2026/27

Please keep in mind the year of validity.

FACULTY OF MANAGEMENT, ECONOMICS AND SOCIAL SCIENCES

UNIVERSITY OF COLOGNE

COLOGNE GRADUATE SCHOOL IN MANAGEMENT, ECONOMICS AND SOCIAL SCIENCES

valid for students of the Examination Regulations 2025

(enrolment from winter semester 2025/26)

MODULE CATALOGUE

Doctoral Study Programme Research in Management, Economics and Social Sciences

Universität zu Köln

Academic Director Management **Academic Director Economics** **Academic Director Social Sciences**	Prof. Dr. Hernan Bruno Prof. Dr. Johannes Münster Prof. Dr. Karsten Hank
Editor	Cologne Graduate School in Management, Economics and Social Sciences - WiSo Faculty
Student Services	Cologne Graduate School in Management, Economics and Social Sciences (CGS) +49 (0) 221 / 470 - 7955 www.cgs.uni-koeln.de
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List of abbreviations

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

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1 Doctoral Study Programme

The doctoral study programme prepares students in particular for a future career in research in Management, Economics and Social Sciences. Graduates are able to understand overall and detailed processes and structures, analyze them theoretically and empirically using scientific methods, develop research questions independently and make their own scientific contributions.

1.1 Requirements

The requirements for admission to the doctoral study programme are defined in Section 3 of the **Doctoral Regulations Research in Management, Economics, and Social Sciences** of the Faculty of Management, Economics and Social Sciences of 11 August 2025 (AM 101/2025) in its currently valid form.

1.2 Programme structure

The programme is divided into the following fields of study: Business Administration, Economics and Social Sciences. It comprises a core section, a specialization section and a compulsory proposal. The doctoral candidate must complete courses of his/her doctoral studies programme amounting to 30 credit points.

Credit transfer options from PhD courses taken

- **at the WiSo Faculty:**

Students who have taken PhD courses at the WiSo-Faculty already during the master studies can transfer those credits to the PhD programme. For any questions regarding the credit transfers, students can contact the **Central Doctoral Office**.

- **outside the WiSo Faculty:**

The Faculty's Credit Transfer Centre 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, For more information on credit transfer rules and regulations from PhD courses offered outside the WiSo Faculty, please go to **WiSo Credit Transfer Center** > Information > Studies Abroad. For any questions regarding credit transfer, students can contact the the **WiSo Credit Transfer Center**.

1.3 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.

1.4 Rules for failed attempts

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

2 Support for students

2.1 Course registration in KLIPS 2.0

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**.

2.2 Exam registration in KLIPS 2.0

Examinations on the various programmes are always managed via KLIPS 2.0. Students must register for them within specified deadlines. Please note that registration for courses without restriction on participation via KLIPS and registration for the corresponding module examinations are two completely separate processes. In the case of courses which are subject to a restriction on participation, an examination registration is generally only possible if a registration for the course has been submitted beforehand. Most examinations in written test form are offered twice per term. Often, this will be to “space out” the dates, i.e. students can choose the date that best fits their examination schedule. In some cases, however, the second examination may be a genuine repetition of the first, depending on the department/institute concerned.

All WiSo Faculty examination candidates are entitled to see their examination papers after they have been marked. For more information, please visit the **WiSo Examination Office website.**

2.3 Subject-specific and examination advice

The **CGS** provide general advice on PhD studies and is the first place to turn to for doctoral students with other questions and problems related to their studies. It can be contacted by phone, in person and, of course, via e-mail. The opening hours and contact information can be found on the corresponding website.

Subject-specific advice is provided during the designated consulting hours by the university’s faculty members and associated teaching staff (“akademische Mitarbeiterinnen und Mitarbeiter”) involved in the teaching of 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 Office**.

2.4 Other sources of information and advice

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.
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 Studierendenwerk. 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 doctoral students are represented by the the **Doctoral Students Represenatives**. For any information please write an email to them.

3 Curriculum and module descriptions

3.1 Business Administration

3.1.1 Curriculum

In the field of study Business Administration, the doctoral candidate must acquire a total of 30 credit points. Of these, 12 credit points must be acquired through two compulsory courses in the core section, 12 credit points through two elective courses in the specialization section and 6 credit points through the compulsory proposal.

Group	Module	ECTS	CC/EC	Required ECTS
Core Section	CM Conceptual Rigor	6	CC	12
	CM Management Electives	6	CC	
Specialisation Section	SpM Advanced Electives I	6	EC	12
	SpM Advanced Electives II	6	EC	
	SpM External Courses	6	EC	
Proposal	Proposal	6	CC	6

3.1.2 Module Descriptions

3.1.2.1 Core Section

CM Conceptual Rigor					
Module Code	**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every term	**Duration** 1 Term
1	**Courses** Conceptual Rigor		**Contact Hours** 30h	**Self-Studies** 150h	**Course Language** English
2	**Module Content** This course focuses on training two skills: (1) Developing a powerful introduction including the positioning relative to the literature (2) Understanding reviews and drawing conclusions for revising the manuscript The cours addresses questions such as • What are success factors of publishing in top tier journals? • Which kinds of contributions exist? • How to position your research relative to the literature? • Which strategy to follow for the submission process? • How to read between the lines in review reports?				
3	**Learning Objectives** Students... ... understand advanced, specialized theories / methods. ... 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. ... use techniques of scientific work and good scientific practice.				
4	**Teaching and Learning Methods** Lecture				
5	**Module Entry Requirements**				
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**				
9	**Module Manager** Univ.-Prof. Dr. Marc Fischer				

CM Management Electives

Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
	180h	6	English	every term	1 Term

1	Courses	Contact Hours	Self-Studies	Course Language
	Current Issues in Accounting Tax and Finance	30h	150h	English
	Organizational Behavior Research Methods	30h	150h	English
	Empirical Research in Finance and Accounting	30h	150h	English
	Research Seminar in Marketing	30h	150h	English
	Supply Chain Management Research Seminar	30h	150h	English
	Machine Learning for Management Research	30h	150h	English
	Research Seminar Economic Geography and Vocational Education	30h	150h	English

2	**Module Content** This module is a foundational seminar with area-specific topics.
3	**Learning Objectives** Students... ... understand advanced, specialized theories / methods. ... assess and discuss findings and research results of specialized theories / methods. … collect and analyse data material for selected scientific questions using quantitative / qualitytive methods. … 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. … evaluate their own action processes in self- and external reflection and identify development potentials. … develop work processes for real problems and challenges
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 module examination
8	**Other Programmes that Use the Module**
9	**Module Manager** Academic Director

3.1.2.2 Specialisiation Section

SpM Advanced Electives I					
Module Code	**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every term	**Duration** 1 Term
1	**Courses**		**Contact Hours**	**Self-Studies**	**Course Language**
	Advanced Econometrics: Applications		30h	150h	English
	Bayesian Data Analytics		30h	150h	English
	Advanced Analytics and Applications		30h	150h	English
	Information Systems Research: Analytics for a Sustainable Society		30h	150h	English
	The Empirical Evaluation of Management Practices I		30h	150h	English
	Survey Design Research		30h	150h	English
2	**Module Content** The purpose of this module is to deepen the knowledge of the student in a specific topic or to broaden the knowledge on the research area as a whole, either in terms of methodology, substantive results or applications. The content of the courses are specific to the course.				
3	**Learning Objectives** Students... ... understand advanced, specialized theories / methods. ... assess and discuss findings and research results of specialized theories / methods. … collect, systematize and synthesize independently literature on selected scientific questions. … 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. … use techniques of scientific work and good scientific practice.				
4	**Teaching and Learning Methods**				
5	**Module Entry Requirements**				
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**				

9	**Module Manager** Academic Director

SpM Advanced Electives II

Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
	180h	6	English	every term	1 Term

1	Courses	Contact Hours	Self-Studies	Course Language
	Advanced Econometrics: Theory	30h	150h	English
	Advanced Microeconomics I	30h	150h	English
	Advanced Microeconomics II	30h	150h	English
	Microeconometrics	30h	150h	English
	Machine Learning for Economists	30h	150h	English
	Statistical Analysis of Financial Data	30h	150h	English
	Causal Inference in Applied Microeconomics	30h	150h	English
	Accounting I	30h	150h	English
	Taxation II	30h	150h	English

2	**Module Content** The purpose of this module is to deepen the knowledge of the student in topics related to economics, statistics, econometrics and other research methods.
3	**Learning Objectives** Students... ... understand advanced, specialized theories / methods. ... assess and discuss findings and research results of specialized theories / methods. … collect, systematize and synthesize independently literature on selected scientific questions. … 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. … use techniques of scientific work and good scientific practice.
4	**Teaching and Learning Methods**
5	**Module Entry Requirements**
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**
9	**Module Manager** Academic Director

SpM External Courses					
Module Code	**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every term	**Duration** 2 Terms
1	**Courses**		**Contact Hours**	**Self-Studies**	**Course Language**
2	**Module Content** This module enables students to take courses for credit in other academic institutions. The content of the courses depends on the course choice.				
3	**Learning Objectives** Students... ... understand advanced, specialized theories / methods.				
4	**Teaching and Learning Methods** Depending on the course selection				
5	**Module Entry Requirements**				
6	**Mode of End-Of-Module Examination**				
7	**Prerequisites for Awarding of Credit Points**				
8	**Other Programmes that Use the Module**				
9	**Module Manager** Academic Director				
10	**Miscellaneous**				

3.1.2.3 Proposal

Proposal					
Module Code	**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every term	**Duration**
1	**Courses**		**Contact Hours**	**Self-Studies**	**Course Language**
	Proposal Accounting				English
	Proposal Finance				English
	Proposal Marketing				English
	Proposal Information Systems				English
	Proposal Wirtschaftspädagogik				English
	Proposal Supply Chain Management				English
	Proposal Corporate Development				English
2	**Module Content** The content of this moduls depends on the research project the students is carrying out.				
3	**Learning Objectives** Students... ... prepare independently a research design for a question. … 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. … develop work processes for real problems and challenges. … use techniques of scientific work and good scientific practice.				
4	**Teaching and Learning Methods** Seminar				
5	**Module Entry Requirements**				
6	**Mode of End-Of-Module Examination** PRES				
7	**Prerequisites for Awarding of Credit Points** Passing the module examination				
8	**Other Programmes that Use the Module**				
9	**Module Manager** Academic Director				

10	**Miscellaneous** In this module students are expected to present their dissertation work either partially (one paper) or fully in a colloquium where 2 or more Professors are present and where they are examined and given a pass - fail grade.

3.2 Social Sciences

3.2.1 Curriculum

In the field of study Social Sciences, the doctoral candidate must acquire a total of 30 credit points. Of these, 6 credit points must be acquired through a course in the basic area, 18 credit points through courses in the specialized area and 6 credit points through the compulsory proposal.

