis. Further, more detailed information on master's theses can be found in the Examination Regulations

3.6 Module description

3.6.1 Core and Advanced Section Information Systems

CM Information Systems I					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1277MBISY1	180h	6	English	every 2nd term - winter term	1 Term
1	Courses Information Systems and Environmental Sustainability		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Forms and types of sustainability • Key sustainability indicators • Green IT • Green IS • Transformation potential of information systems for organizational sustainability • Sustainable development of information systems • Sustainable use of information systems • Sustainable management of information systems 				
3	Learning Objectives Students... ... understand methods and theories in the area of sustainable development, use and management of information systems. ... analyse current questions and challenges in the area of organisational sustainability. ... justify and defend (independently developed) positions or problem solutions. ... act responsibly considering ecological, social and ethical criteria. ... critically evaluate current social developments and develop alternative solutions.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Science Information Systems: Core and Advanced Section Information Systems Master of Arts Medienwissenschaft: MA Media Management and Economics				

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9	Module Manager N. N.
10	Miscellaneous There may be case studies and exercises to be prepared in groups and presented by the students in class. The solutions presented will be analysed and discussed. Students will be advised of compulsory reading on a term-by-term basis.

CM Information Systems II					
Module Code 1277MBISY2	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Analytics and Applications		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Types of decision support and business intelligence • Data Analysis, business analytics • Simulation and optimisation • Data warehouse and business intelligence • Data-/ Text-/ Web-Mining • Predictive modelling, machine learning • Clustering • Making sense of data • Evaluation of modelling results • Using data and methods to create value 				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods in the area of Data Science and Machine Learning. ... solve team-internal conflicts and target divergences independently. ... justify and defend (independently developed) positions or problem solutions. ... develop work processes for real problems and challenges.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Science Information Systems: Core and Advanced Section Information Systems Master of Arts Medienwissenschaft: MA Media Management and Economics				
9	Module Manager Univ.-Prof. Dr. Wolf Ketter				

10	Miscellaneous The lecture is an inverted classroom. Please read the syllabus before joining this class. The participation in the first lecture is strongly recommended.
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CM Digital Transformation					
Module Code 1277MBDTF1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Digital Transformation and Innovation		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Select media, Information and communication Technologies, their application and limitations • Economic and managerial properties of digital goods and services • Different Areas of application of digital media, information and telecommunication Technologies, such as, cloud computing, digital business models, big data and business intelligence, (Enterprise) social media • Management of digital transformation and its prerequisites from an organizational perspective • Concepts for the analysis and innovation of business models 				
3	Learning Objectives Students... ... analyse current questions and challenges of digital transformation and business model innovation. ... justify and defend (independently developed) positions or problem solutions. ... critically evaluate current social developments and develop alternative solutions.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Science Information Systems: Core and Advanced Section Information Systems Master of Arts Medienwissenschaft: MA Media Management and Economics				
9	Module Manager Univ.-Prof. Dr. Detlef Schoder				
10	Miscellaneous Students will be advised of compulsory reading on a term-by-term basis.				

3.6.2 Specialisation Section Information Systems

SpM Information Systems I					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1277MSISY1	180h	6	English	every term	1 Term
1	Courses a) Advanced Analytics and Applications b) Sustainable Digital Innovation Lab c) Case Project Digital Transformation		Contact Hours a) 30h b) 30h c) 30h	Self-Studies a) 150h b) 150h c) 150h	Course Language a) English b) English c) English
2	<p>Module Content</p> <p>a) Advanced Analytics and Applications</p> <ul style="list-style-type: none"> • Business analytics applications • Information quality • Explanatory analytics • Predictive analytics • Data mining process • Predictive models • Classification methods • Clustering and data reduction methods • Gaussian Mixture models • Sampling methods • Neural networks and Deep learning • Time Series • Causal inference • Identification of Treatment Effects • Ensemble Learning • Introduction to Reinforcement Learning • Programming Language: Python <p>b) Sustainable Digital Innovation Lab</p> <ul style="list-style-type: none"> • Introduction to global sustainability challenges and digital innovation • Emergent digital technology stacks (hardware and software) • Systems development practices suitable for complex contexts and requirements • Development of ideas to solve the design challenge • Project and team management • Design and implementation of information systems • Prototyping and testing <p>c) Case Project Digital Transformation</p> <ul style="list-style-type: none"> • Digital Strategy Lab • Digital Strategy Ideation (Design Thinking) • Digital Strategy Development • Digital Transformation (Development of a Technical Solution / Use-Case / Prototype based on the Developed Strategy) 				
3	<p>Learning Objectives</p> <p>Students...</p> <p>... analyse current questions and challenges in the areas of: (a) Data Science and Machine Learning, (b) digital innovation, digital technologies, systems development, sustainability, (c) digital strategy and innovation.</p> <p>... solve team-internal conflicts and target divergences independently.</p> <p>... present scientific results in a way that is appropriate for the target audience.</p>				

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	<p>... critically evaluate current social developments and develop alternative solutions. ... develop work processes for real problems and challenges.</p>
4	<p>Teaching and Learning Methods lecture practice</p>
5	<p>Module Entry Requirements none</p>
6	<p>Mode of End-Of-Module Examination Written test: PO</p>
7	<p>Prerequisites for Awarding of Credit Points Passing the written examination of one course. A course is to be attended; the written examination relates to the content of one course.</p>
8	<p>Other Programmes that Use the Module Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Science Information Systems: Specialization Section Information Systems</p>
9	<p>Module Manager Univ.-Prof. Dr. Wolf Ketter</p>
10	<p>Miscellaneous</p>

SpM Information Systems II					
Module Code 1277MSISY2	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every term	Duration 1 Term
1	<p>Courses</p> <p>a) Emerging Electronic Business</p> <p>b) Business Intelligence and Data Management</p> <p>c) IT Entrepreneurship</p> <p>d) Bayesian Data Analytics</p>		<p>Contact Hours</p> <p>a) 45h</p> <p>b) 50h</p> <p>c) 50h</p> <p>d) 45h</p>	<p>Self-Studies</p> <p>a) 135h</p> <p>b) 130h</p> <p>c) 130h</p> <p>d) 135h</p>	<p>Course Language</p> <p>a) English</p> <p>b) English</p> <p>c) English</p> <p>d) English</p>
2	<p>Module Content</p> <p>a) Emerging Electronic Business</p> <ul style="list-style-type: none"> • Current IT trends and the transformation of electronic business into "ambient business" in the context of networked and computerised objects and environments (Internet of Things, smart Environments) • Conceptual basics of relevant technologies (including sensors, RFID, telecommunication) • Design and applications of smart environments • Design of intuitive human-computer interaction (HCI) • Context awareness and context-based services • Freely offering and sharing Information as a way of adding value • Economic, social and ethical effects of increasingly omnipresent information technology <p>b) Business Intelligence and Data Management</p> <ul style="list-style-type: none"> • Reporting and Online Analytical Processing (OLAP) • Multidimensional Data Modelling (e.g., MetaMIS, ADAPT) • Design and implementation of data warehouses • Data warehouse schemas and architectures • Non-relational databases (NoSQL/NewSQL) • Foundations of managing and analysing large data sets (e.g., Spark, Hadoop, MapReduce) • Data mining and business analytics (association rules, decision trees, clustering, artificial neural networks) <p>c) IT Entrepreneurship</p> <ul style="list-style-type: none"> • Fundamentals of entrepreneurship • Forms of entrepreneurship • Process models of entrepreneurship • IT-centered start-up industries • Digital technologies as enablers and triggers of entrepreneurship • Practices for developing and presenting start-up ideas <p>d) Bayesian Data Analytics</p> <ul style="list-style-type: none"> • Advanced methods for data analysis of business data; alternating topics based on real research projects, e.g.: • Ensemble methods • Social media and network analysis • Text analytics, text mining, NLP • Neural Nets • Heterogeneous Treatment Effects • Multi-Armed Bandits 				
3	<p>Learning Objectives</p> <p>Students...</p> <p>... analyse current questions and challenges:</p>				

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	<p>... a) in the area of latest technical and business-related developments in (emerging) electronic businesses.</p> <p>... b) in data analytics, data warehousing, and data mining.</p> <p>...c) in IT-centric entrepreneurship</p> <p>... d) in data science and machine learning, focused on issues regarding sustainability.</p> <p>... act responsibly considering ecological, social and ethical criteria.</p> <p>... critically evaluate current social developments and develop alternative solutions.</p> <p>... develop work processes for real problems and challenges.</p>
4	<p>Teaching and Learning Methods</p> <p>lecture</p> <p>practice</p>
5	<p>Module Entry Requirements</p> <p>none</p>
6	<p>Mode of End-Of-Module Examination</p> <p>Written test: PO</p>
7	<p>Prerequisites for Awarding of Credit Points</p> <p>Passing the written examination of one course. A course is to be attended; the written examination relates to the content of one course.</p>
8	<p>Other Programmes that Use the Module</p> <p>Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management</p> <p>Master of Science Business Administration - Finance: Supplementary Section Finance</p> <p>Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation</p> <p>Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development</p> <p>Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Ergänzungsbereich Wirtschaftspädagogik</p> <p>Master of Science Business Analytics & Econometrics: Supplementary Section Business Analytics & Econometrics</p> <p>Master of Science Information Systems: Specialisation Section Information Systems</p>
9	<p>Module Manager</p> <p>Univ.-Prof. Dr. Christoph Rosenkranz</p>
10	<p>Miscellaneous</p> <p>a) Lecture is held in a project-based style. Students develop application scenarios and/ or prototypes for emerging electronic business, implement them, and present them in class. b) The course will employ a project-based format. c) Required readings are announced at the beginning of the semester.</p>

SpM Information Systems III					
Module Code 1277MSISY3	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every term	Duration 1 Term
1	Courses a) Artificial Intelligence and Information Management b) Applied Mathematical Optimization c) Machine Learning and Artificial Intelligence d) Decision Making under Uncertainty		Contact Hours a) 50h b) 50h c) 30h d) 30h	Self-Studies a) 130h b) 130h c) 150h d) 150h	Course Language a) English b) English c) Englisch d) Englisch
2	<p>Module Content</p> <p>a) Artificial Intelligence and Information Management</p> <ul style="list-style-type: none"> • Concepts, frameworks, and development of Information Management • Management of external information sources and demand • IT in companies - role and contribution to value generation • IT Governance • IT Strategy and Strategic Alignment • IT Processes • IT Controlling • IT Sourcing • Knowledge Management • Role of the CIO • New trends <p>b) Applied Mathematical Optimization</p> <ul style="list-style-type: none"> • Fundamentals of Sustainable Information Systems • Domain Knowledge in Energy and Mobility in conjunction with sustainability • Data Science and Machine Learning Methods • Introduction to wicked problems and how to tackle them with Data Science • Simulation and experimentation techniques • Cutting-Edge IS use cases from practice and leading research <p>c) Machine Learning and Artificial Intelligence</p> <ul style="list-style-type: none"> • Basics of the methods of Machine Learning and Artificial Intelligence (AI) • Basics of both supervised and unsupervised methods (e.g. decision trees, random forests, boosting, support vector machines, neural networks, deep and opponent learning, ensemble learning, principal component analysis, factor analysis and diverse learning or multidimensional scaling) • Translation of business problems into machine learning use cases; feasibility and impact • Responsible implementation of machine learning projects in compliance with ethical standards <p>d) Decision Making under Uncertainty</p> <ul style="list-style-type: none"> • Probabilistics • Bayesian Networks • (Hidden) Markov Decision Process • Dynamic Programming • Forecasting and Time-Series Prognose und Zeitreihenanalyse • Agent-based Decision and Reinforcement Learning 				
3	<p>Learning Objectives</p> <p>Students...</p> <p>... communicate continuously and purposefully in diverse teams.</p>				

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	<p>... solve team-internal conflicts and target divergences independently. ... justify and defend (independently developed) positions or problem solutions. ... evaluate their own action processes in self- and external reflection and identify development potentials. ... develop work processes for real problems and challenges.</p>
4	<p>Teaching and Learning Methods lecture practice</p>
5	<p>Module Entry Requirements none</p>
6	<p>Mode of End-Of-Module Examination Written test: PO</p>
7	<p>Prerequisites for Awarding of Credit Points Passing the written examination of one course. A course is to be attended; the written examination relates to the content of one course.</p>
8	<p>Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Ergänzungsbereich Wirtschaftspädagogik Master of Science Business Analytics & Econometrics: Supplementary Section Business Analytics & Econometrics Master of Science Information Systems: Specialisation Section Information Systems</p>
9	<p>Module Manager Univ.-Prof. Dr. Wolf Ketter</p>
10	<p>Miscellaneous b) Required readings are announced at the beginning of the semester.</p>

SpM Digital Strategy and Marketing					
Module Code 1266MSDSM1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Digital Strategy and Marketing		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content The emergence of the internet, mobile devices, the ability to automate tasks and the abundance of data is dramatically changing society and businesses. This module exposes students to a wide range of issues and questions related to this "digital" transformation. The module consists of both conceptual as well as applied tools and frameworks to understand business models and the organization of industries. The module aims at covering both the supply side (infrastructure, operations, etc.) as well as the demand side (customer, marketing, etc.). Students are expected to share their own knowledge and to use ongoing events (e.g., new companies, current news, IPOs, etc.) to apply the concepts they learn.				
3	Learning Objectives Students... ... understand economic and strategic frameworks related to industrial organization, business models, and tactical decisions. ... analyse current questions and challenges related to the ongoing changes in business and society as a result of digital technologies. ... assess and discuss findings and research results of specialised theories / methods. ... justify and defend (independently developed) positions or problem solutions. ... act responsibly considering ecological, social and ethical criteria. ... critically evaluate current social developments and develop alternative solutions.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: basic knowledge of marketing and economics				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science International Management: Core and Advanced Section International Management Master of Science Information Systems: Specialization Section Information Systems Master of Arts Medienwissenschaft: MA Media Management and Economics Master of Science Business Administration - Marketing: Specialization Section Marketing				
9	Module Manager Univ.-Prof. Dr. Hernán Bruno				

10	Miscellaneous This module may consist of at least one course that takes place either until the middle of the semester (1. term) or from the middle of the semester onwards (2. term). You can find this information in the KLIPS entry of the corresponding course. The corresponding examinations of courses that take place in the 1. term are often offered in the middle of the semester.
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Specialisation Module Studies Abroad I						
Module Code 1014SASc01		Workload 180h	ECTS Credits 6	Module Language	Module Availability every term	Duration 1 Term
1	Courses			Contact Hours	Self-Studies	Course Language
2	Module Content Depends on chosen course					
3	Learning Objectives Students.... ... describe approaches to information systems from an international perspective. ... explain international issues in the area of information systems. ... discuss and compare different theories and approaches in the area of information systems. ... develop new intellectual perspectives of their own educational background. ... are better equipped to master the dynamic, global dimensions of their professional future.					
4	Teaching and Learning Methods depending on course choice					
5	Module Entry Requirements					
6	Mode of End-Of-Module Examination TR - depending on course selection					
7	Prerequisites for Awarding of Credit Points Depends on chosen course					
8	Other Programmes that Use the Module Master of Science Information Systems: Specialization Section Information Systems					
9	Module Manager					
10	Miscellaneous Language: Can be offered in English or in any language possible at the host university. This module can be studied at a higher education institution in another country. There is a standardised crediting procedure for such cases. Information about course crediting (deadlines and procedures) can be obtained from the Credit Transfer Centre (WiSo Credit Transfer Centre: https://www.anrechnungswiso.uni-koeln.de/) This module can also be taken as part of a summer school organised by the WiSo Faculty. In this case, students must register for the examination in accordance with the rules of the WiSo Faculty prior to embarking on the module.					

SpM Computer Science I					
Module Code 5722MSCSC1	Workload 270h	ECTS Credits 9	Module Language German and English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Computer Science I		Contact Hours 90h	Self-Studies 180h	Course Language German
2	Module Content Different topics in the area of computer science, the current course offer can be seen in KLIPS.				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods. ... justify and defend (independently developed) positions or problem solutions. ... develop work processes for real problems and challenges.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: CM Mathematics, CM Computer Science, AM Computer Science I, AM Computer Science II, Programming Project and if poss. SpM Computer Science from the B.Sc. Wirtschaftsinformatik.				
6	Mode of End-Of-Module Examination Written test: WT (180) Oral examination: OE				
7	Prerequisites for Awarding of Credit Points Passing the module examination. Regular participation in the exercises as well as the successful completion of exercise tasks can be used as a prerequisite for admission to the examination.				
8	Other Programmes that Use the Module Master of Science Information Systems: Specialization Section Information Systems				
9	Module Manager Geschäftsführende*r Direktor*in Institut für Informatik				
10	Miscellaneous The contents of the lecture cannot be learned exclusively by theoretical consideration, therefore participation in the exercises and independent work on the tasks are essential. For further information, please refer to the current web page of the event. The mentioned mode of end-of-module examination are specified per course.				

SpM Computer Science II					
Module Code 5722MSCSC2	Workload 270h	ECTS Credits 9	Module Language German and English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Architecture and programming of graphics and coprocessors		Contact Hours 90h	Self-Studies 180h	Course Language German and English
2	Module Content Part 1: (probably winter term) Performance of computer programs, contents are parallel programming and related paradigms (SIMD, Multithreading, Message Passing, Software Pipelining, etc.), also a short introduction to parallel algorithms and the PRAM / Work-Time paradigm. Part 2: (probably winter term) Rendering Algorithms, Fundamentals of Computer Graphics. In this part the three algorithms "Rasterization", "Deferred Shading" and "Ray Tracing" will be discussed. Part 3: (probably summer term) Rendering Pipeline. In this part, the relationship between the algorithm "Rasterization" and the rendering / rasterization pipeline implemented on modern graphics processors will be discussed. Compression algorithms, GPU caches and mobile GPUs will also be discussed. Part 4: (probably summer term) GPGPU Programming. An introduction to the CUDA GPGPU API will be given. In addition, the programming of special hardware such as NVIDIA's ray tracing cores will be discussed. Part 5: (probably summer term) Sorting on GPUs. In this final part of the lecture, sorting networks, the Bitonic Sort algorithm and its efficient implementation with CUDA will be discussed.				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods. ... justify and defend (independently developed) positions or problem solutions. ... develop work processes for real problems and challenges.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: CM Mathematics, CM Computer Science, AM Computer Science I, AM Computer Science II, Programming Project and if poss. SpM Computer Science from the B.Sc. Wirtschaftsinformatik.				
6	Mode of End-Of-Module Examination Written test: WT (180) Oral examination: OE				
7	Prerequisites for Awarding of Credit Points Passing the module examination. Regular participation in the exercises as well as the successful completion of exercise tasks can be used as a prerequisite for admission to the examination.				
8	Other Programmes that Use the Module Master of Science Information Systems: Specialization Section Information Systems				
9	Module Manager Geschäftsführende*r Direktor*in Institut für Informatik				

10	Miscellaneous The contents of the lecture cannot be learned exclusively by theoretical consideration, therefore participation in the exercises and independent work on the tasks are essential. For further information, please refer to the current web page of the event. The mentioned mode of end-of-module examination are specified per course.
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SpM Seminar Information Systems I					
Module Code 1277MSSIS1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every term	Duration 1 Term
1	Courses a) Advanced Seminar Collaborative Innovation Networks (Prof. Gloor) b) Advanced Seminar Information Systems for Sustainable Society (Prof. Ketter) c) Advanced Seminar Information Systems and Digital Technology (Prof. Recker) d) Advanced Seminar Integrated Information Systems (Prof. Rosenkranz) e) Advanced Seminar Information Management (Prof. Schoder)		Contact Hours a) 30h b) 30h c) 30h d) 30h e) 30h	Self-Studies a) 150h b) 150h c) 150h d) 150h e) 150h	Course Language a) English b) English c) English d) English e) English
2	Module Content Selected issues and varying topics in the area of Information Systems, related either to theory or methods. Topics are primarily related to: <ul style="list-style-type: none"> a) <ul style="list-style-type: none"> • Collaborative Innovation Networks (COINs) • swarm creativity, and coolhunting/ coolfarming • Social Network analysis • Sentiment analysis • Digital platforms for collaboration and creativity b) <ul style="list-style-type: none"> • Business intelligence • Data Science and Business Analytics • Future Energy Business • Learning Agents • Sharing Economy • Smart Markets c) <ul style="list-style-type: none"> • Conceptual Modeling • Business Process Management • Information Systems Development • Systems Analysis and Design • Digital Innovation • Digital Entrepreneurship • Green IS • Environmental Sustainability d) <ul style="list-style-type: none"> • IT Outsourcing • IT Strategy • Information Systems Development & IT Project Management • Global Software Development • Agile Development • Business Process Management • Enterprise Systems 				

	<p>e)</p> <ul style="list-style-type: none"> • Media Mass Customization • Electronic Commerce • Social Media & Social Network Analysis • Openness, • Management of Information Spheres and IT-Platforms • Decision Support Systems • Artificial Intelligence
3	<p>Learning Objectives Students... ... prepare independently a research design for a question. ... solve team-internal conflicts and target divergences independently. ... use techniques of scientific work and good scientific practice.</p>
4	<p>Teaching and Learning Methods seminar</p>
5	<p>Module Entry Requirements none</p>
6	<p>Mode of End-Of-Module Examination Combined examination: PRES, TP</p>
7	<p>Prerequisites for Awarding of Credit Points Passing the module examination</p>
8	<p>Other Programmes that Use the Module Master of Science Information Systems: Specialization Section Information Systems</p>
9	<p>Module Manager Univ.-Prof. Dr. Detlef Schoder</p>
10	<p>Miscellaneous Course registration for advanced seminars in Information Systems is usually organized in a joint process for all advanced seminar courses in one semester. Students are required to provide preferences for at least two different advanced seminar courses in KLIPS during the first enrolment period ("1. Belegungsphase"). Registration is usually not possible during the second enrolment period ("2. Belegungsphase") or during the enrolment period for remaining places ("Restplatzvergabe"). Students are then assigned to a specific advanced seminar, based on the provided preferences and capacities. Delivery and discussion of presentations, prepared in the form of written papers under guidance. Students will generally be advised of compulsory reading and the topics for the presentations towards the end of the preceding term. Which topics are to be assigned to which students is decided after they have been advised of the topics available, towards the end of the preceding term. To enhance the learning outcome and expand the creative component, the advanced seminar can also be project-based or in the style of a case study. In these cases, a specifically defined assignment is given in addition to the compulsory reading. The written paper and the presentation then report on the approaches taken when attempting to answer the question or solve the task on the literature and the students' own work.</p>

SpM Seminar Information Systems II					
Module Code 1277MSSIS2	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every term	Duration 1 Term
1	Courses a) Advanced Seminar Collaborative Innovation Networks (Prof. Gloor) b) Advanced Seminar Information Systems for Sustainable Society (Prof. Ketter) c) Advanced Seminar Information Systems and Digital Technology (Prof. Recker) d) Advanced Seminar Integrated Information Systems (Prof. Rosenkranz) e) Advanced Seminar Information Management (Prof. Schoder)		Contact Hours a) 30h b) 30h c) 30h d) 30h e) 30h	Self-Studies a) 150h b) 150h c) 150h d) 150h e) 150h	Course Language a) English b) English c) English d) English e) English
2	<p>Module Content Selected issues and varying topics in the area of Information Systems, related either to theory or methods. Topics are primarily related to:</p> <p>a)</p> <ul style="list-style-type: none"> • Collaborative Innovation Networks (COINs) • swarm creativity, and coolhunting/ coolfarming • Social Network analysis • Sentiment analysis • Digital platforms for collaboration and creativity <p>b)</p> <ul style="list-style-type: none"> • Business intelligence • Data Science and Business Analytics • Future Energy Business • Learning Agents • Sharing Economy • Smart Markets <p>c)</p> <ul style="list-style-type: none"> • Conceptual Modeling • Business Process Management • Information Systems Development • Systems Analysis and Design • Digital Innovation • Digital Entrepreneurship • Green IS • Environmental Sustainability <p>d)</p> <ul style="list-style-type: none"> • IT Outsourcing • IT Strategy • Information Systems Development & IT Project Management • Global Software Development • Agile Development • Business Process Management • Enterprise Systems 				

	<p>e)</p> <ul style="list-style-type: none"> • Media Mass Customization • Electronic Commerce • Social Media & Social Network Analysis • Openness, • Management of Information Spheres and IT-Platforms • Decision Support Systems • Artificial Intelligence
3	<p>Learning Objectives Students... ... prepare independently a research design for a question. ... solve team-internal conflicts and target divergences independently. ... use techniques of scientific work and good scientific practice.</p>
4	<p>Teaching and Learning Methods seminar</p>
5	<p>Module Entry Requirements none</p>
6	<p>Mode of End-Of-Module Examination Combined examination: PRES, TP</p>
7	<p>Prerequisites for Awarding of Credit Points Passing the module examination</p>
8	<p>Other Programmes that Use the Module Master of Science Information Systems: Specialization Section Information Systems</p>
9	<p>Module Manager Univ.-Prof. Dr. Detlef Schoder</p>
10	<p>Miscellaneous Course registration for advanced seminars in Information Systems is usually organized in a joint process for all advanced seminar courses in one semester. Students are required to provide preferences for at least two different advanced seminar courses in KLIPS during the first enrolment period ("1. Belegungsphase"). Registration is usually not possible during the second enrolment period ("2. Belegungsphase") or during the enrolment period for remaining places ("Restplatzvergabe"). Students are then assigned to a specific advanced seminar, based on the provided preferences and capacities. Delivery and discussion of presentations, prepared in the form of written papers under guidance. Students will generally be advised of compulsory reading and the topics for the presentations towards the end of the preceding term. Which topics are to be assigned to which students is decided after they have been advised of the topics available, towards the end of the preceding term. To enhance the learning outcome and expand the creative component, the advanced seminar can also be project-based or in the style of a case study. In these cases, a specifically defined assignment is given in addition to the compulsory reading. The written paper and the presentation then report on the approaches taken when attempting to answer the question or solve the task on the literature and the students' own work.</p>

Specialisation Module Seminar Computer Science					
Module Code 1277SMSI03	Workload 180h	ECTS Credits 6	Module Language German	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Hauptseminar Informatik		Contact Hours 20h	Self-Studies 160h	Course Language German
2	Module Content The seminar takes a deeper look at areas of mathematical computer science already familiar to students. Students work independently on a predefined topic/project and present it in a semi-nar paper and a presentation. The content usually comprises selected literature from an ad-vanced area of mathematical computer science, which can usually be studied based on knowledge from at least one series of lectures within the Msc Information Systems from the specialisation modules read by the Department of Computer Science				
3	Learning Objectives Students... ... are able to independently deepen their already advanced knowledge of mathematical com-puter science, conduct literature searches and use their results as a basis for independent, re-search-re-lated project work. ... can coherently present and discuss their findings. The general learning outcomes are the ability to apply educational methods learned on the programme when giving academ-ic presen-tations and to engage in critical academic discussions, general presentation skills and commu-nication skills				
4	Teaching and Learning Methods seminar				
5	Module Entry Requirements				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the combined test.				
8	Other Programmes that Use the Module Master of Science Information Systems: Specialization Section Information Systems				
9	Module Manager Geschäftsführende*r Direktor*in Institut für Informatik				
10	Miscellaneous For further information, please refer to the current version of the website for the course in ques-tion.				

3.6.3 Supplementary Section Information Systems

SpM Taxation I					
Module Code 1016MSTAX1	Workload 180h	ECTS Credits 6	Module Language German	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Taxation of Companies I		Contact Hours 45h	Self-Studies 135h	Course Language German
2	Module Content <ul style="list-style-type: none"> • Business taxation • Taxation of different legal structures (partnerships and corporations) • Choice of legal structure • International business taxation • Double taxation and anti-tax avoidance legislation • Case studies 				
3	Learning Objectives Students... ... understand advanced, specialized methods in the area of tax law and business taxation. ... analyse current questions and challenges in the area of business taxation. ... assess and discuss findings and results of specialized methods. ... justify and defend (independently developed) positions or problem solutions.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economics: Supplementary Section Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Science Business Administration - Accounting and Taxation: Specialization Section Accounting and Taxation				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	Supplementary Section Accounting and Taxation Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China
9	Module Manager Univ.-Prof. Dr. Michael Overesch
10	Miscellaneous

SpM Taxation II					
Module Code 1016MSTAX2	Workload 180h	ECTS Credits 6	Module Language German	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Taxation of Companies II		Contact Hours 45h	Self-Studies 135h	Course Language German
2	Module Content <ul style="list-style-type: none"> • Corporate tax planning • Tax planning in the case of mergers and acquisitions • Tax planning in the case of international company structures • Taxation and change of corporate form • Case studies 				
3	Learning Objectives Students... ... understand advanced, specialized methods in the area of tax law and business taxation. ... analyse current questions and challenges in the area of business taxation. ... assess and discuss findings and results of specialized methods. ... justify and defend (independently developed) positions or problem solutions. ... act responsibly considering ecological, social and ethical criteria.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: SpM Taxation I				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economics: Supplementary Section Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Science Business Administration - Accounting and Taxation: Specialization Section Accounting and Taxation Supplementary Section Accounting and Taxation Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

9	Module Manager Univ.-Prof. Dr. Michael Overesch
10	Miscellaneous

SpM Controlling I					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1016MSCON1	180h	6	English	every 2nd term - winter term	1 Term
1	Courses Operative Controlling (1. Term)		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Fundamentals of controlling • Theory, strategies and methods to support controlling activities • Controlling instruments 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... understand advanced, specialized theories / methods in the area of operative controlling. ... communicate continuously and purposefully in diverse teams. ... discuss scientific topics in a professional manner and appropriate to the situation with (non-) specialists. ... develop work processes for real problems and challenges. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Basic knowledge of internal and external accounting, investment, financing and decision theory				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module <ul style="list-style-type: none"> Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Economics: Supplementary Section Master of Science Gesundheitsökonomie: Supplementary Section Health Economics Master of Science International Management: Supplementary Section International Management Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education 				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Master of Science Business Administration - Accounting and Taxation: Specialization Section Accounting and Taxation Supplementary Section Accounting and Taxation Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China</p>
9	<p>Module Manager Univ.-Prof. Dr. Carsten Homburg</p>
10	<p>Miscellaneous This course ends in the middle of the semester (1. term). The exam is offered at the end of the course.</p>

SpM Controlling II					
Module Code 1016MSCON2	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Strategic Controlling (2. Term)		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Introduction to strategic controlling • Conventional cost management instruments • More recent cost management instruments • Benchmarking 				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods in the area of strategic controlling. ... communicate continuously and purposefully in diverse teams. ... discuss scientific topics in a professional manner and appropriate to the situation with (non-) specialists. ... develop work processes for real problems and challenges.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Basic knowledge of internal and external accounting, investment, financing and decision theory				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Economics: Supplementary Section Master of Science Gesundheitsökonomie: Supplementary Section Health Economics Master of Science International Management: Supplementary Section International Management Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs:				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Supplementary Section Business Education Master of Science Business Administration - Accounting and Taxation: Specialization Section Accounting and Taxation Supplementary Section Accounting and Taxation Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China</p>
9	<p>Module Manager Univ.-Prof. Dr. Carsten Homburg</p>
10	<p>Miscellaneous This course starts in the middle of the semester (2. term). The exam is offered at the end of the course.</p>

SpM Accounting I					
Module Code 1016MSACC1	Workload 180h	ECTS Credits 6	Module Language German	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Sustainability Reporting		Contact Hours 45h	Self-Studies 135h	Course Language German
2	Module Content <ul style="list-style-type: none"> • Conceptual and Institutional Background • General Requirements • Reporting on Governance Issues • Reporting on Environmental Issues • Reporting on Social Issues • Preparing Sustainability Reports • Assuring Sustainability Reports • Analyzing Sustainability Reports 				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods in the area of sustainability/ESG reporting. ... analyse current questions and challenges in the area of sustainability/ESG reporting. ... assess and discuss findings and research results of specialized theories / methods. ... justify and defend (independently developed) positions or problem solutions. ... critically evaluate current social developments and develop alternative solutions.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Informatik: Anwendungsfeld Master of Science Geographie: Wahlpflichtfach Management & Social Sciences				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Master of Science Economics: Supplementary Section Management & Social Sciences</p> <p>Master of Science Mathematik: Economics Sciences</p> <p>Master of Science Wirtschaftsmathematik: Economics Sciences</p> <p>Master of Science International Management: Supplementary Section International Management</p> <p>Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Ergänzungsbereich Wirtschaftspädagogik</p> <p>Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Ergänzungsbereich Business Administration</p> <p>Master of Science Business Administration - Accounting and Taxation: Specialisation Section Accounting and Taxation</p>
9	<p>Module Manager Prof. Dr. Maximilian A. Müller</p>
10	<p>Miscellaneous The examination is offered in every term.</p>

SpM Accounting II					
Module Code 1016MSACC2	Workload 180h	ECTS Credits 6	Module Language German	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses International Accounting		Contact Hours 45h	Self-Studies 135h	Course Language German
2	Module Content <ul style="list-style-type: none"> • Theoretical as well as institutional foundations of IFRS • IASB-Framework • Recognition and measurement of different classes of assets and liabilities • Special issues of individual and consolidated IFRS reports 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... understand advanced, specialized theories / methods in the area international accounting. ... analyse current questions and challenges in the area of uninternational accounting. ... gain confidence in reporting according to international financial reporting standards (IFRS) with respect to recognition as well as measurement issues. ... acquire knowledge enabling them to interpret IFRS in light of their principle-based character. ... solve new problems and cases, using the subject-related and methodological competence taught in the module. ... apply business valuation concepts within the framework of IFRS accounting. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module <ul style="list-style-type: none"> Master of Science Economics: Supplementary Section Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Science Business Administration - Accounting and Taxation: Specialization Section Accounting and Taxation Supplementary Section Accounting and Taxation 				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China
9	Module Manager N. N.
10	Miscellaneous The examination is offered in every term.