Group	Module	ECTS	CC/EC	Required ECTS
Core Section	CM Research Design (Sociology and Social Psychology)	6	EC	6
	CM Research Design (Political Sciences)	6	EC	
Specialisation Section	SpM Advanced Theory and Methods I	6	EC	18
	SpM Advanced Theory and Methods II	6	EC	
	SpM Advanced Theory and Methods III	6	EC	
	SpM Import Courses I	6	EC	
	SpM Import Courses II	6	EC	
	SpM External Courses	6	EC	
Proposal	Proposal	6	CC	6

3.2.2 Module Descriptions

3.2.2.1 Core Section

CM Research Design (Sociology and Social Psychology)					
Module Code	**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every 2nd term - winter	**Duration** 1 Term
1	**Courses** Research Design in the Social Sciences		**Contact Hours** 30h	**Self-Studies** 150h	**Course Language** English
2	**Module Content** This course is designed to help PhD students to plan and conduct their dissertation research in a robust fashion.				
3	**Learning Objectives** Students... ... understand advanced, specialized theories / methods. … prepare independently a research design for a question. … communicate continuously and purposefully in diverse teams. … present scientific results in a way that is appropriate to the situation with (non-) specialists. … evaluate their own action processes in self- and external reflection and identify development potentials. … use techniques of scientific work and good scientific practice.				
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 module examination				
8	**Other Programmes that Use the Module**				
9	**Module Manager** Prof. Dr. Lea Ellwardt				
10	**Miscellaneous**				

CM Research Design (Political Sciences)

Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
	180h	6	English	every 2nd term - summer	1 Term

1	**Courses** Research Design Seminar	**Contact Hours** 30h	**Self-Studies** 150h	**Course Language** English

2	**Module Content** This course is designed to help PhD students to plan and conduct their dissertation research in a robust fashion.
3	**Learning Objectives** Students... ... understand advanced, specialized theories / methods. … prepare independently a research design for a question. … communicate continuously and purposefully in diverse teams. … present scientific results in a way that is appropriate to the situation with (non-) specialists. … evaluate their own action processes in self- and external reflection and identify development potentials. … use techniques of scientific work and good scientific practice.
4	**Teaching and Learning Methods** Seminar
5	**Module Entry Requirements** Participants should have completed their master's degree. A sound command of the English language is required.
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**
9	**Module Manager** Prof. Dr. Michael Bechtel
10	**Miscellaneous**

3.2.2.2 Specialisiation Section

<table>
<tr><th colspan="6">SpM Advanced Theory and Methods I</th></tr>
<tr><td colspan="2">Module Code</td><td>Workload
180h</td><td>ECTS Credits
6</td><td>Module Language
English</td><td>Module Availability
every term</td><td>Duration
1 Term</td></tr>
<tr><td>1</td><td colspan="3">Courses
a) Theory Guidance, Replication, and Publication
b) Advanced Theory and Methods Seminar I</td><td>Contact Hours
30h</td><td>Self-Studies
150h</td><td>Course Language
English</td></tr>
<tr><td>2</td><td colspan="6">Module Content
Courses are designed to deepen doctoral students' knowledge of advanced theories and/or methods in the social sciences.</td></tr>
<tr><td>3</td><td colspan="6">Learning Objectives
Students...
... understand advanced, specialized theories / methods.
… assess and discuss findings and research results of specialized theories / methods.
… write an academic paper on a selected topic and achieve thereby their own scientific contribution.
… 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 to the situation with (non-) specialists.
… evaluate their own action processes in self- and external reflection and identify development potentials.
… use techniques of scientific work and good scientific practice.</td></tr>
<tr><td>4</td><td colspan="6">Teaching and Learning Methods
Seminar</td></tr>
<tr><td>5</td><td colspan="6">Module Entry Requirements
Participants should have completed their master's degree. A sound command of the English language is required.</td></tr>
<tr><td>6</td><td colspan="6">Mode of End-Of-Module Examination
Combined Examination: PRES, TP</td></tr>
<tr><td>7</td><td colspan="6">Prerequisites for Awarding of Credit Points
Passing the module examination</td></tr>
<tr><td>8</td><td colspan="6">Other Programmes that Use the Module</td></tr>
<tr><td>9</td><td colspan="6">Module Manager
Prof. Dr. Lea Ellwardt</td></tr>
<tr><td>10</td><td colspan="6">Miscellaneous</td></tr>
</table>

SpM Advanced Theory and Methods II

Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
	180h	6	English	every term	1 Term

1	**Courses** a) Concept and Data in the Social Sciences and Management Research b) Advanced Theory and Methods Seminar II	**Contact Hours** 30h	**Self-Studies** 150h	**Course Language** English
2	**Module Content** Courses are designed to deepen doctoral students' knowledge of advanced theories and/or methods in the social sciences.			
3	**Learning Objectives** Students... ... understand advanced, specialized theories / methods. … assess and discuss findings and research results of specialized theories / methods. … write an academic paper on a selected topic and achieve thereby their own scientific contribution. … 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 to the situation with (non-) specialists. … evaluate their own action processes in self- and external reflection and identify development potentials. … use techniques of scientific work and good scientific practice.			
4	**Teaching and Learning Methods** Seminar			
5	**Module Entry Requirements** Participants should have completed their master's degree. A sound command of the English language is required.			
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**			
9	**Module Manager** Prof. Dr. Michael Bechtel			
10	**Miscellaneous**			

SpM Advanced Theory and Methods III

Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
	180h	6	English	every term	1 Term

1	**Courses** a) Trust and Cooperation b) Advanced Theory and Methods Seminar III	**Contact Hours** 30h	**Self-Studies** 150h	**Course Language** English
2	**Module Content** Courses are designed to deepen doctoral students' knowledge of advanced theories and/or methods in the social sciences.			
3	**Learning Objectives** Students... ... understand advanced, specialized theories / methods. … assess and discuss findings and research results of specialized theories / methods. … write an academic paper on a selected topic and achieve thereby their own scientific contribution. … 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 to the situation with (non-) specialists. … evaluate their own action processes in self- and external reflection and identify development potentials. … use techniques of scientific work and good scientific practice.			
4	**Teaching and Learning Methods** Seminar			
5	**Module Entry Requirements** Participants should have completed their master's degree. A sound command of the English language is required.			
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**			
9	**Module Manager** Prof. Dr. Michael Bechtel			
10	**Miscellaneous**			

SpM Import Courses I

Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
	180h	6	English	every term	1 Term

1	**Courses** See KLIPS	**Contact Hours** 30h	**Self-Studies** 150h	**Course Language** English

2	**Module Content** Courses are designed to enhance doctoral students' perspective beyond the social sciences by gaining insights from management science, economics, or other related fields.
3	**Learning Objectives** Students... ... understand advanced, specialized theories / methods. … assess and discuss findings and research results of specialized theories / methods. … write an academic paper on a selected topic and achieve thereby their own scientific contribution. … 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 to the situation with (non-) specialists. … evaluate their own action processes in self- and external reflection and identify development potentials. … use techniques of scientific work and good scientific practice.
4	**Teaching and Learning Methods** Seminar
5	**Module Entry Requirements** Participants should have completed their master's degree. A sound command of the English language is required.
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**
9	**Module Manager** Prof. Dr. Detlef Fetchenhauer
10	**Miscellaneous**

SpM Import Courses II

Module Code	Workload	ECTS Credits	Module Language	Module Availability	Duration
	180h	6	English	every term	1 Term

1	**Courses** See KLIPS	**Contact Hours** 30h	**Self-Studies** 150h	**Course Language** English

2 Module Content

Courses are designed to enhance doctoral students' perspective beyond the social sciences by gaining insights from management science, economics, or other related fields.

3 Learning Objectives

Students...

... understand advanced, specialized theories / methods.

… assess and discuss findings and research results of specialized theories / methods.

… write an academic paper on a selected topic and achieve thereby their own scientific contribution.

… 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 to the situation with (non-) specialists.

… evaluate their own action processes in self- and external reflection and identify development potentials.

… use techniques of scientific work and good scientific practice.

4 Teaching and Learning Methods

Lecture

Practice

5 Module Entry Requirements

Participants should have completed their master's degree. A sound command of the English language is required.

6 Mode of End-Of-Module Examination

Written Examination: WT

7 Prerequisites for Awarding of Credit Points

Passing the module examination

8 Other Programmes that Use the Module

9 Module Manager

Prof. Dr. Michael Bechtel

10 Miscellaneous

SpM External Courses					
Module Code	**Workload** 180h	**ECTS Credits** 6	**Module Language**	**Module Availability**	**Duration**
1	**Courses**		**Contact Hours**	**Self-Studies**	**Course Language**
2	**Module Content** Courses are offered by external institutions, such as GESIS, providing expertise in specific topics or methods not covered by courses available at WiSo.				
3	**Learning Objectives** Students...				
4	**Teaching and Learning Methods**				
5	**Module Entry Requirements**				
6	**Mode of End-Of-Module Examination** depending on course selection				
7	**Prerequisites for Awarding of Credit Points**				
8	**Other Programmes that Use the Module**				
9	**Module Manager** Prof. Dr. Karsten Hank				
10	**Miscellaneous**				

3.2.2.3 Proposal

Proposal						
Module Code		**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every 2nd term - winter	**Duration** 1 Term
1	**Courses** a) ISS Form b) Proposal Seminar			**Contact Hours** 8h	**Self-Studies** 172h	**Course Language** English
2	**Module Content** Presentation and discussion of doctoral students' proposals or papers.					
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. … collect and analyse data material for selected scientific questions using quantitative / qualitative methods. … collect, systematize and synthetize independently literature on selected scientific questions. … prepare independently a researcj design for a question. … write an academic paper on a selected topic and achieve thereby their own scientific contribution. … justify and defend (independently developed) positions or problem solutions. … present scientific results in a way that is appropriate to the situation with (non-) specialists. … critically evaluate current social developments and develop alternative solutions. … use techniques of scientific work and good scientific practice.					
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 module examination					
8	**Other Programmes that Use the Module**					
9	**Module Manager** Prof. Dr. Marita Jacob					
10	**Miscellaneous**					

3.3 Economics

3.3.1 Curriculum

In the field of study Economics, the doctoral candidate must acquire a total of 30 credit points. Of these, 6 credit points must be acquired through a course in the basic area, 18 credit points through courses in the specialization area and 6 credit points through the compulsory proposal.