SpM Selected Issues in Accounting & Taxation I					
Module Code 1016MSSIS1	Workload 180h	ECTS Credits 6	Module Language German and English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses a) Tax Accounting b) Financial Service and Real Estate Taxation c) Taxation of Family Business d) Selected Issues in Controlling I e) Annual Audit f) Special Audits		Contact Hours a) 30h b) 30h c) 30h d) 30h e) 30h f) 30h	Self-Studies a) 60h b) 60h c) 60h d) 60h e) 60h f) 60h	Course Language a) English b) English c) German d) English e) German f) German
2	Module Content Selected Issues in managerial accounting, financial accounting, auditing or business taxation				
3	Learning Objectives Students... ... understand advanced, specialized theories or methods in accounting or taxation. ... analyse current questions and challenges in accounting or taxation. ... assess and discuss findings and research results of specialized theories / methods. ... justify and defend (independently developed) positions or problem solutions. ... discuss topics in a professional manner and appropriate to the situation with specialists. ... develop work processes for real problems and challenges.				
4	Teaching and Learning Methods lecture				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the module examination: Two lectures must be taken. The exam covers the content of two lectures.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Economics: Supplementary Section Master of Science International Management: Supplementary Section International Management Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs:				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	Supplementary Section Business Education Master of Science Business Administration - Accounting and Taxation: Specialization Section Accounting and Taxation Supplementary Section Accounting and Taxation
9	Module Manager Area Accounting and Taxation
10	Miscellaneous

SpM Selected Issues in Accounting & Taxation II					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1016MSSIS2	180h	6	German and English	every 2nd term - winter term	1 Term
1	Courses a) International Tax Planning b) Taxation of Corporate Groups c) Consolidated Balance Sheets d) Selected Issues in Business Valuation e) Selected Issues in Controlling II		Contact Hours a) 30h b) 30h c) 30h d) 30h e) 30h	Self-Studies a) 60h b) 60h c) 60h d) 60h e) 60h	Course Language a) English b) German c) German d) German e) English
2	Module Content Selected Issues in managerial accounting, financial accounting, auditing , business valuation or business taxation				
3	Learning Objectives Students... ... understand advanced, specialized theories or methods in accounting or taxation. ... analyse current questions and challenges in accounting or taxation. ... assess and discuss findings and research results of specialized theories / methods. ... justify and defend (independently developed) positions or problem solutions. ... discuss topics in a professional manner and appropriate to the situation with specialists. ... develop work processes for real problems and challenges.				
4	Teaching and Learning Methods lecture				
5	Module Entry Requirements None				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the module examination: Two lectures have to be chosen. The exam covers the content of two lectures.				
8	Other Programmes that Use the Module Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Specialisation Section Accounting and Taxation				
9	Module Manager Area Accounting and Taxation				
10	Miscellaneous				

SpM Advanced Accounting					
Module Code 1016MSAAC1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Value-based Controlling		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Basics of value-based controlling (including traditional financial indicators) • Characteristics of capital markets • Effect of capital structure on business value • Shareholder value approach • Discounted cash flow (DCF) method • Value-based indicators and their steering • Working capital management, especially cash management • Risk measurement and risk management • Implementation of a value-based strategy • The Ohlson model 				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods. ... analyse current questions and challenges. ... collect, systematize and synthesize independently literature on selected scientific questions. ... justify and defend (independently developed) positions or problem solutions. ... discuss scientific topics in a professional manner and appropriate to the situation with (non-) specialists. ... act responsibly considering ecological, social and ethical criteria. ... critically evaluate current social developments and develop alternative solutions.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Basic knowledge of internal and external accounting, investment and financing				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Economics: Supplementary Section Master of Science Gesundheitsökonomie:				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Supplementary Section Health Economics</p> <p>Master of Science International Management: Supplementary Section International Management</p> <p>Master of Science Business Administration - Finance: Supplementary Section Finance</p> <p>Master of Science Information Systems: Supplementary Section Information Systems</p> <p>Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education</p> <p>Master of Science Business Administration - Marketing: Specialization Section Marketing</p> <p>Master of Science Business Administration - Accounting and Taxation: Specialization Section Accounting and Taxation Supplementary Section Accounting and Taxation</p> <p>Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China</p>
9	<p>Module Manager Univ.-Prof. Dr. Carsten Homburg</p>
10	<p>Miscellaneous</p>

Specialisation Module Research in Finance (Research Track)					
Module Code 1259RiFi01	Workload 180h	ECTS Credits 6	Module Language German and English	Module Availability irregular	Duration 1 Term
1	Courses a) Empirical Research in Asset Management b) Empirical Research in Corporate Finance c) Wissenschaftliches Arbeiten in Finance: Von der Idee zur Veröffentlichung		Contact Hours a) 30h b) 60h c) 30h	Self-Studies a) 150h b) 120h c) 150h	Course Language a) English b) English c) German
2	Module Content Empirical Research in Corporate Finance <ul style="list-style-type: none"> • Current issues in capital market research, focusing on asset management • Critical assessment of pivotal studies in this area • Methodical implementation of empirical investigations • Guidance on independent research Empirical Research in Asset Management <ul style="list-style-type: none"> • Current issues in capital market research, focusing on asset management • Critical assessment of pivotal studies in this area • Methodical implementation of empirical investigations • Guidance on independent research Scientific work in Finance: From Idea to Publication <ul style="list-style-type: none"> • Development of a research proposal in the field of finance • Preparation of the proposal for a research paper • Presentation and publication of the research paper 				
3	Learning Objectives Students... ... develop their own research ideas. ... devise methods for conducting their own research projects. ... formulate their own research proposals and work them out into papers. ... engage in academic discourse.				
4	Teaching and Learning Methods lecture practice seminar				
5	Module Entry Requirements Recommended: Extensive knowledge of finance and statistics. We recommend a minimum of 42 LPs from the Core and Advanced as well as from the Specialization section with a minimum average grade of 2.0.				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the combined examination. Only one course must be attended; the examination refers to topics of only one course.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management:				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Supplementary Section Supply Chain Management</p> <p>Master of Science Business Administration - Finance: Supplementary Section Finance</p> <p>Master of Science Information Systems: Supplementary Section Information Systems</p> <p>Master of Science Business Administration - Marketing: Supplementary Section Marketing</p> <p>Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation</p> <p>Master of Science Business Administration - Finance: Specialization Section Finance</p>
9	<p>Module Manager</p> <p>Univ.-Prof. Dr. Dieter Hess Univ.-Prof. Dr. Alexander Kempf Dr. Alexander Pütz</p>
10	<p>Miscellaneous</p> <p>Only one course (a, b, or c) must and can be attended. The courses are offered on an irregular basis.</p>

Specialisation module Selected Issues in Corporate Development II					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1253SMSC02	180h	6	German and English	irregular	1 Term
1	Courses a) Elective Corporate Development II b) Sustainability & Strategy		Contact Hours a) 30h b) 30h	Self-Studies a) 150h b) 150h	Course Language a) German and English b) English
2	Module Content Varying topics in the field of corporate development				
3	Learning Objectives Students... ... discuss current issues in the field of corporate development. ... perform analyses and make informed decisions about corporate development issues. ... apply theoretical and methodical knowledge to real-life corporate development issues. ... engage in academic discourse. ... hone their social skills by participating in group-based problem-solving processes				
4	Teaching and Learning Methods seminar				
5	Module Entry Requirements No recommendations				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the written examination. Only one course must an can be attended; the examination refers to topics of only one course.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Business Administration - Corporate Development: Specialization Section Corporate Development				
9	Module Manager Univ.-Prof. Dr. Mark Ebers Univ.-Prof. Dr. Bernd Irlenbusch Univ.-Prof. Dr. Dirk Sliwka				

10	Miscellaneous Discuss, develop and implement corporate development methods in teams and with the lecturer.
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CM Advanced Mathematics					
Module Code 1302MBAMT1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Advanced Mathematics for Economists		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Overview of elementary mathematical concepts • Metric and standardized spaces • Linear algebra • Differential calculus and applications • Convex sets and concave functions • Optimisation 				
3	Learning Objectives Students... ... apply mathematical argumentation and proof techniques correctly. ... formulate economic problems occurring in research mathematically and solve them.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Economics: Supplementary Section Master of Science Economic Research: Core and Advanced Section Economic Research				
9	Module Manager Univ.-Prof. Dr. Martin Barbie				

10	Miscellaneous
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CM Selected Methods in Economics					
Module Code 1289MBEXE1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Experimental Methods		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Experimental Methods in economics • Experimental designs • Analysing experimental data 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... understand advanced, specialized theories / methods in the area of experimental Economics. ... analyse current questions and challenges in the area of Microeconomics. ... assess and discuss findings and research results of specialized methods. ... analyse data for selected scientific questions using quantitative methods. ... present scientific results in a way that is appropriate for the target audience. ... critically evaluate current social developments and develop alternative solutions. ... use techniques of scientific work and good scientific practice. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Bachelor Level Microeconomics, Macroeconomics, Mathematics				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module <ul style="list-style-type: none"> Master of Science Business Administration - Supply Chain Management: <ul style="list-style-type: none"> Core and Advanced Section Supply Chain Management Supplementary Section Supply Chain Management Master of Science Business Administration - Finance: <ul style="list-style-type: none"> Supplementary Section Finance Master of Science Information Systems: <ul style="list-style-type: none"> Supplementary Section Information Systems Master of Science Business Administration - Marketing: <ul style="list-style-type: none"> Supplementary Section Marketing Master of Science Business Administration - Corporate Development: <ul style="list-style-type: none"> Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: <ul style="list-style-type: none"> Supplementary Section Accounting and Taxation Master of Arts Politikwissenschaft: <ul style="list-style-type: none"> Supplementary Section Political Science Master of Science Sociology and Social Research: <ul style="list-style-type: none"> Supplementary Section Sociology and Social Research 				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Master of Science Business Administration - Finance: Core and Advanced Section Finance</p> <p>Master of Science Business Administration - Marketing: Core and Advanced Section Marketing</p> <p>Master of Science Business Administration - Corporate Development: Core and Advanced Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Core and Advanced Section Accounting and Taxation</p>
9	<p>Module Manager Univ.-Prof. Michael Krause, Ph.D.</p>
10	<p>Miscellaneous</p>

AM Computational Methods					
Module Code 1302MACMT1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Computational Methods		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Programming numerical algorithms • Numerical approximation • Numerical solution of zeroing and optimization problems • Application to canonical economic problems • Parametrization, solution and simulation of structural economic models 				
3	Learning Objectives Students... ... apply numerical methods and programs for the solution and simulation of quantitative structural economic models. ... interpret results of the application of numerical models. ... use the technical language in a way that is appropriate for the target group.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Arts Regionalstudien China - Volkswirtschaftslehre: Economics Master Regional Studies China Master of Arts Regionalstudien Ost- und Mitteleuropa - Volkswirtschaftslehre: Economics Master Regional Studies Eastern Europe Master of Science Economic Research: Core and Advanced Section Economic Research				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	Specialization Section Economic Research Master of Arts Regionalstudien Lateinamerika - Volkswirtschaftslehre: Economics Master Regional Studies Latin America
9	Module Manager Univ.-Prof. Dr. Andreas Schabert
10	Miscellaneous

CM Advanced Microeconomics I					
Module Code 1289MBAMI1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Advanced Microeconomics I		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Theory of household and demand • Theory of the enterprise and the supply • Market equilibrium 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... understand modern microeconomic concepts. ... are proficient in the most important techniques of microeconomic analysis, such as the analysis of individual decision-making behaviour. ... use mathematical models to investigate price formation in markets. ... modify these models to recognize their limitations and to analyse the effects of political interventions. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Good basic knowledge of microeconomics and mathematics				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module <ul style="list-style-type: none"> Master of Science Business Administration - Supply Chain Management: <ul style="list-style-type: none"> Supplementary Section Supply Chain Management Master of Science Business Administration - Finance: <ul style="list-style-type: none"> Supplementary Section Finance Master of Science Information Systems: <ul style="list-style-type: none"> Supplementary Section Information Systems Master of Science Business Administration - Marketing: <ul style="list-style-type: none"> Supplementary Section Marketing Master of Science Business Administration - Corporate Development: <ul style="list-style-type: none"> Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: <ul style="list-style-type: none"> Supplementary Section Accounting and Taxation Master of Science Economics: <ul style="list-style-type: none"> Supplementary Section Master of Science Economic Research: <ul style="list-style-type: none"> Core and Advanced Section Economic Research Specialization Section Economic Research 				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

9	Module Manager Univ.-Prof. Dr. Johannes Münster
10	Miscellaneous

CM Advanced Microeconomics II					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1289MBAMI2	180h	6	English	every 2nd term - summer term	1 Term
1	Courses Advanced Microeconomics II		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Static games with complete information: Nash Equilibrium, Mixed Strategies • Dynamic games with complete information: subgame perfect Nash Equilibrium, one-shot deviation principle, bargaining, forward induction • Static games with incomplete information: Bayesian Nash Equilibrium, auctions • Dynamic games with incomplete information: Perfect Bayesian Nash Equilibrium and refinements, signalling games • Mechanism design and social preferences aggregation • Current developments in game theory and mechanism design 				
3	Learning Objectives Students... ... acquire and deepen methodological knowledge in the field of modern game theory and mechanism design. ... discuss the latest developments in game theory.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Economics: Supplementary Section Master of Science Economic Research:				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	Core and Advanced Section Economic Research Specialization Section Economic Research
9	Module Manager Univ.-Prof. Dr. Christoph Schottmüller
10	Miscellaneous

CM Advanced Macroeconomics I					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1302MBAMA1	180h	6	English	every 2nd term - winter term	1 Term
1	Courses Advanced Macroeconomics I		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Stylized facts: growth and business cycles • Dynamic optimization in continuous time and in discrete time under uncertainty • Stability and uniqueness of dynamic systems • The canonical neoclassical growth model • Exogenous and endogenous growth • Real business cycles (TFP and fiscal policy shocks) • Numerical solutions, simulation and evaluation of structural models • Calibration and introduction in structural estimation of model parameter 				
3	Learning Objectives Students... ... analyse and solve the canonical models of real business cycle and growth theory at an advanced methodological level. ... apply the mathematical and numerical methods necessary to do so. ... tailor and apply these models to answer positive and normative research questions in the areas of growth and business cycle fluctuations. ... discuss the strengths and weaknesses of these models in terms of their assumptions and implications. ... parameterize models using filtered data und assess the goodness of fit. ... develop analytical skills required for research activities and further studies (doctorate). ... gain an understanding of the most important strands of the literature that prepares them for their own research at an advanced level.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation</p> <p>Master of Science Economics: Supplementary Section</p> <p>Master of Science Economic Research: Core and Advanced Section Economic Research Specialization Section Economic Research</p>
9	<p>Module Manager Univ.-Prof. Dr. Peter Funk</p>
10	<p>Miscellaneous Useful references are: - Acemoglu, Daron (2008). Introduction to modern economic growth. Princeton University Press. - McCandless, George T. (2008). The ABC of RBCs. Harvard University Press. - King, Robert G. and Sergio T. Rebelo (1999). "Resuscitating real business cycles". Handbook of macroeconomics. Ed. by John B. Taylor and Michael Woodford. Vol. 1. Elsevier, 927–1007. - Chow, Gregory C. (1997). Dynamic economics: optimization by the Lagrange method. Oxford: Oxford University Press. - Ljungqvist, Lars and Thomas J. Sargent (2012). Recursive macroeconomic theory. 3rd ed. Cambridge, MA: MIT Press. - Stokey, Nancy, Robert E. Lucas, and Edward C. Prescott (1989). Recursive methods in economic dynamics. Harvard University Press.</p>

CM Advanced Macroeconomics II					
Module Code 1302MBAMA2	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Advanced Macroeconomics II		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Complete markets and representative agents • Incomplete markets and heterogeneous agents • Fiscal policy, public debt, and optimal taxation • Transaction frictions and monetary policy • Open economy macroeconomics • New Keynesian macroeconomics • Labour market frictions and Labour market fluctuations 				
3	Learning Objectives Students... ... master core macroeconomic concepts for solving positive and normative problems and acquire skill for innovative research. ... deepen their knowledge of short- and medium-run macroeconomic developments and of efficient conduct of policy measures. ... evaluate and discuss the impact of empirically relevant frictions in goods, financial and labour markets. ... recognize possibilities to enhance social welfare in a general equilibrium framework with incomplete markets. ... Identify the optimal implementation of macroeconomic instruments under relevant policy trade-offs. ... question and assess societal developments, in particular, inequality and unemployment, and reflect current policy measures with regard to potential research projects.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation</p> <p>Master of Science Economics: Supplementary Section</p> <p>Master of Science Economic Research: Core and Advanced Section Economic Research Specialization Section Economic Research</p>
9	<p>Module Manager Univ.-Prof. Michael Krause, Ph.D. Univ.-Prof. Dr. Andreas Schabert</p>
10	<p>Miscellaneous Useful references are Ljungqvist, Lars and Thomas J. Sargent (2012). Recursive mac-roeconomic theory. 3rd ed. Cambridge, MA: MIT Press; Gali, J. (2015) Monetary Policy, Inflation, and the Business Cycle An Introduction to the New Keynesian Framework and Its Applications, 2nd ed., Princeton University Press. Schmitt-Grohe, S., and Uribe M. (2017). Open Economy Macroeconomics, Princeton University Press</p>

CM Advanced Econometrics I					
Module Code 1314MBAEM1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Advanced Econometrics: Theory		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • The classic linear model • Tests in the classical linear model • Specification of econometric models • Generalised linear model • Panel data regression • Time series econometric methods • Instrument Variables / GMM • Asymptotic Inference 				
3	Learning Objectives Students... ... have basic knowledge of econometric methods, which enable them to understand scientific contributions in the field of empirical economic research and to assess the properties of quantitative methods. ... model economic relationships econometrically and choose between alternative model specifications. ... estimate parameters with suitable methods and carry out hypothesis tests.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Economics:				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Supplementary Section Master of Science Economic Research: Core and Advanced Section Economic Research Specialization Section Economic Research</p>
9	<p>Module Manager Univ.-Prof. Dr. Jörg Breitung</p>
10	<p>Miscellaneous This module presents econometric tools for the analysis of cross-sectional data, time series and panel data at doctoral level.</p>

CM Advanced Econometrics II					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1314MBAEM2	180h	6	English	every 2nd term - summer term	1 Term
1	Courses Advanced Econometrics: Applications		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Evaluation of causal effects • Fixed effects and difference-in-difference estimator • Regression discontinuity designs • Robust standard errors and clustering • Structural estimates with experimental data 				
3	Learning Objectives Students... ... implement estimation methods and test procedures. ... discuss situation estimation and testing procedures. ... apply appropriate econometric models and the corresponding inference methods. ... carry out empirical studies in modern macro- and microeconometrics. ... report on their approach and their results.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Economics: Supplementary Section Master of Science Economic Research: Core and Advanced Section Economic Research Specialization Section Economic Research				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

9	Module Manager Univ.-Prof. Dr. Jörg Breitung
10	Miscellaneous This module presents econometric tools for the analysis of cross-sectional data, time series and panel data at doctoral level.

SpM Business Ethics					
Module Code 1253MSBET1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Managing Business Ethics in Markets and Organisations		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content This module introduces basic business ethics concepts and applies them to decision making of managers and employees. It draws on standard ethics theories, like teleology, deontology, virtue ethics and fairness concepts. Business decisions in organisations and markets are discussed and evaluated in the light of these foundations. Case studies are employed to illustrate and apply the theoretical concepts.				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods. ... analyse current questions and challenges. ... assess and discuss findings and research results of specialized theories / methods. ... solve team-internal conflicts and target divergences independently. ... justify and defend (independently developed) positions or problem solutions. ... evaluate their own action processes in self- and external reflection and identify development potentials. ... act responsibly considering ecological, social and ethical criteria. ... critically evaluate current social developments and develop alternative solutions.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Economics: Supplementary Section Master of Science Gesundheitsökonomie: Supplementary Section Health Economics Master of Science International Management:				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Core and Advanced Section International Management Supplementary Section International Management Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Arts Medienwissenschaft: MA Media Management and Economics Master of Science Economic Research: Supplementary Section Economic Research Master of Science Business Administration - Corporate Development: Specialization Section Corporate Development Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China</p>
9	<p>Module Manager Univ.-Prof. Dr. Bernd Irlenbusch</p>
10	<p>Miscellaneous This module can contain courses which takes place either until the middle of the semester (1. term) or from the middle of the semester (2. term). The required examinations are generally offered after the respective term.</p>

SpM Strategic Development					
Module Code 1253MSSDP1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Mergers and Acquisitions		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content Key issues of corporate development				
3	Learning Objectives Students... ... understand advanced, specialised theories / methods in the area of corporate development. ... analyse current questions and challenges in the area of corporate development. ... assess and discuss findings and research results of specialised theories / methods. ... justify and defend (independently developed) positions or problem solutions. ... discuss scientific topics in a professional manner and appropriate to the situation with (non-) specialists. ... act responsibly considering ecological, social and ethical criteria.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements None				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science International Management: Supplementary Section International Management Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Science Business Administration - Corporate Development: Specialization Section Corporate Development				
9	Module Manager N.N.				
10	Miscellaneous				

SpM Strategic Human Resource Management					
Module Code 1253MSSHR1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Strategic Human Resource Management		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content The module teaches how Human Resource Management creates economic value and contributes to the implementation of corporate strategies.				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods. ... analyse current questions and challenges. ... communicate continuously and purposefully in diverse teams. ... solve team-internal conflicts and target divergences independently. ... justify and defend (independently developed) positions or problem solutions. ... act responsibly considering ecological, social and ethical criteria. ... develop work processes for real problems and challenges.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Combined examination: WT (60), PRES				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Economics: Supplementary Section Master of Science Gesundheitsökonomie: Supplementary Section Health Economics Master of Science International Management: Supplementary Section International Management Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Arts Medienwissenschaft: MA Media Management and Economics				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Master of Science Economic Research: Supplementary Section Economic Research</p> <p>Master of Science Business Administration - Corporate Development: Specialization Section Corporate Development</p> <p>Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China</p>
9	<p>Module Manager Univ.-Prof. Dr. Dirk Sliwka</p>
10	<p>Miscellaneous</p>

SpM Strategic Management					
Module Code 1253MSSMG1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Strategic Management (1. Term)		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Fundamentals of strategic management • Basic concepts and tools for analysing strategic positioning for companies on the market • Basic concepts and tools for analysing competition • Applying theoretical concepts on strategic positioning and competition in case studies 				
3	Learning Objectives Students... ... analyse current questions and challenges. ... assess and discuss findings and research results of specialized theories / methods. ... collect and analyse data material for selected scientific questions using quantitative / qualitative methods. ... communicate continuously and purposefully in diverse teams. ... solve team-internal conflicts and target divergences independently. ... justify and defend (independently developed) positions or problem solutions. ... present scientific results in a way that is appropriate for the target audience. ... evaluate their own action processes in self- and external reflection and identify development potentials. ... act responsibly considering ecological, social and ethical criteria. ... critically evaluate current social developments and develop alternative solutions. ... develop work processes for real problems and challenges.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Economics: Supplementary Section				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Master of Science Gesundheitsökonomie: Supplementary Section Health Economics</p> <p>Master of Science International Management: Core and Advanced Section International Management Supplementary Section International Management</p> <p>Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education</p> <p>Master of Arts Medienwissenschaft: MA Media Management and Economics</p> <p>Master of Science Economic Research: Supplementary Section Economic Research</p> <p>Master of Science Business Administration - Corporate Development: Specialization Section Corporate Development</p> <p>Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China</p>
9	<p>Module Manager Univ.-Prof. Dr. Matthias Heinz</p>
10	<p>Miscellaneous</p>

CM Microeconomics (Business Administration)					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1289MBMBA1	180h	6	English	every 2nd term - winter term	1 Term
1	Courses Microeconomics: Game Theory		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Non-cooperative Game Theory • Normal form games • Extensive form games, with complete and incomplete information • Finitely and infinitely repeated games • Cooperative Game Theory • Core, Shapley-value, bargaining problem • Evolutionary game theory • Social choice theory, voting • Condorcet-paradox, Arrow-theorem 				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods in the area of Game Theory. ... assess and discuss findings and research results of specialized methods. ... analyse data for selected scientific questions using quantitative methods. ... communicate continuously and purposefully in diverse teams. ... critically evaluate current social developments and develop alternative solutions. ... use techniques of scientific work and good scientific practice.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Bachelor Level Microeconomics, Macroeconomics, Mathematics				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Core and Advanced Section Supply Chain Management Supplementary Section Supply Chain Management Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Arts Regionalstudien China - Volkswirtschaftslehre:				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Economics Master Regional Studies China</p> <p>Master of Science Sociology and Social Research: Supplementary Section Sociology and Social Research</p> <p>Master of Science International Management: Supplementary Section International Management</p> <p>Master of Science Business Administration - Finance: Core and Advanced Section Finance</p> <p>Master of Science Business Administration - Marketing: Core and Advanced Section Marketing</p> <p>Master of Arts Regionalstudien Ost- und Mitteleuropa - Volkswirtschaftslehre: Economics Master Regional Studies Eastern Europe</p> <p>Master of Science Business Administration - Corporate Development: Core and Advanced Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Core and Advanced Section Accounting and Taxation</p> <p>Master of Arts Regionalstudien Lateinamerika - Volkswirtschaftslehre: Economics Master Regional Studies Latin America</p>
9	<p>Module Manager Univ.-Prof. Dr. Bettina Rockenbach</p>
10	<p>Miscellaneous</p>

SpM Market Design and Behaviour II					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1289MSMDB2	180h	6	English	irregular	1 Term
1	Courses Economic Engineering		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Evaluation of the roles of theory and laboratory/field experiments in the development of markets and incentive systems • Analysis of relevant behavioural phenomena and institutional details of particular importance for specific designs • Discussion of practical applications of economic engineering in matching markets, auctions and other markets 				
3	Learning Objectives Students... ... analyse current questions and challenges in the area of market design. ... write an academic paper on a selected topic and achieve thereby their own scientific contribution. ... discuss problems in markets with respect to different affected groups in a professional manner. ... critically evaluate current developments in different markets and develop alternative solutions.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements no recommendation				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Economics: Specialization Section Economics Supplementary Section Master of Science Sociology and Social Research: Supplementary Section Sociology and Social Research				
9	Module Manager Univ.-Prof. Dr. Axel Ockenfels				

10	Miscellaneous
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SpM Market Design and Behaviour IV					
Module Code 1289MSMDB4	Workload 180h	ECTS Credits 6	Module Language German	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses a) Auction Theory (WS) b) Contract Theory		Contact Hours a) 60h b) 45h	Self-Studies a) 120h b) 135h	Course Language a) English b) German
2	Module Content Contract Theory: • Principal-agent models • Moral hazard, adverse selection • Hold-up problem • Incomplete contracts /// Auction Theory (winter semester, until 2022/23): • Auctions with “private values”: second-price auctions, first-price auctions, reservation prices, revenue equivalence theorem, extensions • Mechanism design: revelation principle, optimal mechanisms, efficient mechanisms • Auctions with “interdependent values”: comparisons of auction proceeds, linkage principle				
3	Learning Objectives Students... ... understand advanced, specialized methods of formal institutional economics. ... analyse questions and challenges in situations with asymmetric information. ... assess findings and research results in the theory of economic incentives. ... solve contract-theoretic problems independently.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements no recommendation				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination in one of the courses offered.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Economics:				

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	Specialization Section Economics Supplementary Section Master of Science Sociology and Social Research: Supplementary Section Sociology and Social Research
9	Module Manager Univ.-Prof. Dr. Patrick W. Schmitz
10	Miscellaneous

Specialisation Module Behavioral Economics					
Module Code 1289SMBE00	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Behavioral Economics		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content Using the concept of the homo economicus, the module presents behavioural theory concepts that are based on findings from empirical and experimental research. The lectures provide an introduction to bounded rationality theories, focusing on those theories' criticism of the homo economicus concept.				
3	Learning Objectives Students... ... understand behavioural models and formal arguments. ... apply advanced microeconomic concepts. ... challenge arguments critically.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommended: Core modules in Microeconomics				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the written test.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Economics: Specialization Section Economics Supplementary Section Master of Science Sociology and Social Research: Supplementary Section Sociology and Social Research Master of Science International Management: Supplementary Section International Management Master of Science Economic Research: Supplementary Section Economic Research				

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9	Module Manager Fachbereich Mikroökonomik Jun.-Prof. Dr. Frederik Schwerter
10	Miscellaneous

CM Selected Methods in Economics					
Module Code 1289MBEXE1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Experimental Methods		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Experimental Methods in economics • Experimental designs • Analysing experimental data 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... understand advanced, specialized theories / methods in the area of experimental Economics. ... analyse current questions and challenges in the area of Microeconomics. ... assess and discuss findings and research results of specialized methods. ... analyse data for selected scientific questions using quantitative methods. ... present scientific results in a way that is appropriate for the target audience. ... critically evaluate current social developments and develop alternative solutions. ... use techniques of scientific work and good scientific practice. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Bachelor Level Microeconomics, Macroeconomics, Mathematics				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module <ul style="list-style-type: none"> Master of Science Business Administration - Supply Chain Management: <ul style="list-style-type: none"> Core and Advanced Section Supply Chain Management Supplementary Section Supply Chain Management Master of Science Business Administration - Finance: <ul style="list-style-type: none"> Supplementary Section Finance Master of Science Information Systems: <ul style="list-style-type: none"> Supplementary Section Information Systems Master of Science Business Administration - Marketing: <ul style="list-style-type: none"> Supplementary Section Marketing Master of Science Business Administration - Corporate Development: <ul style="list-style-type: none"> Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: <ul style="list-style-type: none"> Supplementary Section Accounting and Taxation Master of Arts Politikwissenschaft: <ul style="list-style-type: none"> Supplementary Section Political Science Master of Science Sociology and Social Research: <ul style="list-style-type: none"> Supplementary Section Sociology and Social Research 				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

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	<p>Master of Science Business Administration - Finance: Core and Advanced Section Finance</p> <p>Master of Science Business Administration - Marketing: Core and Advanced Section Marketing</p> <p>Master of Science Business Administration - Corporate Development: Core and Advanced Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Core and Advanced Section Accounting and Taxation</p>
9	<p>Module Manager Univ.-Prof. Michael Krause, Ph.D.</p>
10	<p>Miscellaneous</p>

SpM Market Design and Mechanism Design					
Module Code 1289MSMMD1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Matching and Market Design: Theory and Practice		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content Matching Markets, Mechanism Design with and without monetary transfers				
3	Learning Objectives Students... ... understand leading theoretical models of mechanism market design with and without monetary transfers. ... analyse existing mechanism market designs based on a portfolio of theories, experiments and empirical analyses. ... improve existing mechanism market designs.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Knowledge of game theory				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Economics: Specialization Section Economics Supplementary Section Master of Science Sociology and Social Research: Supplementary Section Sociology and Social Research Master of Science Economic Research: Specialization Section Economic Research				
9	Module Manager Univ.-Prof. Dr. Alexander Westkamp				

10	Miscellaneous
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Specialisation Module Seminar in Energy, Resource and Environmental Economics					
Module Code 1289SMSE00	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Seminar in Energy, Resource and Environmental Economics		Contact Hours 30h	Self-Studies 150h	Course Language English
2	Module Content Varying topics from the areas of: <ul style="list-style-type: none"> • Energy economics • Environmental economics • Resource economics • Climate change economics 				
3	Learning Objectives Students... ... acquire the skills necessary for independent conceptual work in the fields of energy, environmental, resource or climate change economics. ... independently analyse current issues in research and practice, using the economics knowledge gained on the programme. ... critically examine the subject-specific, scientific and applied literature, summarise their findings in a piece of written work, present the results in a seminar and discuss them with the other seminar participants.				
4	Teaching and Learning Methods seminar				
5	Module Entry Requirements No recommendations				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the combined examination.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Science Economics: Specialization Section Economics Master of Arts Politikwissenschaft: Supplementary Section Political Science				
9	Module Manager Univ.-Prof. Dr. Marc Oliver Bettzüge				
10	Miscellaneous				

SuM Energy and Climate Change I					
Module Code 1289MEECC1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Energy Markets and Regulation		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Economic models of energy markets and infrastructure • Short- and long-term equilibria • Market design and regulation • Institutions and policies • New technologies 				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods in the area of energy economics. ... discuss scientific topics in a professional manner and appropriate to the situation with (non-) specialists. ... act responsibly considering ecological, social and ethical criteria. ... critically evaluate current political, institutional, technological, and social developments.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Science Economics: Specialization Section Economics Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science International Management: Supplementary Section International Management Master of Science Economic Research: Supplementary Section Economic Research				
9	Module Manager Univ.-Prof. Dr. Marc Oliver Bettzüge				
10	Miscellaneous				