Group	Module	ECTS	CC/EC	Required ECTS
Core Section	CM Advanced Econometrics[1]	6	EC	6
	CM Advanced Econometrics I	6	EC	
	SpM Advanced Mathematics	6	EC	
	SpM Empirical Methods and Data Analysis I	6	EC	
	CM Advanced Microeconomics[2]	6	EC	
Specialisation Section	AM Computational Methods[3]	6	EC	18
	AM Selected Methods in Economics	6	EC	
	CM Advanced Microeconomics[4]	6	EC	
	CM Advanced Macroeconomics	6	EC	
	CM Advanced Macroeconomics I	6	EC	
	CM Advanced Econometrics[5]	6	EC	
	CM Advanced Econometrics I	6	EC	
	SpM Advanced Public Economics	6	EC	
	SpM Political Economics and Media Economics	6	EC	
	SpM Empirical Methods and Data Analysis I	6	EC	
	SpM Empirical Methods and Data Analysis II[6]	6	EC	
	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	
	SpM Energy and Climate Change I[7]	6	EC	

	SpM Energy and Climate Change III[8]	6	EC	
	SpM Market Design and Behavior VI	6	EC	
	SpM Frontiers in Economic Research	6	EC	
	SpM Energy and Environmental Economics	6	EC	
	SpM Empirical Public Finance and Policy Evaluation	6	EC	
	CM Advanced Public Policy	6	EC	
	CM Behavioural Economics and Survey Experiments	6	EC	
	SpM Selected Methods in Economic Research I	6	EC	
	SpM Selected Methods in Economic Research II	6	EC	
	SpM Selected Topics in Economic Research I	6	EC	
	SpM Selected Topics in Economic Research II	6	EC	
Proposal	Proposal	6	CC	6

[1] Die Prüfungsanmeldung ist nicht mehr möglich, wenn zuvor die Prüfung zum Modul "1314MBAEM2 BM Advanced Econometrics II" erfolgreich absolviert wurde.
[2] Die Prüfungsanmeldung ist nicht mehr möglich, wenn zuvor die Prüfung zum Modul "1289MBAMI1 BM Advanced Microeconomics I" erfolgreich absolviert wurde.
[3] Dieses Modul wird ab dem Wintersemester 27/28 nur noch mit dem Turnus "unregelmäßig" angeboten.
[4] Die Prüfungsanmeldung ist nicht mehr möglich, wenn zuvor die Prüfung zum Modul "1289MBAMI1 BM Advanced Microeconomics I" erfolgreich absolviert wurde.
[5] Die Prüfungsanmeldung ist nicht mehr möglich, wenn zuvor die Prüfung zum Modul "1314MBAEM2 BM Advanced Econometrics II" erfolgreich absolviert wurde.
[6] The examination format may differ depending on the specific course taken. If the course ‘Microeconometrics’ is taken, the examination format will be a written examination: written exam (90). If the course ‘Machine Learning for Economists’ or ‘Topics in Econometrics and Statistics II’ is taken, the examination format will be a combined examination: term paper with presentation..
[7] The registration for the examination and recognition is not possible if the examination for the module "SuM Energy and Climate Change I" has already been successfully completed.
[8] The registration for the examination and recognition is not possible if the examination for the module "SuM Energy and Climate Change III" has already been successfully completed.

3.3.2 Module descriptions

3.3.2.1 Core Section

CM Advanced Econometrics						
Module Code 1314MBAEME		**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every 2nd term - winter term	**Duration** 1 Term
1	**Courses** Advanced Econometrics			**Contact Hours** 60h	**Self-Studies** 120h	**Course Language** English
2	**Module Content** In the course, econometric methods and applications will be presented, students will work with the statistical software R. Topics: Linear regression model Advanced aspects of econometric modelling and theory Estimating treatment effects Big data econometrics Selected (financial) time series models					
3	**Learning Objectives** Students... ... know and understand the relevant methods and theories for the points mentioned above under "Module content". ... apply methods in pre-structured contexts in a solution-oriented way. ... analyse (current) questions and challenges within the framework of pre-structured contexts. ... shape their learning and working processes independently. ... ... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.					
4	**Teaching and Learning Methods** lecture practice					
5	**Module Entry Requirements** Recommendation: Knowledge of bachelor's level econometrics and statistics					
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 Economic Research (as of WS 26/27): Core Section Economic Research Master of Science Economic Research: Core Section Economic Research Specialisation Section Economic Research					

	Master of Science Business Analytics & Econometrics: Supplementary Section Business Analytics & Econometrics Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Core Section Research Economics Specialisation Section Research Economics PhD Programm in Wirtschafts- und Sozialwissenschaften: Core Section
9	**Module Manager** Univ.-Prof. Dr. Dominik Wied
10	**Miscellaneous** Textbooks: J.D. Angrist, J.-S.Pischke, Mostly Harmless Econometrics: An Empiricist's Companion. B.E. Hansen, Econometrics

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** • 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. ... know and understand the relevant methods and theories for the points mentioned above under "Module content".				
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 Economic Research: Core Section Economic Research Specialisation Section Economic Research Master of Science Business Analytics & Econometrics: Supplementary Section Business Analytics & Econometrics Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Core Section Research Economics Specialisation Section Research Economics				
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 Advanced Mathematics					
Module Code 1302MSAMT1	**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** 45h	**Self-Studies** 135h	**Course Language** English
2	**Module Content** • Overview of elementary mathematical concepts • Metric and standardized spaces • Linear algebra • Differential calculus and applications • Optimization				
3	**Learning Objectives** Students... ... know and understand the relevant methods and theories for the points mentioned above under "Module content". ... apply mathematical argumentation and proof techniques correctly. ... formulate economic problems occurring in research mathematically and solve them. ... ... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.				
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 Economic Research (as of WS 26/27): Specialisation Section Economic Research Master of Science Economic Research: Core Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Core Section Research Economics PhD Programm in Wirtschafts- und Sozialwissenschaften: Specialisation Section				
9	**Module Manager** Univ.-Prof. Dr. Martin Barbie				
10	**Miscellaneous**				

<table>
<tr><th colspan="7">SpM Empirical Methods and Data Analysis I</th></tr>
<tr><td colspan="2">Module Code
1314MSEMD1</td><td>Workload
180h</td><td>ECTS Credits
6</td><td>Module Language
English</td><td>Module Availability
every 2nd term - winter term</td><td>Duration
1 Term</td></tr>
<tr><td>1</td><td colspan="2">Courses
a) Probability and Statistical Inference
b) Topics in Econometrics and Statistics I</td><td>Contact Hours
a) 45h
b) 45h</td><td>Self-Studies
a) 135h
b) 135h</td><td colspan="2">Course Language
a) English
b) English</td></tr>
<tr><td>2</td><td colspan="6">Module Content
• Foundations of probability theory
• Theory of point estimation and estimation techniques (e.g. maximum likelihood)
• Theory of hypothesis testing and selected tests
• Interval estimation</td></tr>
<tr><td>3</td><td colspan="6">Learning Objectives
Students...
... understand advanced, specialised theories / methods.
... know and understand the relevant methods and theories for the points mentioned above under "Module content".</td></tr>
<tr><td>4</td><td colspan="6">Teaching and Learning Methods
lecture
practice</td></tr>
<tr><td>5</td><td colspan="6">Module Entry Requirements
Recommendation: solid basic knowledge of probability theory</td></tr>
<tr><td>6</td><td colspan="6">Mode of End-Of-Module Examination
Written test: WT (90)</td></tr>
<tr><td>7</td><td colspan="6">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.</td></tr>
<tr><td>8</td><td colspan="6">Other Programmes that Use the Module
Master of Science Business Administration - Corporate Development:
Supplementary Section Corporate Development
Master of Science Information Systems:
Supplementary Section Information Systems
Master of Science Business Administration - Accounting and Taxation:
Supplementary Section Accounting and Taxation
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 - Marketing:
Supplementary Section Marketing
Master of Science Economic Research:
Supplementary Section Economic Research
Master of Science Wirtschaftsmathematik:
Economics
Master of Science Mathematik:
Economics</td></tr>
</table>

	Master of Science Business Analytics & Econometrics: Supplementary Section Business Analytics & Econometrics Master of Science International Management: Supplementary Section International Management Master of Science Informatik: Anwendungsfeld VWL Master of Science Economics: Specialisation Section Economics Supplementary Section Economics Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Core Section Research Economics Specialisation Section Research Economics Master of Science Business Administration - Marketing: Core Section Marketing Master of Science Business Analytics & Econometrics: Specialication Section Business Analytics & Econometrics
9	**Module Manager** Univ.-Prof. Dr. Dominik Wied
10	**Miscellaneous**

<table>
<tr><th colspan="6">CM Advanced Microeconomics</th></tr>
<tr><td colspan="2">Module Code
1289MBAMIC</td><td>Workload
180h</td><td>ECTS Credits
6</td><td>Module Language
English</td><td>Module Availability
every 2nd term - winter term</td><td>Duration
1 Term</td></tr>
<tr><td>1</td><td colspan="3">Courses
Advanced Microeconomics</td><td>Contact Hours
45h</td><td>Self-Studies
135h</td><td>Course Language
English</td></tr>
<tr><td>2</td><td colspan="6">Module Content
Consumer theory
Supermodularity and monotone comparative statics
Market equilibrium and welfare theorems
Game theoretic equilibrium concepts
Market failure:
• behavioural consumers
• externalities
• market power
• asymmetric information
Supermodular games</td></tr>
<tr><td>3</td><td colspan="6">Learning Objectives
Students...
... understand modern microeconomic concepts.
... practice formal techniques of microeconomic analysis.
... use mathematical models to investigate the efficiency of market outcomes.
... modify these models to recognize their limitations and to analyse the effects of political interventions.
... know and understand the relevant methods and theories for the points mentioned above under "Module content".
...
... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.</td></tr>
<tr><td>4</td><td colspan="6">Teaching and Learning Methods
lecture
practice</td></tr>
<tr><td>5</td><td colspan="6">Module Entry Requirements
Recommendation: Good basic knowledge of microeconomics and mathematics</td></tr>
<tr><td>6</td><td colspan="6">Mode of End-Of-Module Examination
Written test: WT (60)</td></tr>
<tr><td>7</td><td colspan="6">Prerequisites for Awarding of Credit Points
Passing the module examination</td></tr>
<tr><td>8</td><td colspan="6">Other Programmes that Use the Module
Master of Science Economic Research (as of WS 26/27):
Core Section Economic Research
Master of Science Economic Research:
Core Section Economic Research
PhD Programm in Wirtschafts- und Sozialwissenschaften:
Core Section
Research in Management, Economics and Social Sciences - Volkswirtschaftslehre:</td></tr>
</table>

	Specialisation Section Research Economics Master of Science Economic Research: Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Core Section Research Economics
9	**Module Manager** Univ.-Prof. Dr. Johannes Münster
10	**Miscellaneous**