SuM Energy and Climate Change III					
Module Code 1289MEECC3	Workload 180h	ECTS Credits 6	Module Language English	Module Availability irregular	Duration 1 Term
1	Courses Quantitative Methods in Energy Economics		Contact Hours 30h	Self-Studies 150h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Numerical approaches to energy market modelling • Optimisation problems in energy economics • Empirical methods in energy economics 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... learn how to apply quantitative methods for analysing problems in energy economics. ... collect and analyse data material for selected scientific questions using quantitative / qualitative methods. ... write an academic paper on a selected topic and achieve thereby their own scientific contribution. ... present scientific results in a way that is appropriate for the target audience. ... use techniques of scientific work and good scientific practice. 				
4	Teaching and Learning Methods seminar				
5	Module Entry Requirements Recommendation: SuM Energy and Climate Change I				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module <ul style="list-style-type: none"> Master of Science Business Administration - Supply Chain Management: <ul style="list-style-type: none"> Supplementary Section Supply Chain Management Master of Science Information Systems: <ul style="list-style-type: none"> Supplementary Section Information Systems Master of Science Economics: <ul style="list-style-type: none"> Specialization Section Economics Master of Arts Politikwissenschaft: <ul style="list-style-type: none"> Supplementary Section Political Science Master of Science Economic Research: <ul style="list-style-type: none"> Supplementary Section Economic Research 				
9	Module Manager Univ.-Prof. Dr. Marc Oliver Bettzüge				
10	Miscellaneous				

SuM Energy and Climate Change IV					
Module Code 1289MEECC4	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Model UNFCCC - Climate Change Strategy		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Economics of climate change • Resource economics • Fundamentals of energy economics • Environmental economics • Economics and politics of international climate change agreements 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... analyse current questions and challenges in the area of energy economics and climate policy. ... write an academic paper on a selected topic and achieve thereby their own scientific contribution. ... communicate continuously and purposefully in diverse teams. ... justify and defend (independently developed) positions or problem solutions. ... develop work processes for real problems and challenges. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements None				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module <ul style="list-style-type: none"> Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Science Economics: Specialization Section Economics Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Economic Research: Supplementary Section Economic Research 				
9	Module Manager Univ.-Prof. Dr. Marc Oliver Bettzüge				
10	Miscellaneous				

Specialisation module Competition Policy					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1289SMCP00	180h	6	English	irregular	1 Term
1	Courses Competition Policy		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Institutional background: competition policy in Germany, the EU and the US • Market power: theory and measurement • Unilateral abuse of market power: horizontal and vertical restraints on competition • Multilateral abuse of market power: cartels and implicit agreements 				
3	Learning Objectives Students... ... recognise, based on models of competition theory, how competitive markets work. ... discuss the causes of market power and its effects in terms of welfare economics. ... assess, evaluate and debate cases that illustrate competition policy in practice and use competition theory to analyse them.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements No recommendations				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the written test.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Mathematik: Economics Master of Science Economics: Specialization Section Economics Supplementary Section Master of Arts Regionalstudien China - Volkswirtschaftslehre: Economics Master Regional Studies China Master of Science Wirtschaftsmathematik: Economics Master of Science International Management: Core and Advanced Section International Management				

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	<p>Master of Arts Regionalstudien Ost- und Mitteleuropa - Volkswirtschaftslehre: Economics Master Regional Studies Eastern Europe</p> <p>Master of Science Economic Research: Supplementary Section Economic Research</p> <p>Master of Science Geographie: Economics Master Geography</p> <p>Master of Arts Regionalstudien Lateinamerika - Volkswirtschaftslehre: Economics Master Regional Studies Latin America</p>
9	<p>Module Manager Univ.-Prof. Dr. Christoph Schottmüller</p>
10	<p>Miscellaneous</p>

Specialisation Module Financial Theory					
Module Code 1259SFith0	Workload 360h	ECTS Credits 12	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses a) Capital Market Theory (1. Term) b) Corporate Finance Theory (1. Term)		Contact Hours a) 60h b) 60h	Self-Studies a) 120h b) 120h	Course Language a) English b) English
2	Module Content <ul style="list-style-type: none"> • Capital markets and consumption • Investment decisions given certainty and uncertainty • Portfolio theory • Asset pricing models • Analysis and valuation of forwards, futures, and options • Equity valuation models (in particular Discounted Cash Flow methods, models of residual income, Multiples approach) • Impact of financial policies • M&A activities and defensive strategies • Aspects of balancing of accounts and financial realisation of mergers and acquisitions 				
3	Learning Objectives Students... ... analyse investment decisions. ... understand asset pricing models. ... determine the value of securities and derivatives. ... use different methods of valuing companies and individual assets. ... learn how to analyse annual accounts in order to extract value relevant information. ... recognize different theories explaining M&A-activities. ... analyse manager interests in mergers and acquisitions.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements no recommendations				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the written test. Both courses must be attended; the examination refers to topics of both courses.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development				

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	<p>Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation</p> <p>Master of Science Mathematik: MA Business and Economics Sciences Mathematics</p> <p>Master of Science Economics: Supplementary Section</p> <p>Master of Science Wirtschaftsmathematik: MA Business and Economics Sciences Mathematics</p> <p>Master of Science International Management: Core and Advanced Section International Management Supplementary Section International Management</p> <p>Master of Science Business Administration - Finance: Specialization Section Finance</p> <p>Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education</p> <p>Master of Science Geographie: Business Administration Master Geography</p> <p>Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China</p>
9	<p>Module Manager Univ.-Prof. Dr. Dieter Hess Univ.-Prof. Dr. Alexander Kempf Dr. Alexander Pütz</p>
10	<p>Miscellaneous</p>

Specialisation Module Financial Institutions Management					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1259SFIMa0	360h	12	English	every 2nd term - winter term	1 Term
1	Courses a) Insurance Economics b) Risk Management (2. Term)		Contact Hours a) 60h b) 60h	Self-Studies a) 120h b) 120h	Course Language a) English b) English
2	Module Content Module content 1. Risk Management <ul style="list-style-type: none"> • Risk control on perfect and imperfect financial markets • Risk and risk measures • Management of liquidity risk • Management of interest rate risk • Management of default risk 2. Insurance Economics <ul style="list-style-type: none"> • Insurance demand theory • Production theory in insurance • Market balance in regard to information symmetry and asymmetry • Basics of sector-specific tariff calculation and reserve creation • Claim settlement • Introduction to solvency standards 				
3	Learning Objectives Students... ... analyse various risk measures in terms of effective risk/return management. ... apply risk measures to decision-making problems in bank operations. ... assess regulatory standards intended to limit risk. ... are familiar with the methods for measuring market and default risks. ... assess instruments for controlling market and default risks. ... analyse insurance supply and demand. ... can explain information symmetry and asymmetry. ... assess the institutional parameters for insurance markets. ... calculate premiums and reserves in life and indemnity insurance.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements no recommendations				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the written test. Both courses must be attended; the examination refers to topics of both courses.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management:				

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	<p>Supplementary Section Supply Chain Management</p> <p>Master of Science Information Systems: Supplementary Section Information Systems</p> <p>Master of Science Business Administration - Marketing: Supplementary Section Marketing</p> <p>Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation</p> <p>Master of Science Mathematik: MA Business and Economics Sciences Mathematics</p> <p>Master of Science Economics: Supplementary Section</p> <p>Master of Science Gesundheitsökonomie: Supplementary Section Health Economics</p> <p>Master of Science Wirtschaftsmathematik: MA Business and Economics Sciences Mathematics</p> <p>Master of Science International Management: Supplementary Section International Management</p> <p>Master of Science Business Administration - Finance: Specialization Section Finance</p> <p>Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education</p> <p>Master of Science Geographie: Business Administration Master Geography</p> <p>Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China</p>
9	<p>Module Manager</p> <p>Univ.-Prof. Dr. Thomas Hartmann-Wendels Univ.-Prof. Dr. Heinrich R. Schradin</p>
10	<p>Miscellaneous</p>

Specialisation Module Finance 2					
Module Code 1259SMFi09	Workload 180h	ECTS Credits 6	Module Language German and English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Fixed Income Management		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Market for Fixed Income securities • Trading strategies • Types of bonds and risk factors • Yield curves • Bond valuation and management • Interest rate derivatives 				
3	Learning Objectives Students... ... outline how the Fixed Income market operates. ... analyse various investment styles and their prospects of success. ... value bonds and bond portfolios. ... calculate the risks involved in bonds. ... weigh the anticipated return against the risk taken in order to ensure professional and responsible risk management. ... compare portfolio management strategies. ... answer critical questions confidently. ... work on practical exercises in small groups to discuss the knowledge and methods learned in class. ... agree on suitable methods for solving the practical exercises within the small groups and justify their decision. ... students reflect their own learning success by solving case studies independently.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommended: Specialisation Module Financial Theory				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the written test.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development				

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	<p>Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation</p> <p>Master of Science Mathematik: MA Business and Economics Sciences Mathematics</p> <p>Master of Science Wirtschaftsmathematik: MA Business and Economics Sciences Mathematics</p> <p>Master of Science International Management: Supplementary Section International Management</p> <p>Master of Science Business Administration - Finance: Specialization Section Finance Supplementary Section Finance</p> <p>Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education</p> <p>Master of Science Geographie: Business Administration Master Geography</p> <p>Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China</p>
9	<p>Module Manager Univ.-Prof. Dr. Alexander Kempf Dr. Alexander Pütz</p>
10	<p>Miscellaneous</p>

Specialisation Module Finance 5					
Module Code 1259SMFi10	Workload 180h	ECTS Credits 6	Module Language German and English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Insurance		Contact Hours 60h	Self-Studies 120h	Course Language German
2	Module Content Part A: Reinsurance and ART <ul style="list-style-type: none"> • Reinsurance and Alternative Risk Transfer • Forms of traditional Reinsurance • Financial Reinsurance • Alternative Risk Transfer Part B: Management of groups and mutual principle <ul style="list-style-type: none"> • Management of groups and mutual principle • Construction of insurance groups • Risk Management and insurance groups 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... understand advanced, specialized theories / methods in the area of finance. ... analyse current questions and challenges in the area of finance. ... assess and discuss findings and research results of specialized theories / methods. ... discuss scientific topics in a professional manner and appropriate to the situation. ... critically evaluate current developments in finance. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements no recommendations				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the written test. Both courses must be attended; the examination refers to topics of both courses.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Mathematik: MA Business and Economics Sciences Mathematics				

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	<p>Master of Science Economics: Supplementary Section</p> <p>Master of Science Wirtschaftsmathematik: MA Business and Economics Sciences Mathematics</p> <p>Master of Science Business Administration - Finance: Specialization Section Finance Supplementary Section Finance</p> <p>Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education</p>
9	<p>Module Manager Univ.-Prof. Dr. Heinrich R. Schradin</p>
10	<p>Miscellaneous</p>

Specialisation Module Finance 7					
Module Code 1259SMFi07	Workload 180h	ECTS Credits 6	Module Language German and English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Rechnungslegung von Versicherungsunternehmen nach HGB und IFRS		Contact Hours 30h	Self-Studies 60h	Course Language German
2	Module Content <ul style="list-style-type: none"> • Accounting systems • Sources of law • HGB, IAS/IFRS accounting methods • Full fair value accounting 				
3	Learning Objectives Students... ... analyse insurance companies' annual financial statements based on different accounting rules. ... value claims reserves, claims equalization reserves and actuarial reserves. ... explore the impact of different accounting rules on how balance sheet items are valued. ... implement risk-based auditing strategies for insurance companies.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements no recommendations				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the written test.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Mathematik: MA Business and Economics Sciences Mathematics Master of Science Economics: Supplementary Section Master of Science Wirtschaftsmathematik: MA Business and Economics Sciences Mathematics Master of Science Business Administration - Finance: Specialization Section Finance Supplementary Section Finance				

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	<p>Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education</p> <p>Master of Science Geographie: Business Administration Master Geography</p> <p>Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China</p>
9	<p>Module Manager Univ.-Prof. Dr. Heinrich R. Schradin</p>
10	<p>Miscellaneous</p>

Specialisation module Finance 8					
Module Code 1259SMFi08	Workload 180h	ECTS Credits 6	Module Language German and English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Asset Management		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Investment process and design of equity funds • Trading strategies for equity funds • Risk factors 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... outline the institutional framework related to asset management. ... analyse various investment styles and their prospects of success. ... value stock, bonds and combined stock/bond portfolios. ... calculate the risks involved in stocks and bonds. ... weigh the anticipated return against the risk taken in order to ensure professional and responsible risk management. ... compare portfolio management strategies. ... answer critical questions confidently. ... work on practical exercises in small groups to discuss the knowledge and methods learned in class. ... agree on suitable methods for solving the practical exercises within the small groups and justify their decision. ... reflect their own learning success by solving case studies independently. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommended: Specialisation Module Financial Theory				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the written test.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Mathematik:				

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	<p>MA Business and Economics Sciences Mathematics Master of Science Wirtschaftsmathematik: MA Business and Economics Sciences Mathematics Master of Science International Management: Supplementary Section International Management Master of Science Business Administration - Finance: Specialization Section Finance Supplementary Section Finance Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Science Geographie: Business Administration Master Geography Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China</p>
9	<p>Module Manager Univ.-Prof. Dr. Alexander Kempf Dr. Alexander Pütz</p>
10	<p>Miscellaneous</p>

Specialisation Module Value-Based Management in Insurance					
Module Code 1259SMVB00	Workload 180h	ECTS Credits 6	Module Language English	Module Availability irregular	Duration 1 Term
1	Courses Value-Based Management in Insurance - Theory and Practice		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Introduction in Insurance Management • Insurance Risk and Production Technology • Risk Modelling and Risk Measurement • Risk Management and Shareholder Wealth • Risk-based Capital Allocation • Decision-making in a Value-Based Management Framework • Trends and Challenges in the Insurance Industry • Trends and Challenges in the Insurance Industry 				
3	Learning Objectives Students... ... learn methods for managing and evaluating insurance companies. ... learn methods of value-based management in insurance companies. ... model cash flows of insurance companies. ... analyze the risk situation of insurance companies. ... assess different methods for calculating the capital requirements. ... assess different methods for risk capital allocation. ... learn fundamentals of asset liability management.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the written examination.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Mathematik: MA Business and Economics Sciences Mathematics Master of Science Economics: Supplementary Section				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Master of Science Wirtschaftsmathematik: MA Business and Economics Sciences Mathematics</p> <p>Master of Science International Management: Supplementary Section International Management</p> <p>Master of Science Business Administration - Finance: Specialization Section Finance Supplementary Section Finance</p> <p>Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education</p>
9	<p>Module Manager Dr. Muhammed Altuntas Univ.-Prof. Dr. Heinrich R. Schradin</p>
10	<p>Miscellaneous</p>

Specialisation Module Selected Issues in Finance I (6 LP)					
Module Code 1259SIIIF01	Workload 180h	ECTS Credits 6	Module Language German	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses a) Management of Leasing Companies (1st term) b) Management von Bausparkassen		Contact Hours a) 60h b) 30h	Self-Studies a) 120h b) 150h	Course Language b) German
2	Module Content a) Management of building societies: • Main contents of the Building and Loan Associations Act (Bausparkassengesetz) • Basic theories of controlling depositors groups • Risk categories relevant for building societies • Managing interest rate margins on a depositor group level • Management of liquidity risks • Impact of the Basel Committee's capital accords on building societies b) Management of Leasing Companies: • Institutional Economic Analysis of Leases • Financing of Leasing Companies • Special Features of Accounting for Leasing Contracts • Calculation of Net Asset Value • Financial Controlling of Leasing Companies' Profit and Risk Situation				
3	Learning Objectives Students... ... analyse the theoretical fundamentals of the leasing business ... recognise the special features of leasing in term in term of business administration ... assess different refinancing possibilities for leasing companies ... calculate net asset value in order to value leasing portfolios ... discuss the special features of accounting for leasing contracts ... apply financial controlling instruments to leasing companies' return/risk control activities ... develop an understanding for the managerial tasks in a leasing company				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements No recommendations				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the written test in one of the courses.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development:				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Supplementary Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation</p> <p>Master of Science Mathematik: MA Business and Economics Sciences Mathematics</p> <p>Master of Science Wirtschaftsmathematik: MA Business and Economics Sciences Mathematics</p> <p>Master of Science Business Administration - Finance: Specialization Section Finance Supplementary Section Finance</p>
9	<p>Module Manager Univ.-Prof. Dr. Thomas Hartmann-Wendels</p>
10	<p>Miscellaneous</p>

CM Macroeconomics					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1302MBMAC1	180h	6	English	every 2nd term - winter term	1 Term
1	Courses Macroeconomics		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content The course focuses on macroeconomic theory and issues. In its first part, it covers key determinants of economic growth and cross-country income differences, using modern growth theory. In the second part, short-term fluctuations in economic activity and stabilisation policy are covered, using real business cycle and new Keynesian models. Both parts ask when market outcomes are sustainable, whether they coincide with outcomes that are optimal from society's perspective, and whether economic policy can help achieve socially desirable outcomes. The course also introduces methods of dynamic optimisation and simulation of macroeconomic models.				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods. ... analyse current questions and challenges. ... present scientific results in a way that is appropriate for the target audience. ... act responsibly considering ecological, social and ethical criteria. ... critically evaluate current social developments and develop alternative solutions.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Microeconomics, Macroeconomics and Bachelor Level Mathematics				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economics: Core and Advanced Section Economics Master of Arts Regionalstudien China - Volkswirtschaftslehre: Economics Master Regional Studies China Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science International Management: Supplementary Section International Management Master of Arts Regionalstudien Ost- und Mitteleuropa - Volkswirtschaftslehre: Economics Master Regional Studies Eastern Europe Master of Science Business Administration - Corporate Development:				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	Supplementary Section Corporate Development Master of Arts Regionalstudien Lateinamerika - Volkswirtschaftslehre: Economics Master Regional Studies Latin America
9	Module Manager Univ.-Prof. Michael Krause, Ph.D.
10	Miscellaneous

SpM Markets and Economic Policy I					
Module Code 1302MSMEP1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Growth, Inequality and Structural Change		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Neoclassical Growth • The Rate and the Direction of Technical Change • Automation, Work and Leisure • Men, Robots, and Artificial Intelligence • Sectorial Change (Deindustrialisation, Services, Real Estate, Rise of the State) • Technical Change and Inequality • The Affluent Society and its Economic Problems 				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods. ... analyse current questions and challenges. ... assess and discuss findings and research results of specialized theories / methods.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: CM Macroeconomics or CM Advanced Macroeconomics I				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economics: Specialization Section Economics Supplementary Section Master of Arts Regionalstudien China - Volkswirtschaftslehre: Economics Master Regional Studies China Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Arts Regionalstudien Ost- und Mitteleuropa - Volkswirtschaftslehre: Economics Master Regional Studies Eastern Europe Master of Science Economic Research: Supplementary Section Economic Research Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	Master of Arts Regionalstudien Lateinamerika - Volkswirtschaftslehre: Economics Master Regional Studies Latin America
9	Module Manager Univ.-Prof. Dr. Peter Funk
10	Miscellaneous

SpM Markets and Economic Policy IV					
Module Code 1302MSMEP4	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Macroeconomics of the Labour Market		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Labour Market Dynamics: job creation and destruction • Theory of Search Unemployment • The Search and Matching Model of the Labour Market • Structural Labour Market Policy: Employment Protection and Unemployment Insurance • Labour Markets and the Business Cycle • Specific Topics in Macroeconomics of the Labour Market 				
3	Learning Objectives Students... ... assess and discuss findings and research results of specialized theories / methods. ... justify and defend (independently developed) positions or problem solutions. ... discuss scientific topics in a professional manner and appropriate to the situation with (non-) specialists. ... critically evaluate current social developments and develop alternative solutions.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: CM Macroeconomics or CM Advanced Macroeconomics; CM Microeconomics or CM Microeconomics (Business Administration) or CM Advanced Microeconomics; CM Mathematics or CM Advanced Mathematics				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economics: Specialization Section Economics Supplementary Section Master of Arts Regionalstudien China - Volkswirtschaftslehre: Economics Master Regional Studies China Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Arts Regionalstudien Ost- und Mitteleuropa - Volkswirtschaftslehre: Economics Master Regional Studies Eastern Europe Master of Science Economic Research:				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Supplementary Section Economic Research Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Arts Regionalstudien Lateinamerika - Volkswirtschaftslehre: Economics Master Regional Studies Latin America</p>
9	<p>Module Manager Univ.-Prof. Michael Krause, Ph.D.</p>
10	<p>Miscellaneous</p>

SpM Markets and Economic Policy III					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1302MSMEP3	180h	6	English	every 2nd term - winter term	1 Term
1	Courses Development Economics		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Introduction to development economics based on theoretical and empirical research • Causes and consequences of poverty, underinvestment in health, education, and wealth • Risk and insurance • Methods to evaluate development projects and policies 				
3	Learning Objectives Students... ... assess and discuss findings and research results of specialized theories / methods. ... collect and analyse data material for selected scientific questions using quantitative / qualitative methods. ... justify and defend (independently developed) positions or problem solutions. ... evaluate their own action processes in self- and external reflection and identify development potentials.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: CM Econometrics or CM Applied Econometrics (Business Administration)				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economics: Specialization Section Economics Supplementary Section Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Economic Research: Supplementary Section Economic Research				
9	Module Manager Univ.-Prof. Dr. Erik Hornung				
10	Miscellaneous				

SpM Markets and Economic Policy V					
Module Code 1302MSMEP5	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Determinants of Growth in Economic History		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Introduction to the determinants of long-term development and growth in economic history, especially geography, institutions and cultural factors • Methods for assessing causal relationships between the determinants and current economic development 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... assess and discuss findings and research results of specialized theories / methods. ... justify and defend (independently developed) positions or problem solutions. ... evaluate their own action processes in self- and external reflection and identify development potentials. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: CM Econometrics or CM Applied Econometrics (Business Administration)				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module <ul style="list-style-type: none"> Master of Science Economics: <ul style="list-style-type: none"> Specialization Section Economics Supplementary Section Master of Arts Politikwissenschaft: <ul style="list-style-type: none"> Supplementary Section Political Science Master of Science Business Administration - Finance: <ul style="list-style-type: none"> Supplementary Section Finance Master of Science Information Systems: <ul style="list-style-type: none"> Supplementary Section Information Systems Master of Science Economic Research: <ul style="list-style-type: none"> Supplementary Section Economic Research 				
9	Module Manager Univ.-Prof. Dr. Erik Hornung				
10	Miscellaneous				

SpM Market Design and Behaviour III					
Module Code 1289MSMDB3	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Economics of Innovation		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content Core and current research in the field Economics of Innovation: <ul style="list-style-type: none"> • Ideas and knowledge production, adoption and diffusion of technologies • Competition in product markets, market entry, innovation, and economic growth • Innovation, productivity, and reallocation • Intellectual property rights, science and basic research • Mobility of innovators and high-skilled individuals • Decision-making of inventors and entrepreneurs • Artificial intelligence, automation, and digital transformation Empirical modelling and econometric methods: <ul style="list-style-type: none"> • Potential outcomes, treatments, assignment mechanisms, and identification of causal effects • Difference-in-differences methods, methods using instrumental variables • Propensity-score and matching methods, non- and semi-parametric models, machine learning 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... understand advanced methods in the field Economics of Innovation. ... extend and use their knowledge of econometrics, economic theory, and data sources. ... assess and evaluate quantitative findings and research results. ... present and discuss scientific contributions, including their own contributions. ... are introduced to new research questions. ... use techniques of scientific work and good scientific practice. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: CMs Econometrics, Microeconomics, and Macroeconomics and AM Empirical Methods in the M.Sc. Economics or the CMs Advanced Econometrics I and II, Advanced Microeconomics I, and Advanced Macroeconomics I in the M.Sc. Economic Research				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Master of Science Information Systems: Supplementary Section Information Systems</p> <p>Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development</p> <p>Master of Science Economics: Specialization Section Economics Supplementary Section</p>
9	<p>Module Manager Univ.-Prof. Dr.' Susanne Prantl</p>
10	<p>Miscellaneous See the relevant online systems and www.ieam.uni-koeln.de for further information.</p>

CM Microeconomics (Business Administration)					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1289MBMBA1	180h	6	English	every 2nd term - winter term	1 Term
1	Courses Microeconomics: Game Theory		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Non-cooperative Game Theory • Normal form games • Extensive form games, with complete and incomplete information • Finitely and infinitely repeated games • Cooperative Game Theory • Core, Shapley-value, bargaining problem • Evolutionary game theory • Social choice theory, voting • Condorcet-paradox, Arrow-theorem 				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods in the area of Game Theory. ... assess and discuss findings and research results of specialized methods. ... analyse data for selected scientific questions using quantitative methods. ... communicate continuously and purposefully in diverse teams. ... critically evaluate current social developments and develop alternative solutions. ... use techniques of scientific work and good scientific practice.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Bachelor Level Microeconomics, Macroeconomics, Mathematics				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Core and Advanced Section Supply Chain Management Supplementary Section Supply Chain Management Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Arts Regionalstudien China - Volkswirtschaftslehre:				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Economics Master Regional Studies China</p> <p>Master of Science Sociology and Social Research: Supplementary Section Sociology and Social Research</p> <p>Master of Science International Management: Supplementary Section International Management</p> <p>Master of Science Business Administration - Finance: Core and Advanced Section Finance</p> <p>Master of Science Business Administration - Marketing: Core and Advanced Section Marketing</p> <p>Master of Arts Regionalstudien Ost- und Mitteleuropa - Volkswirtschaftslehre: Economics Master Regional Studies Eastern Europe</p> <p>Master of Science Business Administration - Corporate Development: Core and Advanced Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Core and Advanced Section Accounting and Taxation</p> <p>Master of Arts Regionalstudien Lateinamerika - Volkswirtschaftslehre: Economics Master Regional Studies Latin America</p>
9	<p>Module Manager Univ.-Prof. Dr. Bettina Rockenbach</p>
10	<p>Miscellaneous</p>

Specialisation module Competition Policy					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1289SMCP00	180h	6	English	irregular	1 Term
1	Courses Competition Policy		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Institutional background: competition policy in Germany, the EU and the US • Market power: theory and measurement • Unilateral abuse of market power: horizontal and vertical restraints on competition • Multilateral abuse of market power: cartels and implicit agreements 				
3	Learning Objectives Students... ... recognise, based on models of competition theory, how competitive markets work. ... discuss the causes of market power and its effects in terms of welfare economics. ... assess, evaluate and debate cases that illustrate competition policy in practice and use competition theory to analyse them.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements No recommendations				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the written test.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Mathematik: Economics Master of Science Economics: Specialization Section Economics Supplementary Section Master of Arts Regionalstudien China - Volkswirtschaftslehre: Economics Master Regional Studies China Master of Science Wirtschaftsmathematik: Economics Master of Science International Management: Core and Advanced Section International Management				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Master of Arts Regionalstudien Ost- und Mitteleuropa - Volkswirtschaftslehre: Economics Master Regional Studies Eastern Europe</p> <p>Master of Science Economic Research: Supplementary Section Economic Research</p> <p>Master of Science Geographie: Economics Master Geography</p> <p>Master of Arts Regionalstudien Lateinamerika - Volkswirtschaftslehre: Economics Master Regional Studies Latin America</p>
9	<p>Module Manager Univ.-Prof. Dr. Christoph Schottmüller</p>
10	<p>Miscellaneous</p>

SpM Media Economics					
Module Code 1289MSMEC1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Media Economics		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Characteristics of media markets • Cost and revenue structures on media markets • Digital transformation of media markets • Political economy of media markets 				
3	Learning Objectives Students... ... analyse current questions and challenges. ... assess and discuss findings and research results of specialised theories / methods. ... critically evaluate current social developments and develop alternative solutions.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements None				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Economics: Specialization Section Economics Supplementary Section Master of Science International Management: Supplementary Section International Management Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Economic Research: Supplementary Section Economic Research				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education
9	Module Manager Univ.-Prof. Dr. Johannes Münster
10	Miscellaneous

CM Health Economics III					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1282MBHHE3	180h	6	English	every 2nd term - winter term	1 Term
1	Courses Information problems in healthcare markets		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Relevant players on these markets, their goals and factors influencing decisions • Relationships between the players and implications in terms of health care market design • Analysis of existing health care systems in Europe and the rest of the world 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... analyse current questions and challenges. ... assess and discuss findings and research results of specialized theories / methods. ... justify and defend (independently developed) positions or problem solutions. ... critically evaluate current social developments and develop alternative solutions. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module <ul style="list-style-type: none"> Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Economics: Specialization Section Economics Supplementary Section Master of Science Gesundheitsökonomie: Core and Advanced Section Health Economics Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Science Economic Research: Supplementary Section Economic Research 				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

9	Module Manager Univ.-Prof. Dr. Christoph Schottmüller
10	Miscellaneous

SpM Market Design and Behaviour III					
Module Code 1289MSMDB3	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Economics of Innovation		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content Core and current research in the field Economics of Innovation: <ul style="list-style-type: none"> • Ideas and knowledge production, adoption and diffusion of technologies • Competition in product markets, market entry, innovation, and economic growth • Innovation, productivity, and reallocation • Intellectual property rights, science and basic research • Mobility of innovators and high-skilled individuals • Decision-making of inventors and entrepreneurs • Artificial intelligence, automation, and digital transformation Empirical modelling and econometric methods: <ul style="list-style-type: none"> • Potential outcomes, treatments, assignment mechanisms, and identification of causal effects • Difference-in-differences methods, methods using instrumental variables • Propensity-score and matching methods, non- and semi-parametric models, machine learning 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... understand advanced methods in the field Economics of Innovation. ... extend and use their knowledge of econometrics, economic theory, and data sources. ... assess and evaluate quantitative findings and research results. ... present and discuss scientific contributions, including their own contributions. ... are introduced to new research questions. ... use techniques of scientific work and good scientific practice. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: CMs Econometrics, Microeconomics, and Macroeconomics and AM Empirical Methods in the M.Sc. Economics or the CMs Advanced Econometrics I, Advanced Microeconomics I, and Advanced Macroeconomics I in the M.Sc. Economic Research				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Master of Science Information Systems: Supplementary Section Information Systems</p> <p>Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development</p> <p>Master of Science Economics: Specialization Section Economics Supplementary Section</p>
9	<p>Module Manager Univ.-Prof. Dr.' Susanne Prantl</p>
10	<p>Miscellaneous See the relevant online systems and www.ieam.uni-koeln.de for further information.</p>

SpM Market Design and Mechanism Design					
Module Code 1289MSMMD1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Matching and Market Design: Theory and Practice		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content Matching Markets, Mechanism Design with and without monetary transfers				
3	Learning Objectives Students... ... understand leading theoretical models of mechanism market design with and without monetary transfers. ... analyse existing mechanism market designs based on a portfolio of theories, experiments and empirical analyses. ... improve existing mechanism market designs.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Knowledge of game theory				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Economics: Specialization Section Economics Supplementary Section Master of Science Sociology and Social Research: Supplementary Section Sociology and Social Research Master of Science Economic Research: Specialization Section Economic Research				
9	Module Manager Univ.-Prof. Dr. Alexander Westkamp				

10	Miscellaneous
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SuM Media and Technology Management - Enterprises, Markets, and Strategies					
Module Code 1284MEEMS1	Workload 180h	ECTS Credits 6	Module Language German and English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Media and Technology Management: Enterprises, Markets, and Strategies		Contact Hours 30h	Self-Studies 150h	Course Language German and English
2	Module Content <ul style="list-style-type: none"> • Overview of business models and characteristics of various media and telecommunications industries and markets in the digital age • Economic characteristics of digital products and services and resulting pricing strategies (economy of digital goods) • MTM infrastructures and their regulation and influence on MTM business models, companies and social welfare • Design options and decision strategies on digital and hybrid platforms and markets • Application of concepts of technology and innovation management, strategy development, transformation evaluation and entrepreneurship to selected media, IS and telecommunications companies, markets, platforms and innovations 				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods in the area of Media and Technology Management. ... analyse current questions and challenges in the area of Media and Technology Management. ... assess and discuss findings and research results of specialized theories / methods.				
4	Teaching and Learning Methods lecture Colloquium				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economics: Supplementary Section Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Arts Medienwissenschaft: MA Media Management and Economics Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

9	Module Manager Univ.-Prof. Dr. Claudia Loebbecke, M.B.A.
10	Miscellaneous

SuM Media and Technology Management - Selected Issues I					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1284MEMTM1	180h	6	German and English	every 2nd term - winter term	1 Term
1	Courses Selected Media and Technology Issues		Contact Hours 30h	Self-Studies 150h	Course Language German and English
2	Module Content Varying topics				
3	Learning Objectives Students... ... analyse current questions and challenges in the area of Media and Technology Management. ... justify and defend (independently developed) positions or problem solutions. ... discuss scientific topics in a professional manner and appropriate to the situation with (non-) specialists. ... act responsibly considering ecological, social and ethical criteria. ... critically evaluate current social developments and develop alternative solutions.				
4	Teaching and Learning Methods seminar Colloquium				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economics: Supplementary Section Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Arts Medienwissenschaft: MA Media Management and Economics Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education				
9	Module Manager Univ.-Prof. Dr. Claudia Loebbecke, M.B.A.				
10	Miscellaneous				

SuM Media and Technology Management - Selected Issues II					
Module Code 1284MEMTM2	Workload 180h	ECTS Credits 6	Module Language German and English	Module Availability irregular	Duration 1 Term
1	Courses Selected Media and Technology Issues		Contact Hours 30h	Self-Studies 150h	Course Language German and English
2	Module Content Varying topics				
3	Learning Objectives Students... ... analyse current questions and challenges in the area of Media and Technology Management. ... assess and discuss findings and research results of specialized theories / methods. ... justify and defend (independently developed) positions or problem solutions. ... critically evaluate current social developments and develop alternative solutions. ... use techniques of scientific work and good scientific practice.				
4	Teaching and Learning Methods seminar Colloquium				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economics: Supplementary Section Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education				
9	Module Manager Univ.-Prof. Dr. Claudia Loebbecke, M.B.A.				
10	Miscellaneous				