<table>
<tr><th colspan="6">CM Advanced Microeconomics</th></tr>
<tr><td colspan="2">Module Code
1289MBAMIC</td><td>Workload
180h</td><td>ECTS Credits
6</td><td>Module Language
English</td><td>Module Availability
every 2nd term - winter term</td><td>Duration
1 Term</td></tr>
<tr><td>1</td><td colspan="3">Courses
Advanced Microeconomics</td><td>Contact Hours
45h</td><td>Self-Studies
135h</td><td>Course Language
English</td></tr>
<tr><td>2</td><td colspan="6">Module Content
Consumer theory
Supermodularity and monotone comparative statics
Market equilibrium and welfare theorems
Game theoretic equilibrium concepts
Market failure:
• behavioural consumers
• externalities
• market power
• asymmetric information
Supermodular games</td></tr>
<tr><td>3</td><td colspan="6">Learning Objectives
Students...
... understand modern microeconomic concepts.
... practice formal techniques of microeconomic analysis.
... use mathematical models to investigate the efficiency of market outcomes.
... modify these models to recognize their limitations and to analyse the effects of political interventions.
... know and understand the relevant methods and theories for the points mentioned above under "Module content".
...
... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.</td></tr>
<tr><td>4</td><td colspan="6">Teaching and Learning Methods
lecture
practice</td></tr>
<tr><td>5</td><td colspan="6">Module Entry Requirements
Recommendation: Good basic knowledge of microeconomics and mathematics</td></tr>
<tr><td>6</td><td colspan="6">Mode of End-Of-Module Examination
Written test: WT (60)</td></tr>
<tr><td>7</td><td colspan="6">Prerequisites for Awarding of Credit Points
Passing the module examination</td></tr>
<tr><td>8</td><td colspan="6">Other Programmes that Use the Module
Master of Science Economic Research (as of WS 26/27):
Core Section Economic Research
Master of Science Economic Research:
Core Section Economic Research
PhD Programm in Wirtschafts- und Sozialwissenschaften:
Core Section
Research in Management, Economics and Social Sciences - Volkswirtschaftslehre:</td></tr>
</table>

	Specialisation Section Research Economics Master of Science Economic Research: Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Core Section Research Economics
9	**Module Manager** Univ.-Prof. Dr. Johannes Münster
10	**Miscellaneous**

3.3.2.2 Specialisiation Section

<table>
<tr><th colspan="7">AM Computational Methods</th></tr>
<tr><td colspan="2">Module Code
1302MACMT1</td><td>Workload
180h</td><td>ECTS Credits
6</td><td>Module Language
English</td><td>Module Availability
every 2nd term - summer term</td><td>Duration
1 Term</td></tr>
<tr><td>1</td><td colspan="3">Courses
Computational Methods</td><td>Contact Hours
45h</td><td>Self-Studies
135h</td><td>Course Language
English</td></tr>
<tr><td>2</td><td colspan="6">Module Content
• 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</td></tr>
<tr><td>3</td><td colspan="6">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.
... know and understand the relevant methods and theories for the points mentioned above under "Module content".</td></tr>
<tr><td>4</td><td colspan="6">Teaching and Learning Methods
lecture
practice</td></tr>
<tr><td>5</td><td colspan="6">Module Entry Requirements
none</td></tr>
<tr><td>6</td><td colspan="6">Mode of End-Of-Module Examination
Written test: WT (60)</td></tr>
<tr><td>7</td><td colspan="6">Prerequisites for Awarding of Credit Points
Passing the module examination</td></tr>
<tr><td>8</td><td colspan="6">Other Programmes that Use the Module
Master of Science Economic Research:
Core Section Economic Research
Master of Science Economics:
Specialisation Section Economics
Supplementary Section Economics
Research in Management, Economics and Social Sciences - Volkswirtschaftslehre:
Specialisation Section Research Economics
Master of Science Economic Research (as of WS 26/27):
Supplementary Section Economic Research</td></tr>
<tr><td>9</td><td colspan="6">Module Manager
Univ.-Prof. Michael Krause, Ph.D.</td></tr>
</table>

10	**Miscellaneous**

AM Selected Methods in Economics					
Module Code 1289MAEXM1	**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** • Experimental Methods in economics • Experimental designs • Analysing experimental data				
3	**Learning Objectives** Students... ... 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. ... know and understand the relevant methods and theories for the points mentioned above under "Module content".				
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 Economic Research: Core Section Economic Research Master of Science Economics: Specialisation Section Economics Supplementary Section Economics Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics Master of Science Economic Research (as of WS 26/27): Supplementary Section Economic Research				
9	**Module Manager** Prof. Christopher Roth				
10	**Miscellaneous**				

<table>
<tr><th colspan="6">CM Advanced Microeconomics</th></tr>
<tr><td colspan="2">Module Code
1289MBAMIC</td><td>Workload
180h</td><td>ECTS Credits
6</td><td>Module Language
English</td><td>Module Availability
every 2nd term - winter term</td><td>Duration
1 Term</td></tr>
<tr><td>1</td><td colspan="3">Courses
Advanced Microeconomics</td><td>Contact Hours
45h</td><td>Self-Studies
135h</td><td>Course Language
English</td></tr>
<tr><td>2</td><td colspan="6">Module Content
Consumer theory
Supermodularity and monotone comparative statics
Market equilibrium and welfare theorems
Game theoretic equilibrium concepts
Market failure:
• behavioural consumers
• externalities
• market power
• asymmetric information
Supermodular games</td></tr>
<tr><td>3</td><td colspan="6">Learning Objectives
Students...
... understand modern microeconomic concepts.
... practice formal techniques of microeconomic analysis.
... use mathematical models to investigate the efficiency of market outcomes.
... modify these models to recognize their limitations and to analyse the effects of political interventions.
... know and understand the relevant methods and theories for the points mentioned above under "Module content".
...
... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.</td></tr>
<tr><td>4</td><td colspan="6">Teaching and Learning Methods
lecture
practice</td></tr>
<tr><td>5</td><td colspan="6">Module Entry Requirements
Recommendation: Good basic knowledge of microeconomics and mathematics</td></tr>
<tr><td>6</td><td colspan="6">Mode of End-Of-Module Examination
Written test: WT (60)</td></tr>
<tr><td>7</td><td colspan="6">Prerequisites for Awarding of Credit Points
Passing the module examination</td></tr>
<tr><td>8</td><td colspan="6">Other Programmes that Use the Module
Master of Science Economic Research (as of WS 26/27):
Core Section Economic Research
Master of Science Economic Research:
Core Section Economic Research
PhD Programm in Wirtschafts- und Sozialwissenschaften:
Core Section
Research in Management, Economics and Social Sciences - Volkswirtschaftslehre:</td></tr>
</table>

	Specialisation Section Research Economics Master of Science Economic Research: Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Core Section Research Economics
9	**Module Manager** Univ.-Prof. Dr. Johannes Münster
10	**Miscellaneous**

CM Advanced Macroeconomics					
Module Code 1302MBAMAC	**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every 2nd term - winter term	**Duration** 1 Term
1	**Courses** Advanced Macroeconomics		**Contact Hours** 60h	**Self-Studies** 120h	**Course Language** English
2	**Module Content** - Dynamic general equilibrium macroeconomics - Long-run equilibria and business cyles - Complete markets, intertemporal allocation and risk sharing - Financial market imperfections and incomplete markets - Fiscal policy and public debt sustainability - Optimal taxation under commitment - Transaction frictions, money demand and price determination - Macroeconomics under nominal rigidities - Monetary policy and inequality - Macroprudential regulation				
3	**Learning Objectives** Students... ... know and understand the relevant methods and theories for the points mentioned above under "Module content". ... know and understand basic theories in dynamic and monetary macroeconomics. ... choose and use theories in pre-structured contexts (e.g. case studies) in a solution-driven way. ... know and understand common methods in optimal policy analysis. ... apply methods in pre-structured contexts in a solution-oriented way. ... analyse (current) questions and challenges within the framework of pre-structured contexts. ... communicate continuously and purposefully within teaching and learning groups. ... analyse the impact of decisions that consider environmental, economic, social or ethical criteria. ... reflect on current social developments. ... organise their learning and working processes independently. ... use taught techniques of scientific work and good scientific practice. ... ... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.				
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 Economic Research (as of WS 26/27): Core Section Economic Research				

	Master of Science Economic Research: Core Section Economic Research Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics PhD Programm in Wirtschafts- und Sozialwissenschaften: Core Section
9	**Module Manager** Univ.-Prof. Dr. Andreas Schabert
10	**Miscellaneous** Useful literature: Ljungqvist, Lars and Thomas J. Sargent (2012). Recursive macroeconomic 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

<table>
<tr><th colspan="7">CM Advanced Macroeconomics I</th></tr>
<tr><td colspan="2">Module Code
1302MBAMA1</td><td>Workload
180h</td><td>ECTS Credits
6</td><td>Module Language
English</td><td>Module Availability
every 2nd term - winter term</td><td>Duration
1 Term</td></tr>
<tr><td>1</td><td colspan="3">Courses
Advanced Macroeconomics I</td><td>Contact Hours
60h</td><td>Self-Studies
120h</td><td>Course Language
English</td></tr>
<tr><td>2</td><td colspan="6">Module Content
• 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)
• Numeral solutions, simulation and evaluation of structural models
• Calibration and introduction in structural estimation of model parameter
Frictions and fluctuations in labor markets</td></tr>
<tr><td>3</td><td colspan="6">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.
... know and understand the relevant methods and theories for the points mentioned above under "Module content".</td></tr>
<tr><td>4</td><td colspan="6">Teaching and Learning Methods
lecture
practice</td></tr>
<tr><td>5</td><td colspan="6">Module Entry Requirements
none</td></tr>
<tr><td>6</td><td colspan="6">Mode of End-Of-Module Examination
Written test: WT (90)</td></tr>
<tr><td>7</td><td colspan="6">Prerequisites for Awarding of Credit Points
Passing the module examination</td></tr>
<tr><td>8</td><td colspan="6">Other Programmes that Use the Module
Master of Science Economic Research:
Core Section Economic Research
Specialisation Section Economic Research
Research in Management, Economics and Social Sciences - Volkswirtschaftslehre:
Specialisation Section Research Economics</td></tr>
</table>

9	**Module Manager** Univ.-Prof. Dr. Peter Funk
10	**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.