SuM Media and Technology Management - Research and Publications					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1284MEMRP1	180h	6	English	irregular	1 Term
1	Courses Media and Technology Management: Research and Publications		Contact Hours 30h	Self-Studies 150h	Course Language English
2	Module Content The focus of this event is on scientific work, research design and research methods in the field of media and technology management and information systems.				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods in the field of media and technology management. ... analyse current questions and challenges in the field of media and technology management. ... assess and discuss findings and research results of specialized theories / methods. ... collect, systematize and synthesize independently literature on selected scientific questions. ... prepare independently a research design for a question. ... justify and defend (independently developed) positions or problem solutions. ... present scientific results in a manner appropriate to the target audience. ... use techniques of scientific work and good scientific practice.				
4	Teaching and Learning Methods seminar				
5	Module Entry Requirements Recommendation: At least parallel assignment of an MTM Master Module and interest to write the Master thesis in MTM.				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the module examination.				
8	Other Programmes that Use the Module Master of Science Economics: Supplementary Section Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Arts Medienwissenschaft: MA Media Management and Economics Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education				
9	Module Manager Univ.-Prof. Dr.' Claudia Loebbecke, M.B.A.				
10	Miscellaneous See www.mtm.uni-koeln.de				

SpM Media Economics					
Module Code 1289MSMEC1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Media Economics		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Characteristics of media markets • Cost and revenue structures on media markets • Digital transformation of media markets • Political economy of media markets 				
3	Learning Objectives Students... ... analyse current questions and challenges. ... assess and discuss findings and research results of specialised theories / methods. ... critically evaluate current social developments and develop alternative solutions.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements None				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Economics: Specialization Section Economics Supplementary Section Master of Science International Management: Supplementary Section International Management Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Economic Research: Supplementary Section Economic Research				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education
9	Module Manager Univ.-Prof. Dr. Johannes Münster
10	Miscellaneous

SpM Empirical Methods and Data Analysis I					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1314MSEMD1	180h	6	English	every 2nd term - winter term	1 Term
1	Courses a) Statistical Inference b) Topics in Econometrics and Statistics I		Contact Hours a) 45h b) 45h	Self-Studies a) 135h b) 135h	Course Language a) English b) English
2	Module Content <ul style="list-style-type: none"> • Foundations of probability theory • Theory of point estimation and estimation techniques (e.g. maximum likelihood) • Theory of hypothesis testing and selected tests • Interval estimation 				
3	Learning Objectives Students... ... understand advanced, specialised theories / methods.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: solid basic knowledge of probability theory				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the written examination of one course. A course is to be attended; the written examination relates to the content of one course.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Core and Advanced Section Supply Chain Management Master of Science Economics: Specialization Section Economics Supplementary Section Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Core and Advanced Section Finance Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Business Administration - Marketing: Core and Advanced Section Marketing				

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Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Master of Science Economic Research: Supplementary Section Economic Research</p> <p>Master of Science Business Administration - Corporate Development: Core and Advanced Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Core and Advanced Section Accounting and Taxation</p>
9	<p>Module Manager Univ.-Prof. Dr. Dominik Wied</p>
10	<p>Miscellaneous</p>

SpM Empirical Methods and Data Analysis III					
Module Code 1314MSEMD3	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses a) Time Series Econometrics b) Stochastic Models and Processes c) Topics in Econometrics and Statistics III		Contact Hours a) 45h b) 45h c) 45h	Self-Studies a) 135h b) 135h c) 135h	Course Language a) English b) English c) English
2	Module Content a) Time Series Econometrics: <ul style="list-style-type: none"> • ARMA Models • State-Space Models • Models for Non-Stationary Time Series • Multivariate Time Series Models • Non-Stationarity in Multivariate Time Series b) Stochastic Models and Processes: <ul style="list-style-type: none"> • Deepening topics in statistical inference • bootstrap • nonparametric density estimation • nonparametric tests (e.g. for independence) • Brownian motions • Poisson processes • Markov processes Course c) Topics in Econometrics and Statistics III will be offered if available.				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods. ... analyse current questions and challenges. ... collect and analyse data material for selected scientific questions using quantitative / qualitative methods.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Solid basic knowledge of probability theory				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the written examination of one course. A course is to be attended; the written examination relates to the content of one course.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Core and Advanced Section Supply Chain Management				

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	<p>Master of Science Economics: Specialization Section Economics Supplementary Section</p> <p>Master of Arts Politikwissenschaft: Supplementary Section Political Science</p> <p>Master of Science Business Administration - Finance: Core and Advanced Section Finance Supplementary Section Finance</p> <p>Master of Science Information Systems: Supplementary Section Information Systems</p> <p>Master of Science Business Administration - Marketing: Supplementary Section Marketing</p> <p>Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation</p> <p>Master of Science Business Administration - Marketing: Core and Advanced Section Marketing</p> <p>Master of Science Economic Research: Specialization Section Economic Research Supplementary Section Economic Research</p> <p>Master of Science Business Administration - Corporate Development: Core and Advanced Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Core and Advanced Section Accounting and Taxation</p>
9	<p>Module Manager Univ.-Prof. Dr. Dominik Wied</p>
10	<p>Miscellaneous</p>

SpM Empirical Methods and Data Analysis IV					
Module Code 1314MSEMD4	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses a) Statistical Analysis of Financial Data b) Topics in Econometrics and Statistics IV		Contact Hours a) 45h b) 45h	Self-Studies a) 135h b) 135h	Course Language a) English b) English
2	Module Content <ul style="list-style-type: none"> • Properties of financial time series • Time series models • Efficiency of financial markets • Empirical analysis of the capital asset pricing model • Empirical analysis of intertemporal asset pricing models • Volatility models • Market Microstructure and high-frequency data 				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods. ... analyse current questions and challenges. ... collect and analyse data material for selected scientific questions using quantitative / qualitative methods. ... justify and defend (independently developed) positions or problem solutions.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Solid knowledge of statistical and econometric methods; CM Econometrics or CM Applied Econometrics (Business Administration) or CM Advanced Econometrics				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the written examination of one course. A course is to be attended; the written examination relates to the content of one course.				
8	Other Programmes that Use the Module Master of Science Economics: Specialization Section Economics Supplementary Section Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development:				

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	<p>Supplementary Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation</p> <p>Master of Science Economic Research: Supplementary Section Economic Research</p>
9	<p>Module Manager</p> <p>Univ.-Prof. Dr. Roman Liesenfeld</p>
10	<p>Miscellaneous</p>

SpM Empirical Methods and Data Analysis V					
Module Code 1314MSEMD5	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses a) Multivariate Statistics b) Panel Data Analysis c) Bayesian Econometrics d) Topics in Econometrics and Statistics V		Contact Hours a) 45h b) 45h c) 45h d) 45h	Self-Studies a) 135h b) 135h c) 135h d) 135h	Course Language a) English b) English c) English d) English
2	<p>Module Content</p> <p>a) Multivariate Statistics:</p> <ul style="list-style-type: none"> • Analysis of Variance • Eigenvalues • Principal Component Analysis • Factor Analysis • Discriminant Analysis • Cluster Analysis • Multivariate Testing • Correlation Analysis <p>b) Panel Data Analysis:</p> <ul style="list-style-type: none"> • Static Panel Data Model • Dynamic Panel Data Model • Extensions • Factor Analysis <p>c) Bayesian Econometrics:</p> <ul style="list-style-type: none"> • Basic Principles of Bayesian Econometrics • Bayesian Estimators and Numerical Integration • Importance Sampling and Markov-Chain-Monte-Carlo • Gaussian Linear Regression Model with Conjugate Priors • Gaussian Linear Regression Model with Non-Conjugate Priors • Linear Regression Model with General Error Covariance Matrix • Time Series Models • Models for discrete dependent variables • Students will practice the use of the methods using econometric software to analyse economic data <p>d) Topics in Econometrics and Statistics 5:</p> <ul style="list-style-type: none"> • Recent statistical and econometric methods • Applications in business administration, management studies and economics and social sciences 				
3	<p>Learning Objectives</p> <p>Students...</p> <ul style="list-style-type: none"> ... understand advanced, specialized methods in Statistics and Econometrics. ... analyse current questions and challenges in Statistics and Econometrics. ... analyse data material for selected scientific questions using statistical and econometric methods. ... justify and defend (independently developed) positions or problem solutions. ... discuss scientific topics in a professional manner and appropriate to the situation with specialists. ... use techniques of scientific work and good scientific practice. 				

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4	<p>Teaching and Learning Methods lecture practice</p>
5	<p>Module Entry Requirements Recommendation: CM Econometrics or CM Applied Econometrics (Business Administration) or CM Advanced Econometrics</p>
6	<p>Mode of End-Of-Module Examination Oral examination: OE</p>
7	<p>Prerequisites for Awarding of Credit Points Passing the oral examination of one course. A course is to be attended; the oral examination relates to the content of one course.</p>
8	<p>Other Programmes that Use the Module Master of Science Economics: Specialization Section Economics Supplementary Section Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Economic Research: Supplementary Section Economic Research</p>
9	<p>Module Manager Dr. Bastian Gribisch</p>
10	<p>Miscellaneous</p>

Specialisation Module Seminar Statistics and Econometrics					
Module Code 1314SMSS00	Workload 180h	ECTS Credits 6	Module Language German and English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Seminar in Statistics and Econometrics		Contact Hours 30h	Self-Studies 150h	Course Language German and English
2	Module Content The seminar covers topics from areas such as: <ul style="list-style-type: none"> • Time series analysis • Microeconometrics • Macroeconometrics • Panel econometrics • Financial market econometrics and statistics • Bayesian econometrics and statistics • Non-parametric methods • Analysis of stochastic processes • Statistical inference 				
3	Learning Objectives Students... ... analyse specialist literature on the subject. ... critically assess contemporary statistical and econometric methods. ... apply contemporary statistical and econometric methods independently in practice to analyse real data. ... write and present a paper in accordance with academic standards.				
4	Teaching and Learning Methods seminar				
5	Module Entry Requirements Recommended: Core module Econometrics I and/or specialisation module Advanced Statistics (Stochastics Processes) or Advanced Statistics (Statistical Inference)				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the combined examination.				
8	Other Programmes that Use the Module Master of Science Economics: Specialization Section Economics Supplementary Section Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development:				

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	<p>Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation</p>
9	<p>Module Manager Univ.-Prof. Dr. Jörg Breitung Univ.-Prof. Dr. Roman Liesenfeld Univ.-Prof. Dr. Dominik Wied</p>
10	<p>Miscellaneous</p>

CM Econometrics						
Module Code 1314MBECO1		Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Econometrics			Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Linear regression model • Least squares (LS) method and generalized least squares (GLS) method • Endogeneity and instrumental variable (IV) method • Maximum likelihood (ML) method • Models for limited dependent variables • Time series models 					
3	Learning Objectives Students... ... understand advanced, specialized theories / methods. ... analyse current questions and challenges. ... collect and analyse data material for selected scientific questions using quantitative / qualitative methods. ... justify and defend (independently developed) positions or problem solutions.					
4	Teaching and Learning Methods lecture practice					
5	Module Entry Requirements no recommendation					
6	Mode of End-Of-Module Examination Written test: WT (90)					
7	Prerequisites for Awarding of Credit Points Passing the module examination					
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Core and Advanced Section Supply Chain Management Master of Science Economics: Core and Advanced Section Economics Master of Arts Regionalstudien China - Volkswirtschaftslehre: Economics Master Regional Studies China Master of Science Sociology and Social Research: Supplementary Section Sociology and Social Research Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Core and Advanced Section Finance Supplementary Section Finance Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing:					

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	<p>Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Business Administration - Marketing: Core and Advanced Section Marketing Master of Arts Regionalstudien Ost- und Mitteleuropa - Volkswirtschaftslehre: Economics Master Regional Studies Eastern Europe Master of Science Business Administration - Corporate Development: Core and Advanced Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Core and Advanced Section Accounting and Taxation Master of Arts Regionalstudien Lateinamerika - Volkswirtschaftslehre: Economics Master Regional Studies Latin America</p>
9	<p>Module Manager Univ.-Prof. Dr. Roman Liesenfeld</p>
10	<p>Miscellaneous</p>

AM Empirical Methods					
Module Code 1314MAEMT1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Empirical Methods		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Principles of modern data analysis • Parametric and nonparametric statistical inference • Causal Inference • Specialized econometric tools • Machine learning and big-data methods • Classification methods 				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods. ... analyse current questions and challenges. ... collect and analyse data material for selected scientific questions using quantitative / qualitative methods. ... discuss scientific topics in a professional manner and appropriate to the situation with (non-) specialists. ... use techniques of scientific work and good scientific practice.				
4	Teaching and Learning Methods lecture				
5	Module Entry Requirements Recommendation: BM Econometrics				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Core and Advanced Section Supply Chain Management Master of Science Economics: Specialization Section Economics Supplementary Section Master of Arts Regionalstudien China - Volkswirtschaftslehre: Economics Master Regional Studies China Master of Science Sociology and Social Research: Supplementary Section Sociology and Social Research Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Core and Advanced Section Finance Supplementary Section Finance Master of Science Information Systems:				

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	<p>Supplementary Section Information Systems</p> <p>Master of Science Business Administration - Marketing: Supplementary Section Marketing</p> <p>Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation</p> <p>Master of Science Business Administration - Marketing: Core and Advanced Section Marketing</p> <p>Master of Arts Regionalstudien Ost- und Mitteleuropa - Volkswirtschaftslehre: Economics Master Regional Studies Eastern Europe</p> <p>Master of Science Business Administration - Corporate Development: Core and Advanced Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Core and Advanced Section Accounting and Taxation</p> <p>Master of Arts Regionalstudien Lateinamerika - Volkswirtschaftslehre: Economics Master Regional Studies Latin America</p>
9	<p>Module Manager Univ.-Prof. Dr. Jörg Breitung</p>
10	<p>Miscellaneous</p>

SpM Supply Chain Strategy					
Module Code 1271MSSSY1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Supply Chain Strategy		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Strategy Formation • Product development • Process Design • Process Simulation • Applications 				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods for formulation and implementation of strategies in the context of supply chain and operations management. ... analyse current questions and challenges in supply chains. ... assess and discuss findings and research results of specialized theories / methods. ... communicate continuously and purposefully in diverse teams. ... justify and defend (independently developed) positions or problem solutions. ... act responsibly considering ecological, social and ethical criteria. ... critically evaluate current social developments and develop alternative solutions.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Specialization Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China				

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9	Module Manager Univ.-Prof. Dr. Fabian Sting Area Supply Chain Management
10	Miscellaneous

SpM Supply Chain Innovation					
Module Code 1271MSSIN1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Supply Chain Innovation		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Innovation Strategy in Supply Chains • Innovation Management in Supply Chains • Supply Chain Innovation Processes: Idea Generation, Idea Selection, Idea Implementation • Collaborative Supply Chain Innovation • Applications of Supply Chain Innovation Strategy • Current Technological Changes and Effective Supply Chain Strategies 				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods supply chain innovation management. ... analyse current questions and challenges supply chain innovation management. ... assess and discuss findings and research results of specialized theories / methods. ... communicate continuously and purposefully in diverse teams. ... justify and defend (independently developed) positions or problem solutions. ... act responsibly considering ecological, social and ethical criteria. ... critically evaluate current social developments and develop alternative solutions.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Specialization Section Supply Chain Management Master of Science Economics: Supplementary Section Master of Science International Management: Supplementary Section International Management Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development				

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	<p>Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China</p>
9	<p>Module Manager Univ.-Prof. Dr. Fabian Sting Area Supply Chain Management</p>
10	<p>Miscellaneous</p>

SpM Selected Issues in Behavioural Supply Chain Management					
Module Code 1271MSIBS1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Behavioural Supply Chain Management		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Behavioural Decision Making • Behavioural Management • Decision Heuristics 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... understand advanced, specialized theories / methods in Behavioural Operations Management. ... assess and discuss findings and research results of specialized theories / methods. ... collect and analyse data material for selected scientific questions using quantitative / qualitative methods. ... prepare independently a research design for a question. ... communicate continuously and purposefully in diverse teams. ... justify and defend (independently developed) positions or problem solutions. ... present scientific results in a way that is appropriate for the target audience. ... use techniques of scientific work and good scientific practice. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: The basic modules Supply Chain Analytics I and II should have been completed.				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module <ul style="list-style-type: none"> Master of Science Business Administration - Supply Chain Management: Specialization Section Supply Chain Management Master of Science Economics: Supplementary Section Master of Science International Management: Supplementary Section International Management Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: 				

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Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	Supplementary Section Accounting and Taxation Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China
9	Module Manager Prof. Dr. Nicolas Fugger Area Supply Chain Management
10	Miscellaneous

SpM Supply Chain Operations					
Module Code 1271MSSOP1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Supply Chain Operations		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Inventory Management • Contract Design • Capacity and Revenue Management • Supply Chain Management 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... understand advanced, specialized theories / methods to control supply chains. ... analyse current questions and challenges in supply chain management. ... communicate continuously and purposefully in diverse teams. ... discuss scientific topics in a professional manner and appropriate to the situation with (non-) specialists. ... present scientific results in a way that is appropriate for the target audience. ... act responsibly considering ecological, social and ethical criteria. ... use techniques of scientific work and good scientific practice. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: The CM Supply Chain Analytics I should have been completed.				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module <ul style="list-style-type: none"> Master of Science Business Administration - Supply Chain Management: Specialization Section Supply Chain Management Master of Science Economics: Supplementary Section Master of Science International Management: Supplementary Section International Management Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: 				

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Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Supplementary Section Accounting and Taxation Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China</p>
9	<p>Module Manager Area Supply Chain Management Univ.-Prof. Dr. Ulrich W. Thonemann</p>
10	<p>Miscellaneous</p>

Specialisation Module Operative Supply Chain Planning					
Module Code 1271OSCP01	Workload 180h	ECTS Credits 6	Module Language German and English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Production Management		Contact Hours 45h	Self-Studies 135h	Course Language German
2	Module Content <ul style="list-style-type: none"> • Supply Chain Design • Demand Planning • Program Planning • Lotsizing and Scheduling • Inventory Management 				
3	Learning Objectives Students... ... acquire knowledge about the problems that occur in production planning and supply chain management and methods for solving them. ... learn about the relationships between the relevant decision variables and ... are able to develop, implement and evaluate proposals for practical solutions to specific decision problems, based on solid theoretical foundations. ... work cooperatively in teams, ... discuss and present Supply Chain Management topics, ... recognize the consequences of decision-making, ... learn to act in a responsible as well as sustainable way and ... organize autonomously their learning and working processes.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the written test.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Specialization Section Supply Chain Management Master of Science Mathematik: MA Business and Economics Sciences Mathematics Master of Science Economics: Supplementary Section Master of Science Wirtschaftsmathematik: MA Business and Economics Sciences Mathematics Master of Science International Management: Core and Advanced Section International Management Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education				

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	<p>Master of Science Information Systems: Supplementary Section Information Systems</p> <p>Master of Science Business Administration - Marketing: Supplementary Section Marketing</p> <p>Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation</p> <p>Master of Science Geographie: Business Administration Master Geography</p> <p>Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China</p>
9	<p>Module Manager AD Dr. Johannes Antweiler Univ.-Prof. Dr. Horst Tempelmeier</p>
10	<p>Miscellaneous Guided and structured self-study in working groups with active presentation of results. Registration in ILIAS is required. Mandatory reading will be announced in ILIAS.</p>

Specialisation Module Project Management					
Module Code 1271SMPrjM	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Project Management		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Project Definition and Scoping • Project Risk Analysis and Risk Management • Resource Allocation and Budgeting • Project Scheduling • Project Monitoring • Project Portfolio Management • Managing Human Behaviour in Projects 				
3	Learning Objectives Students... ... understand the strategic relevance of project management across industries. ... understand, recognise, and discuss the importance of project complexity, project uncertainty and human behavior in managing projects. ... engage in group and class discourses to evaluate how different project planning and execution approaches are contingent on project environments ... reflect on their own developed project management skills by applying these in project groups and case studies. Critically reflect on own and peer developed project management solutions. ... apply modern methods of project planning and project execution such as agile or help-based project management systems ... apply real options thinking to determine the value of uncertain projects. ... recommend project approaches to cope with uncertainty, complexity, and human behavior while accounting for the multidimensional goals of project stakeholders				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommended: at least 12 ECTS credits from the group Foundation Knowledge				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the written test.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Specialization Section Supply Chain Management Master of Science Mathematik: MA Business and Economics Sciences Mathematics Master of Science Economics: Supplementary Section Master of Science Wirtschaftsmathematik: MA Business and Economics Sciences Mathematics				

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Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	<p>Master of Science International Management: Core and Advanced Section International Management Supplementary Section International Management</p> <p>Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education</p> <p>Master of Science Information Systems: Supplementary Section Information Systems</p> <p>Master of Science Business Administration - Marketing: Supplementary Section Marketing</p> <p>Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development</p> <p>Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation</p> <p>Master of Science Geographie: Business Administration Master Geography</p> <p>Master of Arts Regionalstudien China - Betriebswirtschaftslehre: Business Administration Master Regional Studies China</p>
9	<p>Module Manager Univ.-Prof. Dr. Fabian Sting</p>
10	<p>Miscellaneous</p>

SpM Selected Issues in Supply Chain Management					
Module Code 1271MSISP1	Workload 180h	ECTS Credits 6	Module Language German and English	Module Availability irregular	Duration 1 Term
1	Courses a) Purchasing b) Supply Chain Games		Contact Hours a) 45h b) 45h	Self-Studies a) 135h b) 135h	Course Language a) German b) English
2	Module Content Selected Issues in Supply Chain Management: • Purchasing: Strategic Procurement Management • Supply Chain Games: Data Modelling, Databases and Simulation Tools				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods in Supply Chain Management. ... justify and defend (independently developed) positions or problem solutions. ... discuss scientific topics in a professional manner and appropriate to the situation with (non-) specialists.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: The CM Supply Chain Analytics I and II should have been completed.				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the written examination of one course. A course is to be attended; the written examination relates to the content of one course.				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Specialization Section Supply Chain Management Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation				
9	Module Manager Area Supply Chain Management				
10	Miscellaneous				

SuM Economic Geography I					
Module Code 1343MEEGY1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Start-ups and Innovation in the European Union		Contact Hours 30h	Self-Studies 150h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Spatial patterns of economic activities in the European Union • Geographical and interdisciplinary approaches to entrepreneurship, innovation, creativity and territorial innovation systems • Empirical case studies from different EU regions 				
3	Learning Objectives Students... ... understand advanced, specialized theories of entrepreneurship and innovation research within the context of regional development. ... analyse current questions and challenges considering the role of knowledge intensive and creative industries for regional development in the European Union. ... write an academic paper on a selected topic and achieve thereby their own scientific contribution. ... justify and defend (independently developed) positions or problem solutions. ... critically evaluate spatial disparities of the European Union and formulate recommendations for policy makers based on their insights.				
4	Teaching and Learning Methods seminar				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economics: Supplementary Section Master of Science Sociology and Social Research: Supplementary Section Sociology and Social Research Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Information Systems: Supplementary Section Information Systems Master of Arts Regionalstudien Ost- und Mitteleuropa - Sozialwissenschaften: Social Sciences Master Regional Studies Eastern Europe Master of Arts Regionalstudien Lateinamerika - Sozialwissenschaften: Social Sciences Master Regional Studies Latin America Master of Arts Regionalstudien China - Sozialwissenschaften: Social Sciences Master Regional Studies China				

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9	Module Manager Univ.-Prof. Dr. Martina Fuchs
10	Miscellaneous

SuM Economic Geography II					
Module Code 1343MEEGY2	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Digitalization, Smart Manufacturing and 'Smart' Regions		Contact Hours 60h	Self-Studies 300h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Digitalization as opportunity and challenge for internationalization and spatial development • Geographical approaches to digital change in the areas of production and consumption • Smart Manufacturing • Smart regional development and 'Smart City'- strategies • Regional Innovation Systems • Digitalization of value chains: case studies • Digitalization and sustainable development: institutional arrangements and strategies of practitioners 				
3	Learning Objectives Students... ... understand advanced, specialized theories of technological change to digitalization processes in the areas of production, consumption and work. ... analyse characteristics and current questions and challenges of digital transformation. ... write an academic paper on a selected topic using literature from economic geography and achieve thereby their own scientific contribution. ... justify and defend (independently developed) positions or problem solutions. ... critically evaluate assess opportunities and challenges of digitalization for different actors (small and large firms, employees, final consumers) within different value chains.				
4	Teaching and Learning Methods seminar				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economics: Supplementary Section Master of Science Sociology and Social Research: Supplementary Section Sociology and Social Research Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Information Systems: Supplementary Section Information Systems Master of Arts Regionalstudien Ost- und Mitteleuropa - Sozialwissenschaften: Social Sciences Master Regional Studies Eastern Europe Master of Arts Regionalstudien Lateinamerika - Sozialwissenschaften: Social Sciences Master Regional Studies Latin America				

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Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	Master of Arts Regionalstudien China - Sozialwissenschaften: Social Sciences Master Regional Studies China
9	Module Manager Univ.-Prof. Dr. Martina Fuchs
10	Miscellaneous

SuM Economic Geography III					
Module Code 1343MEEGY3	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Global South and Sustainable International Business: Ethics, Responsibility and Governance		Contact Hours 30h	Self-Studies 150h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Sustainability as interdisciplinary theoretical concept and as strategic approach of companies • Theoretical approaches to regional development in the context of international production • Modes and ways of regional economic integration in the world economy • Empirical case studies of regions of the Global South • Strategies and governance for sustainable development 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... understand advanced, specialized theoretical approaches to sustainability, ethics, corporate responsibility and governance in the context of a globalized economy. ... assess and discuss analyse drivers and limitations of corporate social responsibility (CSR) and regional social responsibility (RSR) in global value chains. ... collect, systematize and synthesize independently literature from economic geography and related disciplines as well as secondary data. ... discuss the effects of foreign direct investment in countries of the Global South with regard to local resource pools and sustainable development. ... critically evaluate upgrading strategies in global value chains as drivers for growth and development. 				
4	Teaching and Learning Methods seminar				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module <ul style="list-style-type: none"> Master of Science Economics: Supplementary Section Master of Science Sociology and Social Research: Supplementary Section Sociology and Social Research Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Information Systems: Supplementary Section Information Systems Master of Arts Regionalstudien Ost- und Mitteleuropa - Sozialwissenschaften: Social Sciences Master Regional Studies Eastern Europe Master of Arts Regionalstudien Lateinamerika - Sozialwissenschaften: Social Sciences Master Regional Studies Latin America 				

MODULE CATALOGUE – INFORMATION SYSTEMS - MASTER OF SCIENCE

Valid for students of the ER 2015 (enrolment for winter semester 2020/21 at the latest)

	Master of Arts Regionalstudien China - Sozialwissenschaften: Social Sciences Master Regional Studies China
9	Module Manager Univ.-Prof. Dr. Martina Fuchs
10	Miscellaneous

SuM Economic Geography IV					
Module Code 1343MEEGY4	Workload 180h	ECTS Credits 6	Module Language German	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Methods in Regional Research		Contact Hours 60h	Self-Studies 300h	Course Language German
2	Module Content <ul style="list-style-type: none"> • Research methods in economic geography and regional studies • Selected geographical case study of a region or city, e.g. in North Rhine-Westphalia • Designing and conducting a research project in economic geography 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... collect and analyse data material for selected scientific questions using quantitative / qualitative methods. ... prepare independently a qualitative, quantitative or mixed-method research design to analyse current issues in economic geography. ... write an academic paper on a selected topic and achieve thereby their own scientific contribution. ... communicate continuously and purposefully in diverse teams. ... critically evaluate issues of positionality and ethics in geographical field work. 				
4	Teaching and Learning Methods seminar				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module <ul style="list-style-type: none"> Master of Science Economics: Supplementary Section Master of Science Sociology and Social Research: Supplementary Section Sociology and Social Research Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Information Systems: Supplementary Section Information Systems Master of Arts Regionalstudien Ost- und Mitteleuropa - Sozialwissenschaften: Social Sciences Master Regional Studies Eastern Europe Master of Arts Regionalstudien Lateinamerika - Sozialwissenschaften: Social Sciences Master Regional Studies Latin America Master of Arts Regionalstudien China - Sozialwissenschaften: Social Sciences Master Regional Studies China 				
9	Module Manager Univ.-Prof. Dr.' Martina Fuchs				

10	Miscellaneous
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Studies Abroad I (Master)					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1014SAEr01	360h	12		every term	1 Term
1	Courses		Contact Hours	Self-Studies	Course Language
2	Module Content Depends on chosen course				
3	Learning Objectives Students... ... describe approaches to business administration, economics and social sciences from an international perspective. ... explain international issues in the areas of business administration, economics and social science. ... discuss and compare different theories and approaches in business administration, economics and social science. ... develop new intellectual perspectives with regard to their own education. ... recognize the dynamic, global dimensions of their professional future.				
4	Teaching and Learning Methods depending on course choice				
5	Module Entry Requirements No recommendations				
6	Mode of End-Of-Module Examination TR - depending on course selection				
7	Prerequisites for Awarding of Credit Points Depends on chosen course				
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Economics: Supplementary Section Master of Science Sociology and Social Research: Supplementary Section Sociology and Social Research Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation				

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9	Module Manager
10	<p>Miscellaneous</p> <p>Language: can be held in English or in any language offered at the host university. This module can be studied at a higher education institution in another country. There is a standardised crediting procedure for such cases. Information about course crediting (deadlines and procedures) can be obtained from the Credit Transfer Centre (WiSo Credit Transfer Centre: https://www.anrechnungswiso.uni-koeln.de/) This module can also be taken as part of a summer school organised by the WiSo Faculty. In this case, students must register for the examination in accordance with the rules of the WiSo Faculty prior to embarking on the module.</p>

Studies Abroad II (Master)						
Module Code 1014SAEr02		Workload 360h	ECTS Credits 12	Module Language	Module Availability every term	Duration 1 Term
1	Courses			Contact Hours	Self-Studies	Course Language
2	Module Content Depends on chosen course					
3	Learning Objectives Students... ... describe approaches to business administration, economics and social sciences from an international perspective. ... explain international issues in the areas of business administration, economics and social science. ... discuss and compare different theories and approaches in business administration, economics and social science. ... develop new intellectual perspectives with regard to their own education. ... are better equipped to deal with the dynamic, global dimensions of their professional future in an effective manner.					
4	Teaching and Learning Methods depending on course choice					
5	Module Entry Requirements No recommendations					
6	Mode of End-Of-Module Examination TR - depending on course selection					
7	Prerequisites for Awarding of Credit Points Depends on chosen course.					
8	Other Programmes that Use the Module Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management Master of Science Sociology and Social Research: Supplementary Section Sociology and Social Research Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Business Administration - Finance: Supplementary Section Finance Master of Education Wirtschaftspädagogik/Lehramt an Berufskollegs: Supplementary Section Business Education Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation					

9	Module Manager
10	<p>Miscellaneous</p> <p>Language: Can be offered in English or in any language possible at the host university. This module can be studied at a higher education institution in another country. There is a standardised crediting procedure for such cases. Information about course crediting (deadlines and procedures) can be obtained from the Credit Transfer Centre (WiSo Credit Transfer Centre: https://www.anrechnungswiso.uni-koeln.de/) This module can also be taken as part of a summer school organised by the WiSo Faculty. In this case, students must register for the examination in accordance with the rules of the WiSo Faculty prior to embarking on the module.</p>

3.6.4 Masterthesis

Master Thesis Information Systems					
Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
1015MalS00	900h	30	German and English	every term	1 Term
1	Courses a) Master's thesis with Prof. Ketter b) Master's thesis with Prof. Recker c) Master's thesis with Prof. Rosenkranz d) Master's thesis with Prof. Schoder		Contact Hours a) 0h b) 0h c) 0h d) 0h	Self-Studies a) 0h b) 0h c) 0h d) 0h	Course Language a) German and English b) German and English c) German and English d) German and English
2	Module Content The topic of the Master's thesis in Information Systems must be taken from the area of specialisation or the group of the supplementary area occupied by the examination candidate. If the topic is assigned to the supplementary area, the candidate must have already successfully completed 18 ECTS in the supplementary area.				
3	Learning Objectives Students... ... are familiar with current debate on the theory and methods of their subject area and make use of it through their own independent research work. ... identify questions and issues that meet academic requirements. ... work on these questions independently, using the main primary and secondary literature. ... formulate theoretical and methodical (qualitative and/or quantitative) approaches to academic research. ... draw up a research plan and implement it independently. ... organise and design an academic research process. ... independently collect relevant data and evaluate them in a methodically competent manner. ... engage in advanced discussion of theoretical and methodical Problems, with teaching staff, other students and individuals with an interest in the subject. ... assess research findings and develop scientifically and socially relevant conclusions from them.				
4	Teaching and Learning Methods Master's Thesis				
5	Module Entry Requirements				
6	Mode of End-Of-Module Examination Written test 6 months				
7	Prerequisites for Awarding of Credit Points Passing the written test.				
8	Other Programmes that Use the Module Master of Science Information Systems: Master Thesis				

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9	Module Manager Managing Director Cologne Institute for Information Systems
10	Miscellaneous The Master thesis can be written in German or English.