<table>
<tr><th colspan="7">CM Advanced Econometrics</th></tr>
<tr><td colspan="2">Module Code
1314MBAEME</td><td>Workload
180h</td><td>ECTS Credits
6</td><td>Module Language
English</td><td>Module Availability
every 2nd term - winter term</td><td>Duration
1 Term</td></tr>
<tr><td>1</td><td colspan="3">Courses
Advanced Econometrics</td><td>Contact Hours
60h</td><td>Self-Studies
120h</td><td>Course Language
English</td></tr>
<tr><td>2</td><td colspan="6">Module Content
In the course, econometric methods and applications will be presented, students will work with the statistical software R. Topics:

Linear regression model
Advanced aspects of econometric modelling and theory
Estimating treatment effects
Big data econometrics
Selected (financial) time series models</td></tr>
<tr><td>3</td><td colspan="6">Learning Objectives
Students...
... know and understand the relevant methods and theories for the points mentioned above under "Module content".
... apply methods in pre-structured contexts in a solution-oriented way.
... analyse (current) questions and challenges within the framework of pre-structured contexts.
... shape their learning and working processes independently.
...
... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.</td></tr>
<tr><td>4</td><td colspan="6">Teaching and Learning Methods
lecture
practice</td></tr>
<tr><td>5</td><td colspan="6">Module Entry Requirements
Recommendation: Knowledge of bachelor’s level econometrics and statistics</td></tr>
<tr><td>6</td><td colspan="6">Mode of End-Of-Module Examination
Written test: WT (90)</td></tr>
<tr><td>7</td><td colspan="6">Prerequisites for Awarding of Credit Points
Passing the module examination.</td></tr>
<tr><td>8</td><td colspan="6">Other Programmes that Use the Module
Master of Science Economic Research (as of WS 26/27):
Core Section Economic Research
Master of Science Economic Research:
Core Section Economic Research
Specialisation Section Economic Research
Master of Science Business Analytics & Econometrics:
Supplementary Section Business Analytics & Econometrics
Research in Management, Economics and Social Sciences - Volkswirtschaftslehre:
Core Section Research Economics
Specialisation Section Research Economics</td></tr>
</table>

	PhD Programm in Wirtschafts- und Sozialwissenschaften: Core Section
9	**Module Manager** Univ.-Prof. Dr. Dominik Wied
10	**Miscellaneous** Textbooks: J.D. Angrist, J.-S.Pischke, Mostly Harmless Econometrics: An Empiricist's Companion. B.E. Hansen, Econometrics

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** • 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. ... know and understand the relevant methods and theories for the points mentioned above under "Module content".				
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 Economic Research: Core Section Economic Research Specialisation Section Economic Research Master of Science Business Analytics & Econometrics: Supplementary Section Business Analytics & Econometrics Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Core Section Research Economics Specialisation Section Research Economics				
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 Advanced Public Economics					
Module Code 1302MSAPE1	**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every 2nd term - winter term	**Duration** 1 Term
1	**Courses** Advanced Public Economics		**Contact Hours** 45h	**Self-Studies** 135h	**Course Language** English
2	**Module Content** Theory of optimal taxation Methods: „Mechanism Design“ and „Tax Perturbations“ Evaluation of tax reforms using „Sufficient Statistics“				
3	**Learning Objectives** Students... ... know and understand the relevant methods and theories for the points mentioned above under "Module content". ... learn to use the methods of optimal tax theory ... will be able to derive „optimal tax formulas“ ... acquire basic knowledge in „Mechanism Design“ and understand the use of mechanism design approaches in public finance. ... will become familiar with „tax perturbations“, a method that uses tools from the calculus of variations. These tools are used to analyze the welfare implications of tax reforms. ... Acquire an understanding of „sufficient statistics approaches“ in the empirical evaluation of tax reforms. ... ... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.				
4	**Teaching and Learning Methods** lecture practice				
5	**Module Entry Requirements** Recommendation: CM Microeconomics and CM Advanced Public Policy				
6	**Mode of End-Of-Module Examination** Combined examination: Project work				
7	**Prerequisites for Awarding of Credit Points** Passing the module examination				
8	**Other Programmes that Use the Module** Master of Science Economic Research: Specialisation Section Economic Research Supplementary Section Economic Research Master of Science Economics: Supplementary Section Economics Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics Master of Science Economic Research (as of WS 26/27): Specialisation Section Economic Research PhD Programm in Wirtschafts- und Sozialwissenschaften: Specialisation Section				

9	**Module Manager** Univ.-Prof. Dr. Felix Bierbrauer
10	**Miscellaneous**

<table>
<tr><th colspan="7">SpM Political Economy and Media Economics</th></tr>
<tr><td colspan="2">Module Code
1302MSPME1</td><td>Workload
180h</td><td>ECTS Credits
6</td><td>Module Language
English</td><td>Module Availability
every 2nd term - summer term</td><td>Duration
1 Term</td></tr>
<tr><td>1</td><td colspan="3">Courses
Political Economics and Media Economics</td><td>Contact Hours
45h</td><td>Self-Studies
135h</td><td>Course Language
English</td></tr>
<tr><td>2</td><td colspan="6">Module Content
• Aggregation of preferences and information on socially relevant issues
• Models of political competition in democracies, e.g. on social issues, taxation and redistribution
• Behavioural economic aspects of political competition
• Interaction of media markets and politics</td></tr>
<tr><td>3</td><td colspan="6">Learning Objectives
Students...
... know and understand the relevant methods and theories for the points mentioned above under "Module content".
... know classical and current research results in the field of Political Economics.
... understand formal models of political competition in democracies.
... explain empirical findings with the help of these models.
... discuss the current state of research and implications for society.
...
... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.</td></tr>
<tr><td>4</td><td colspan="6">Teaching and Learning Methods
lecture
practice</td></tr>
<tr><td>5</td><td colspan="6">Module Entry Requirements
Recommendation: CM Advanced Public Policy, Knowledge of game theory, knowledge of consumer behaviour theory</td></tr>
<tr><td>6</td><td colspan="6">Mode of End-Of-Module Examination
Written test: WT (90)</td></tr>
<tr><td>7</td><td colspan="6">Prerequisites for Awarding of Credit Points
Passing the module examination</td></tr>
<tr><td>8</td><td colspan="6">Other Programmes that Use the Module
Master of Science Economic Research:
Specialisation Section Economic Research
Supplementary Section Economic Research
Master of Science Economics:
Supplementary Section Economics
Research in Management, Economics and Social Sciences - Volkswirtschaftslehre:
Specialisation Section Research Economics
Master of Science Economic Research (as of WS 26/27):
Specialisation Section Economic Research
PhD Programm in Wirtschafts- und Sozialwissenschaften:
Specialisation Section</td></tr>
</table>

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

SpM Empirical Methods and Data Analysis I						
Module Code 1314MSEMD1		**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every 2nd term - winter term	**Duration** 1 Term
1	**Courses** a) Probability and 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** • 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. ... know and understand the relevant methods and theories for the points mentioned above under "Module content".					
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 - Corporate Development: Supplementary Section Corporate Development Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation 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 - Marketing: Supplementary Section Marketing Master of Science Economic Research: Supplementary Section Economic Research Master of Science Wirtschaftsmathematik: Economics Master of Science Mathematik: Economics					

	Master of Science Business Analytics & Econometrics: Supplementary Section Business Analytics & Econometrics Master of Science International Management: Supplementary Section International Management Master of Science Informatik: Anwendungsfeld VWL Master of Science Economics: Specialisation Section Economics Supplementary Section Economics Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Core Section Research Economics Specialisation Section Research Economics Master of Science Business Administration - Marketing: Core Section Marketing Master of Science Business Analytics & Econometrics: Specialication Section Business Analytics & Econometrics
9	**Module Manager** Univ.-Prof. Dr. Dominik Wied
10	**Miscellaneous**

<table>
<tr><th colspan="7">SpM Empirical Methods and Data Analysis II</th></tr>
<tr><td colspan="2">Module Code
1314MSEMD2</td><td>Workload
180h</td><td>ECTS Credits
6</td><td>Module Language
English</td><td>Module Availability
every 2nd term - summer term</td><td>Duration
1 Term</td></tr>
<tr><td>1</td><td colspan="3">Courses
a) Microeconometrics
b) Machine Learning for Economists
c) Topics in Econometrics and Statistics II</td><td>Contact Hours
a) 45h
b) 45h
c) 45h</td><td>Self-Studies
a) 135h
b) 135h
c) 135h</td><td>Course Language
a) English
b) English
c) English</td></tr>
<tr><td>2</td><td colspan="6">Module Content
a) Microeconometrics
• Limited dependent variables
• Evaluation of treatment effects (Causal analysis)
• Nonparametric density and regression estimation
• Quantile and distribution regressions
• Panel data
• Duration models

b) Machine Learning for Economists
• Cross Validation, Bias-Variance Tradeoff
• Regularization, LASSO, Ridge, Elastic Net
• Optimization
• Decision trees
• Ensemble Learning, Gradient Boosting
• Neural Networks
• Classification
• Text analysis
• Causal Machine Learning</td></tr>
<tr><td>3</td><td colspan="6">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.
... know and understand the relevant methods and theories for the points mentioned above under "Module content".</td></tr>
<tr><td>4</td><td colspan="6">Teaching and Learning Methods
lecture</td></tr>
<tr><td>5</td><td colspan="6">Module Entry Requirements
Recommendation: CM Econometrics or CM Applied Econometrics (Business Administration) or CM Advanced Econometrics</td></tr>
<tr><td>6</td><td colspan="6">Mode of End-Of-Module Examination
Combined examination: term paper with presentation
Written test: WT (90)</td></tr>
</table>

7	**Prerequisites for Awarding of Credit Points** Passing the examination. Dieses Modul kann mit alternativen Prüfungsformen geprüft werden. Prüfungen zur Lehrveranstaltung Microeconometrics finden in Form einer Klausur (90) statt. Prüfungen zu den Lehrveranstaltungen Machine Learning for Economists sowie Topics in Econometrics and Statistics II finden als kombinierte Prüfung: Hausarbeit mit Referat statt.
8	**Other Programmes that Use the Module** Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation 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 - Marketing: Supplementary Section Marketing Master of Science Economic Research: Specialisation Section Economic Research Master of Science Wirtschaftsmathematik: Economics Master of Science Mathematik: Economics Master of Science Business Analytics & Econometrics: Supplementary Section Business Analytics & Econometrics Master of Science International Management: Supplementary Section International Management Master of Science Informatik: Anwendungsfeld VWL Master of Science Economics: Specialisation Section Economics Supplementary Section Economics Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics Master of Science Economic Research (as of WS 26/27): Specialisation Section Economic Research Master of Science Business Analytics & Econometrics: Specialication Section Business Analytics & Econometrics PhD Programm in Wirtschafts- und Sozialwissenschaften: Specialisation Section
9	**Module Manager** Univ.-Prof. Dr. Dominik Wied Prof. Dr. Tom Zimmermann
10	**Miscellaneous**

<table>
<tr><th colspan="7">SpM Empirical Methods and Data Analysis III</th></tr>
<tr><td colspan="2">Module Code
1314MSEMD3</td><td>Workload
180h</td><td>ECTS Credits
6</td><td>Module Language
English</td><td>Module Availability
every 2nd term - summer term</td><td>Duration
1 Term</td></tr>
<tr><td>1</td><td colspan="3">Courses
a) Time Series Econometrics
b) Stochastic Models and Processes
c) Topics in Econometrics and Statistics III</td><td>Contact Hours
a) 45h
b) 45h
c) 45h</td><td>Self-Studies
a) 135h
b) 135h
c) 135h</td><td>Course Language
a) English
b) English
c) English</td></tr>
<tr><td>2</td><td colspan="6">Module Content
a)Time Series Econometrics:
• 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:
• Deepening topics in statistical inference
• bootstrap
• nonparametric density estimation
• nonparametric tests (e.g. for independence)
• Brownian motions
• Poisson processes
• Markov processes</td></tr>
<tr><td>3</td><td colspan="6">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.
... know and understand the relevant methods and theories for the points mentioned above under "Module content".</td></tr>
<tr><td>4</td><td colspan="6">Teaching and Learning Methods
lecture
practice</td></tr>
<tr><td>5</td><td colspan="6">Module Entry Requirements
Recommendation: Solid basic knowledge of probability theory</td></tr>
<tr><td>6</td><td colspan="6">Mode of End-Of-Module Examination
Written test: WT (90)</td></tr>
<tr><td>7</td><td colspan="6">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.</td></tr>
<tr><td>8</td><td colspan="6">Other Programmes that Use the Module
Master of Science Business Administration - Corporate Development:
Supplementary Section Corporate Development
Master of Science Information Systems:</td></tr>
</table>

	Supplementary Section Information Systems Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation 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 - Marketing: Supplementary Section Marketing Master of Science Economic Research: Specialisation Section Economic Research Supplementary Section Economic Research Master of Science Wirtschaftsmathematik: Economics Master of Science Mathematik: Economics Master of Science Business Analytics & Econometrics: Supplementary Section Business Analytics & Econometrics Master of Science International Management: Supplementary Section International Management Master of Science Informatik: Anwendungsfeld VWL Master of Science Economics: Specialisation Section Economics Supplementary Section Economics Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics Master of Science Business Administration - Marketing: Core Section Marketing Master of Science Economic Research (as of WS 26/27): Specialisation Section Economic Research Master of Science Business Analytics & Econometrics: Specialication Section Business Analytics & Econometrics PhD Programm in Wirtschafts- und Sozialwissenschaften: Specialisation Section
9	**Module Manager** Univ.-Prof. Dr. Dominik Wied
10	**Miscellaneous**

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** • 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. ... know and understand the relevant methods and theories for the points mentioned above under "Module content".					
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 Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation 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 - Marketing: Supplementary Section Marketing Master of Science Economic Research: Supplementary Section Economic Research Master of Science Wirtschaftsmathematik: Economics Master of Science Mathematik: Economics Master of Science Business Analytics & Econometrics: Supplementary Section Business Analytics & Econometrics Master of Science Business Administration - Accounting and Taxation: Core Section Accounting and Taxation Master of Science International Management: Supplementary Section International Management Master of Science Informatik: Anwendungsfeld VWL Master of Science Economics: Specialisation Section Economics Supplementary Section Economics Master of Science Business Administration - Finance: Core Section Finance Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics Master of Science Business Analytics & Econometrics: Specialication Section Business Analytics & Econometrics
9	**Module Manager** Univ.-Prof. Dr. Roman Liesenfeld
10	**Miscellaneous**

<table>
<tr><th colspan="6">SpM Empirical Methods and Data Analysis V</th></tr>
<tr><td colspan="2">Module Code
1314MSEMD5</td><td>Workload
180h</td><td>ECTS Credits
6</td><td>Module Language
English</td><td>Module Availability
every 2nd term - winter term</td><td>Duration
1 Term</td></tr>
<tr><td>1</td><td colspan="2">Courses
a) Multivariate Statistics
b) Panel Data Analysis
c) Bayesian Econometrics
d) Topics in Econometrics and Statistics V</td><td>Contact Hours
a) 45h
b) 45h
c) 45h
d) 45h</td><td>Self-Studies
a) 135h
b) 135h
c) 135h
d) 135h</td><td>Course Language
a) English
b) English
c) English
d) English</td></tr>
<tr><td>2</td><td colspan="6">Module Content
a) Multivariate Statistics:
• Analysis of Variance
• Eigenvalues
• Principal Component Analysis
• Factor Analysis
• Discriminant Analysis
• Cluster Analysis
• Multivariate Testing
• Correlation Analysis

b) Panel Data Analysis:
• Static Panel Data Model
• Dynamic Panel Data Model
• Extensions
• Factor Analysis

c) Bayesian Econometrics:
• 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

d) Topics in Econometrics and Statistics 5:
• Recent statistical and econometric methods
• Applications in business administration, management studies and economics and social sciences</td></tr>
<tr><td>3</td><td colspan="6">Learning Objectives
Students...
... 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.
... know and understand the relevant methods and theories for the points mentioned above under "Module content".</td></tr>
</table>

4	**Teaching and Learning Methods** lecture practice
5	**Module Entry Requirements** Recommendation: CM Econometrics or CM Applied Econometrics (Business Administration) or CM Advanced Econometrics
6	**Mode of End-Of-Module Examination** Oral examination: OE
7	**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.
8	**Other Programmes that Use the Module** Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation 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 - Marketing: Supplementary Section Marketing Master of Science Economic Research: Supplementary Section Economic Research Master of Science Wirtschaftsmathematik: Economics Master of Science Mathematik: Economics Master of Science Business Analytics & Econometrics: Supplementary Section Business Analytics & Econometrics Master of Science Business Administration - Accounting and Taxation: Core Section Accounting and Taxation Master of Science International Management: Supplementary Section International Management Master of Science Informatik: Anwendungsfeld VWL Master of Science Economics: Specialisation Section Economics Supplementary Section Economics Master of Science Business Administration - Finance: Core Section Finance Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics Master of Science Business Analytics & Econometrics: Specialication Section Business Analytics & Econometrics
9	**Module Manager** Univ.-Prof. Dr. Bastian Gribisch
10	**Miscellaneous**

<table>
<tr><th colspan="7">SpM Energy and Climate Change I</th></tr>
<tr><td colspan="2">Module Code
1289MSECC1</td><td>Workload
180h</td><td>ECTS Credits
6</td><td>Module Language
English</td><td>Module Availability
every 2nd term - winter term</td><td>Duration
1 Term</td></tr>
<tr><td>1</td><td colspan="3">Courses
a) Topics in Energy and Climate Change I
b) Energy Markets and Regulation</td><td>Contact Hours
a) 45h
b) 45h</td><td>Self-Studies
a) 135h
b) 135h</td><td>Course Language
a) English
b) English</td></tr>
<tr><td>2</td><td colspan="6">Module Content
• Economic models of energy markets and infrastructure • Short- and long-term equilibria • Market design and regulation • Institutions and policies • New technologies</td></tr>
<tr><td>3</td><td colspan="6">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.</td></tr>
<tr><td>4</td><td colspan="6">Teaching and Learning Methods
lecture
practice</td></tr>
<tr><td>5</td><td colspan="6">Module Entry Requirements
none</td></tr>
<tr><td>6</td><td colspan="6">Mode of End-Of-Module Examination
Written test: WT (90)</td></tr>
<tr><td>7</td><td colspan="6">Prerequisites for Awarding of Credit Points
Passing the module examination in one of the courses offered.</td></tr>
<tr><td>8</td><td colspan="6">Other Programmes that Use the Module
Master of Science Business Administration - Corporate Development:
Supplementary Section Corporate Development
Master of Science Information Systems:
Supplementary Section Information Systems
Master of Science Business Administration - Accounting and Taxation:
Supplementary Section Accounting and Taxation
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 - Marketing:
Supplementary Section Marketing
Master of Science Economic Research:
Supplementary Section Economic Research
Master of Science International Management:
Supplementary Section International Management
Master of Arts Politikwissenschaft:
Supplementary Section Political Science
Master of Science Political Science:
Supplementary Section Political Science</td></tr>
</table>

	Master of Science Economics: Specialisation Section Economics Supplementary Section Economics Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics Master of Science Sociology: Social and Economic Psychology: Supplementary Section Sociology: Social and Economic Psychology Master of Science Sociology: Social Research: Supplementary Section Sociology and Social Research Master of Science Economic Research (as of WS 26/27): Supplementary Section Economic Research
9	**Module Manager** Univ.-Prof. Dr. Marc Oliver Bettzüge
10	**Miscellaneous**

SpM Energy and Climate Change III					
Module Code 1289MSECC3	**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** • Numerical approaches to energy market modelling • Optimisation problems in energy economics • Empirical methods in energy economics				
3	**Learning Objectives** Students... ... 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: presentation with written paper				
7	**Prerequisites for Awarding of Credit Points** Passing the module examination				
8	**Other Programmes that Use the Module** Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development Master of Science Information Systems: Supplementary Section Information Systems Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation 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 - Marketing: Supplementary Section Marketing Master of Science Economic Research: Supplementary Section Economic Research Master of Science International Management: Supplementary Section International Management Master of Arts Politikwissenschaft: Supplementary Section Political Science Master of Science Political Science: Supplementary Section Political Science Master of Science Economics: Specialisation Section Economics Supplementary Section Economics				

	Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics Master of Science Sociology: Social and Economic Psychology: Supplementary Section Sociology: Social and Economic Psychology Master of Science Sociology: Social Research: Supplementary Section Sociology and Social Research Master of Science Economic Research (as of WS 26/27): Supplementary Section Economic Research
9	**Module Manager** Univ.-Prof. Dr. Marc Oliver Bettzüge
10	**Miscellaneous**

SpM Market Design and Behaviour VI						
Module Code 1289MSMDB6		**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every 2nd term - summer term	**Duration** 1 Term
1	**Courses** Econometrics for Behavioral Economists			**Contact Hours** 45h	**Self-Studies** 135h	**Course Language** English
2	**Module Content** This module introduces advanced econometric tools for empirical research in behavioural and applied microeconomics. It covers causal inference using experimental and quasi-experimental designs, correct implementation of randomisation and power analysis, handling non-compliance and design uncertainty, and adjustments for multiple testing. It further discusses research planning, pre-analysis plans, scientific conduct and reproducibility. Basic machine-learning methods are introduced to contrast prediction-oriented and causal approaches.					
3	**Learning Objectives** Students... ... know and understand the relevant methods and theories for the points mentioned above under "Module content". ... understand how experiments and quasi-experimental designs identify causal effects. ... can plan and conduct power analyses and randomisation correctly. ... know how to address non-compliance, design uncertainty and multiple testing. ... are able to critically assess empirical studies and design their own research projects. ... understand the basic principles of machine learning relative to econometric inference. ... ... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations					
4	**Teaching and Learning Methods** lecture practice					
5	**Module Entry Requirements** Recommendation: Core Module Econometrics					
6	**Mode of End-Of-Module Examination** Combined examination: Project work					
7	**Prerequisites for Awarding of Credit Points** Passing the module examination.					
8	**Other Programmes that Use the Module** Master of Science Economic Research (as of WS 26/27): Specialisation Section Economic Research Master of Science Economic Research: Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics Master of Science Economics: Specialisation Section Economics Supplementary Section Economics PhD Programm in Wirtschafts- und Sozialwissenschaften: Specialisation Section					

9	**Module Manager** Univ.-Prof. Dr.‘ Pia Pinger
10	**Miscellaneous**

SpM Frontiers in Economic Research					
Module Code 1289MSSDE1	**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every 2nd term - summer term	**Duration** 1 Term
1	**Courses** Frontiers in Economic Research		**Contact Hours** 45h	**Self-Studies** 135h	**Course Language** English
2	**Module Content** Topics in Economics.				
3	**Learning Objectives** Students... ...know and understand the relevant methods and theories for the points mentioned above under "Module content". … acquire knowledge and skills related to the selected course. … present and discuss results with teaching staff and other students. ... ... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.				
4	**Teaching and Learning Methods** lecture practice				
5	**Module Entry Requirements** none				
6	**Mode of End-Of-Module Examination** Combined examination: presentation with written paper				
7	**Prerequisites for Awarding of Credit Points** Passing the module examination.				
8	**Other Programmes that Use the Module** Master of Science Economic Research (as of WS 26/27): Specialisation Section Economic Research Master of Science Economic Research: Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics PhD Programm in Wirtschafts- und Sozialwissenschaften: Specialisation Section				
9	**Module Manager** Academic Director MSc Economic Research				
10	**Miscellaneous**				

<table>
<tr><th colspan="7">SpM Energy and Environmental Economics</th></tr>
<tr><td colspan="2">Module Code
1289MSEEE1</td><td>Workload
180h</td><td>ECTS Credits
6</td><td>Module Language
English</td><td>Module Availability
every 2nd term - summer term</td><td>Duration
1 Term</td></tr>
<tr><td>1</td><td colspan="3">Courses
Energy and Environmental Economics</td><td>Contact Hours
45h</td><td>Self-Studies
135h</td><td>Course Language
English</td></tr>
<tr><td>2</td><td colspan="6">Module Content
Energy and Environmental Economics
Energy and Environmental Markets and Policy</td></tr>
<tr><td>3</td><td colspan="6">Learning Objectives
Students...
... know and understand the relevant methods and theories for the points mentioned above under "Module content".
... relate to general concepts of behavioral economics and public economics
... analyze existing markets and policies in the areas of energy and the environment
… communicate continuously and purposefully within teaching and learning groups.
… present and discuss results with teaching staff and other students.
… communicate in English.
… analyse the impact of decisions that consider environmental, economic, social or ethical criteria.
… shape their learning and working processes independently.
… use taught techniques of scientific work and good scientific practice.
... identify reference points for their own doctoral research
...
... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.</td></tr>
<tr><td>4</td><td colspan="6">Teaching and Learning Methods
lecture
practice</td></tr>
<tr><td>5</td><td colspan="6">Module Entry Requirements
none</td></tr>
<tr><td>6</td><td colspan="6">Mode of End-Of-Module Examination
Combined examination: presentation with written test</td></tr>
<tr><td>7</td><td colspan="6">Prerequisites for Awarding of Credit Points
Passing the module examination.</td></tr>
<tr><td>8</td><td colspan="6">Other Programmes that Use the Module
Master of Science Economic Research:
Specialisation Section Economic Research
Supplementary Section Economic Research
Master of Science Economics:
Supplementary Section Economics
Master of Science Economic Research (as of WS 26/27):
Specialisation Section Economic Research
Research in Management, Economics and Social Sciences - Volkswirtschaftslehre:
Specialisation Section Research Economics
PhD Programm in Wirtschafts- und Sozialwissenschaften:
Specialisation Section</td></tr>
</table>

9	**Module Manager** Jun.-Prof. Dr. Oliver Ruhnau
10	**Miscellaneous**

<table>
<tr><th colspan="6">SpM Empirical Public Finance and Policy Evaluation</th></tr>
<tr><td colspan="2">Module Code
1287MSEPF1</td><td>Workload
180h</td><td>ECTS Credits
6</td><td>Module Language
English</td><td>Module Availability
every 2nd term - winter term</td><td>Duration
1 Term</td></tr>
<tr><td>1</td><td colspan="3">Courses
Empirical Public Finance and Policy Evaluation</td><td>Contact Hours
45h</td><td>Self-Studies
135h</td><td>Course Language
English</td></tr>
<tr><td>2</td><td colspan="6">Module Content
This course provides an in-depth introduction to modern empirical research in public finance and policy evaluation. The focus is on identifying and quantifying the efficiency, equity, and welfare implications of public policies. Students will learn how to apply and critically assess empirical and structural methods used to analyse taxation, social insurance, and redistribution.
The course is structured around three overarching themes:

• Data and Measurement
o Administrative micro data
o Survey data and preference elicitation
o Inequality measurement and welfare indices
• Quantitative Methods
o Sophisticated correlations and long-run trend analyses
o Quantitative structural models such as spatial equilibrium models (macro) or microsimulation models (micro)
o Experimental approaches (lab, survey, field experiments)
o Quasi-experimental designs (DiD and extensions, RDD, IV)
• Selection substantive Topics in Public Finance (such as)
o Income and Business Taxation
o Inequality and Equality of opportunity
o Tax incidence and pass-through
o Social Insurance
o Labor Market Institutions
o Tax evasion and Enforcement</td></tr>
<tr><td>3</td><td colspan="6">Learning Objectives
Students...
... know and understand the relevant methods and theories for the points mentioned above under "Module content".
... know and understand how to empirically evaluate the efficiency, equity, and welfare effects of public policies.
... Know, compare and evaluate main empirical strategies used in public finance, including experimental and quasi-experimental designs.
... Use and learn to interpret real research micro data for policy evaluation.
... Know and understand the structure and purpose of macro- and micro-structural models used in public economics.
... Know, compare and evaluate identification strategies and the external validity of empirical findings.
... Acquire the skills to replicate empirical studies and to design their own research proposals in empirical public finance.
... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.</td></tr>
<tr><td>4</td><td colspan="6">Teaching and Learning Methods
Research project</td></tr>
</table>

5	**Module Entry Requirements** none
6	**Mode of End-Of-Module Examination** Written test: Portfolio
7	**Prerequisites for Awarding of Credit Points** Passing the module examination.
8	**Other Programmes that Use the Module** Master of Science Economic Research (as of WS 26/27): Specialisation Section Economic Research Master of Science Economic Research: Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics PhD Programm in Wirtschafts- und Sozialwissenschaften: Specialisation Section
9	**Module Manager** Univ.-Prof. Dr. Sebastian Siegloch
10	**Miscellaneous**

<table>
<tr><th colspan="6">CM Advanced Public Policy</th></tr>
<tr><td colspan="2">Module Code
1302MBAPP1</td><td>Workload
180h</td><td>ECTS Credits
6</td><td>Module Language
English</td><td>Module Availability
every 2nd term - winter term</td><td>Duration
1 Term</td></tr>
<tr><td>1</td><td colspan="3">Courses
Advanced Public Policy</td><td>Contact Hours
45h</td><td>Self-Studies
135h</td><td>Course Language
English</td></tr>
<tr><td>2</td><td colspan="6">Module Content
Introduction to Optimal Taxation
Introduction to the Political Economy of Taxation
Introduction to Social Choice
Introduction to the Political Economy of the Media
Introduction to the main empirical methods in public finance and policy evaluation</td></tr>
<tr><td>3</td><td colspan="6">Learning Objectives
Students...
...know and understand the relevant methods and theories for the points mentioned above under "Module content".
... understand the trade-offs that are analyzed in the theory of optimal taxation, in particular, the
... equity-efficiency trade-off
...
... get an overview of what the theory of optimal taxation implies for the taxation of incomes, consumption expenditures and wealth
...
... use simple models to learn the formal, micro-funded analysis of taxes
...
... understand the difference between a welfare economics perspective and a political economy analysis of taxes
...
... learn how to prove median voter theorems
...
...
... understand key results of Social Choice theory.
...
... get an overview over political participation, descriptive and substantive representation, and political inequality.
...
... understand the economics of the news media and their role in democratic processes.
...
... learn and use formal and empirical methods to analyze political processes.
...
... understand the core empirical methods used to quantify welfare and distributional effects of public policies.
...
... gain fundamental insights into the logic and implementation of structural models in public economics.
...
... learn the “sufficient statistics” approach through simple applications in the context of social insurance.
...
... obtain an overview of the main quasi-experimental research designs applied to income taxation, corporate taxation, tax evasion, and social insurance.</td></tr>
</table>

	... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.
4	**Teaching and Learning Methods** lecture practice
5	**Module Entry Requirements** Recommendation: basic knowledge in Consumer choice, Constrained Optimisation, Game 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 Economic Research (as of WS 26/27): Core Section Economic Research Master of Science Economic Research: Core Section Economic Research Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics PhD Programm in Wirtschafts- und Sozialwissenschaften: Core Section
9	**Module Manager** Univ.-Prof. Dr. Felix Bierbrauer Univ.-Prof. Dr. Johannes Münster Univ.-Prof. Dr. Sebastian Siegloch
10	**Miscellaneous**

CM Behavioural Economics and Survey Experiments						
Module Code 1289MBBESE		**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every 2nd term - winter term	**Duration** 1 Term
1	**Courses** Behavioural Economics and Survey Experiments			**Contact Hours** 45h	**Self-Studies** 135h	**Course Language**
2	**Module Content** This course introduces students to a recent literature in behavioral economics that has used survey experiments. The course will focus on both methods and applied research using these methods to understand economic decision-making. On the methodological side, the course introduces students to methods such as information provision experiments, the use of open-ended data to measure economic reasoning, or hypothetical vignette studies. The course will then explore research applying these methods to understand belief formation and economic decision making in various areas such as political economics, macroeconomics, finance, labor economics and economics of education. In particular, we will explore the following issues: • Laypeople's mental models in contexts such as education choice, labor supply decisions, decision-making in financial markets, and macroeconomic expectation formation. • Laypeople's economic narratives and their implications for beliefs and decisions in contexts such as job search, inflation or parental leave-taking. • The role of economic beliefs in shaping economic decisions in contexts such as job search, consumption spending, and stock investment. • The determinants and consequences of attention allocation among households and firm managers. The course will cover a total of 12 topics.					
3	**Learning Objectives** Students... ... know and understand the relevant methods and theories for the points mentioned above under "Module content". ... know and understand basic theories in Behavioural Economics and Survey Experiments. ... know, compare and evaluatecommon methods in Behavioural Economics and Survey Experiments. ... apply methods in pre-structured contexts in a solution-oriented way. ... communicate in English. ... organise their learning and working processes independently. ... ... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.					
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 Economic Research (as of WS 26/27): Core Section Economic Research Master of Science Economic Research: Core Section Economic Research Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics PhD Programm in Wirtschafts- und Sozialwissenschaften: Core Section
9	**Module Manager** Univ.-Prof. Dr. Christopher Roth Univ.-Prof. Dr.‘ Sonja Settele Univ.-Prof. Dr. Johannes Wohlfart
10	**Miscellaneous**

SpM Selected Methods in Economic Research I					
Module Code 1287MSSME1	**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** irregular	**Duration** 1 Term
1	**Courses** Selected Methods in Economic Research I		**Contact Hours** 30h	**Self-Studies** 150h	**Course Language** English
2	**Module Content** Methods in Economics				
3	**Learning Objectives** Students... ... know and understand the relevant methods and theories for the points mentioned above under "Module content". ... acquire knowledge and skills depending on course choice ... present and discuss results with teaching staff and other students. ... ... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.				
4	**Teaching and Learning Methods** seminar				
5	**Module Entry Requirements** none				
6	**Mode of End-Of-Module Examination** Combined examination: presentation with written paper				
7	**Prerequisites for Awarding of Credit Points** Passing the module examination				
8	**Other Programmes that Use the Module** Master of Science Economic Research (as of WS 26/27): Specialisation Section Economic Research Master of Science Economic Research: Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics PhD Programm in Wirtschafts- und Sozialwissenschaften: Specialisation Section				
9	**Module Manager** Academic Director MSc Economic Research				
10	**Miscellaneous**				

SpM Selected Methods in Economic Research II					
Module Code 1287MSSME2	**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** irregular	**Duration** 1 Term
1	**Courses** Selected Methods in Economic Research II		**Contact Hours** 60h	**Self-Studies** 120h	**Course Language** English
2	**Module Content** Methods in Economics				
3	**Learning Objectives** Students... ... know and understand the relevant methods and theories for the points mentioned above under "Module content". ... acquire knowledge and skills depending on course choice ... present and discuss results with teaching staff and other students. ... ... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.				
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 Economic Research (as of WS 26/27): Specialisation Section Economic Research Master of Science Economic Research: Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics PhD Programm in Wirtschafts- und Sozialwissenschaften: Specialisation Section				
9	**Module Manager** Academic Director MSc Economic Research				
10	**Miscellaneous**				

SpM Selected Topics in Economic Research I					
Module Code 1287MSSTE1	**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** irregular	**Duration** 1 Term
1	**Courses** Selected Topics in Economic Research I		**Contact Hours** 30h	**Self-Studies** 150h	**Course Language** English
2	**Module Content** Topics of Economics				
3	**Learning Objectives** Students... ... know and understand the relevant methods and theories for the points mentioned above under "Module content". ... acquire knowledge and skills depending on course choice ... present and discuss results with teaching staff and other students. ... ... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.				
4	**Teaching and Learning Methods** seminar				
5	**Module Entry Requirements** none				
6	**Mode of End-Of-Module Examination** Combined examination: presentation with written paper				
7	**Prerequisites for Awarding of Credit Points** Passing the module examination				
8	**Other Programmes that Use the Module** Master of Science Economic Research (as of WS 26/27): Specialisation Section Economic Research Master of Science Economic Research: Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics PhD Programm in Wirtschafts- und Sozialwissenschaften: Specialisation Section				
9	**Module Manager** Academic Director MSc Economic Research				
10	**Miscellaneous**				

SpM Selected Topics in Economic Research II					
Module Code 1287MSSTE2	**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** irregular	**Duration** 1 Term
1	**Courses** Selected Topics in Economic Research II		**Contact Hours** 60h	**Self-Studies** 120h	**Course Language** English
2	**Module Content** Topics in Economics				
3	**Learning Objectives** Students... ... know and understand the relevant methods and theories for the points mentioned above under "Module content". ... acquire knowledge and skills depending on course choice ... present and discuss results with teaching staff and other students. ... ... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.				
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 Economic Research (as of WS 26/27): Specialisation Section Economic Research Master of Science Economic Research: Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Specialisation Section Research Economics PhD Programm in Wirtschafts- und Sozialwissenschaften: Specialisation Section				
9	**Module Manager** Academic Director MSc Economic Research				
10	**Miscellaneous**				

3.3.2.3 Proposal

SpM Graduate Research Seminar: Empiricial Microeconomics, Public and Behavioural Economics						
Module Code 1289MSGRMI		**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every term	**Duration** 1 Term
1	**Courses** Graduate Research Seminar Empirical Microeconomics, Public and Behavioural Economics			**Contact Hours** 30h	**Self-Studies** 150h	**Course Language** English
2	**Module Content** The content is based on current issues in the literature and the research work and interests of the participants in the field of empiricial microeconomics, public and behavioural economics. The module is intended to prepare and support students' own research in the field of empiricial microeconomics, public and behavioural economics by providing a framework for the presentation and discussion of important contributions from the literature as well as their own research (ideas).					
3	**Learning Objectives** Students... ...know and understand the relevant methods and theories for the points mentioned above under "Module content". ... discuss current research. ... present and evaluate academic papers in the context of the research literature. ... develop their own research designs based on the literature. ... ... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.					
4	**Teaching and Learning Methods** seminar					
5	**Module Entry Requirements** none					
6	**Mode of End-Of-Module Examination** Combined examination: presentation with written paper					
7	**Prerequisites for Awarding of Credit Points** Passing the module examination.					
8	**Other Programmes that Use the Module** Master of Science Economic Research (as of WS 26/27): Specialisation Section Economic Research Master of Science Economic Research: Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Proposal Research Economics PhD Programm in Wirtschafts- und Sozialwissenschaften: Specialisation Section					
9	**Module Manager** Academic Director MSc Economic Research					

10	**Miscellaneous**

SpM Graduate Research Seminar: Theory, Applied Theory and Macroeconomics					
Module Code 1302MSGRMA	**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every term	**Duration** 1 Term
1	**Courses** Graduate Research Seminar Theory, Applied Theory and Macroeconomics		**Contact Hours** 30h	**Self-Studies** 150h	**Course Language** English
2	**Module Content** The content is based on current issues in the literature and the research work and interests of the participants in the field of macroeconomics. The module is intended to prepare and support students' own research in the field of macroeconomics by providing a framework for the presentation and discussion of important contributions from the literature as well as their own research (ideas).				
3	**Learning Objectives** Students... ...know and understand the relevant methods and theories for the points mentioned above under "Module content". ... discuss current research. ... present and evaluate academic papers in the context of the research literature. ... develop their own research designs based on the literature. ... ... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.				
4	**Teaching and Learning Methods** seminar				
5	**Module Entry Requirements** none				
6	**Mode of End-Of-Module Examination** Combined examination: presentation with written paper				
7	**Prerequisites for Awarding of Credit Points** Passing the module examination.				
8	**Other Programmes that Use the Module** Master of Science Economic Research (as of WS 26/27): Specialisation Section Economic Research Master of Science Economic Research: Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Proposal Research Economics PhD Programm in Wirtschafts- und Sozialwissenschaften: Specialisation Section				
9	**Module Manager** Academic Director MSc Economic Research				
10	**Miscellaneous**				

SpM Graduate Research Seminar: Econometrics and Statistics					
Module Code 1314MSGREC	**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every term	**Duration** 1 Term
1	**Courses** Graduate Research Seminar Econometrics and Statistics		**Contact Hours** 30h	**Self-Studies** 150h	**Course Language**
2	**Module Content** The content is based on current issues in the literature and the research work and interests of the participants in the field of econometrics and statistics. The module is intended to prepare and support students' own research in the field of econometrics and statistics by providing a framework for the presentation and discussion of important contributions from the literature and recent external research projects as well as their own research (ideas).				
3	**Learning Objectives** Students... ...know and understand the relevant methods and theories for the points mentioned above under "Module content". ... discuss current research. ... present and evaluate academic papers in the context of the research literature. ... develop their own research designs based on the literature. ... ... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.				
4	**Teaching and Learning Methods** seminar				
5	**Module Entry Requirements** none				
6	**Mode of End-Of-Module Examination** Combined examination: presentation with written paper				
7	**Prerequisites for Awarding of Credit Points** Passing the module examination.				
8	**Other Programmes that Use the Module** Master of Science Economic Research (as of WS 26/27): Specialisation Section Economic Research Master of Science Economic Research: Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Proposal Research Economics PhD Programm in Wirtschafts- und Sozialwissenschaften: Specialisation Section				
9	**Module Manager** Department of Econometrics and Statistics				
10	**Miscellaneous**				

SpM Graduate Research Seminar: Energy Economics					
Module Code 1289MSGREE	**Workload** 180h	**ECTS Credits** 6	**Module Language** English	**Module Availability** every term	**Duration** 1 Term
1	**Courses** Graduate Research Seminar: Energy Economics		**Contact Hours** 30h	**Self-Studies** 150h	**Course Language** English
2	**Module Content** The content is based on current issues in the literature and the research work and interests of the participants in the field of energy economics. The module is intended to prepare and support students' own research in the field of energy economics by providing a framework for the presentation and discussion of important contributions from the literature as well as their own research (ideas).				
3	**Learning Objectives** Students... ...know and understand the relevant methods and theories for the points mentioned above under "Module content". ... discuss current research. ... present and evaluate academic papers in the context of the research literature. ... develop their own research designs based on the literature. ... ... The module is successfully completed through a competency-based exam format stated below in part 6. The exam format is defined in paragraph 12 of the exam regulations.				
4	**Teaching and Learning Methods** seminar				
5	**Module Entry Requirements** none				
6	**Mode of End-Of-Module Examination** Combined examination: presentation with written paper				
7	**Prerequisites for Awarding of Credit Points** Passing the module examination.				
8	**Other Programmes that Use the Module** Master of Science Economic Research (as of WS 26/27): Specialisation Section Economic Research Master of Science Economic Research: Specialisation Section Economic Research Research in Management, Economics and Social Sciences - Volkswirtschaftslehre: Proposal Research Economics PhD Programm in Wirtschafts- und Sozialwissenschaften: Specialisation Section				
9	**Module Manager** Univ.-Prof. Dr. Marc Oliver Bettzüge				
10	**Miscellaneous**				