

2023/24

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
2022

(enrolment from
winter semester 2022/23)



MODULE CATALOGUE

PhD Programme

PHD PROGRAMME

valid for students of the PhD Programme 2022 (enrolment from winter semester 2022/23)

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Status	Taking effect on 01/10/2022

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 examination	WL	Workload
PCR	Practical component report	WT	Written test
PO	Portfolio		

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1 PhD Programme

The PhD programme prepares students in particular for a future career in economic research and related disciplines. Graduates are able to understand overall and microeconomic 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 PhD study programme are defined in Section 3 of the **Doctoral Regulations for the PhD programme** of the Faculty of Management, Economics and Social Sciences of 01 August 2022 (AM 54/2022) in its currently valid form.

1.2 Programme structure

The PhD programme is modular in its structure and the standard period of study is two terms. Students are required to accumulate 60 ECTS credits. Students first complete the core modules, which contribute a total of 36 ECTS credits. The specialisation section (specialisation modules) comprise 24 ECTS credits and consist of a selection of 3 out of a broad offer of selectable modules which represent the faculty's economic research focus. In addition, one reading group must be completed, in which students have the opportunity to present their research ideas to a specialist audience. Students can focus on specific topics.

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 **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** provides 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 Representatives**. For any information please write an email to them.

3 Curriculum and module descriptions

3.1. Core section

In accordance with the Annex 1 of the Examination Regulations, the PhD student must obtain 36 ECTS credits in the core section.

Group	Module	ECTS	CC/ EC	Required ECTS
Core Section	CM Advanced Mathematics	6	EC	6
	AM Computational Methods	6	EC	6
	AM Selected Methods in Economics	6	EC	6
	CM Advanced Microeconomics I	6	EC	6
	CM Advanced Microeconomics II	6	EC	6
	CM Advanced Macroeconomics I	6	EC	6
	CM Advanced Macroeconomics II	6	EC	6
	CM Advanced Econometrics I	6	EC	6
	CM Advanced Econometrics II	6	EC	6
				36

3.2 Specialisation section

In accordance with the Annex 1 of the Examination Regulations, the examination candidate must obtain 24 ECTS credits in the specialisation section, of which one reading group must be taken.

Group	Module	EC TS	CC/ EC	Required ECTS	
Specialisation Section	SpM Advanced Public Economics	6	EC	18	24
	SpM Advanced Behavioural Economics	6	EC		
	SpM Market Design and Mechanism Design	6	EC		
	SpM Political Economy and Media Economics	6	EC		
	SpM Frictions, Technology, and Inequality	6	EC		
	SpM Survey Design Research	6	EC		
	SpM Empirical Methods and Data Analysis II	6	EC		
	SpM Empirical Methods and Data Analysis III	6	EC		
	CM Advanced Mathematics	6	EC		
	AM Computational Methods	6	EC		
	AM Selected Methods in Economics	6	EC		
	CM Advanced Microeconomics I	6	EC		
	CM Advanced Microeconomics II	6	EC		
	CM Advanced Macroeconomics I	6	EC		
	CM Advanced Macroeconomics II	6	EC		
	CM Advanced Econometrics I	6	EC		
	CM Advanced Econometrics II	6	EC		
	SpM Selected Issues in Economic Research I	6	EC		
	SpM Selected Issues in Economic Research II	6	EC		
	SpM Selected Issues in Economic Research III	6	WP		
	SpM Reading Group Microeconomics	6	EC	6	
	SpM Reading Group Macroeconomics	6	EC		

PHD PROGRAMME

valid for students of the PhD Programme 2022 (enrolment from winter semester 2022/23)

	SpM Reading Group Econometrics	6	EC		
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3.6 Module descriptions

3.6.1 Core Section

CM Advanced Mathematics					
Module Code 1302MBAMT1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Advanced Mathematics for Economists		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Overview of elementary mathematical concepts • Metric and standardized spaces • Linear algebra • Differential calculus and applications • Convex sets and concave functions • Optimisation 				
3	Learning Objectives Students... ... apply mathematical argumentation and proof techniques correctly. ... formulate economic problems occurring in research mathematically and solve them.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written Test: Take-home-exam				
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				
9	Module Manager Univ.-Prof. Dr. Martin Barbie				
10	Miscellaneous				

AM Computational Methods						
Module Code 1302MACMT1		Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Computational Methods			Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Programming numerical algorithms • Numerical approximation • Numerical solution of zeroing and optimization problems • Application to canonical economic problems • Parametrization, solution and simulation of structural economic models 					
3	Learning Objectives Students... ... apply numerical methods and programs for the solution and simulation of quantitative structural economic models. ... interpret results of the application of numerical models. ... use the technical language in a way that is appropriate for the target group.					
4	Teaching and Learning Methods lecture practice					
5	Module Entry Requirements none					
6	Mode of End-Of-Module Examination Written test: WT (60)					
7	Prerequisites for Awarding of Credit Points Passing the module examination					
8	Other Programmes that Use the Module Master of Science Economics: Specialisation Section Economics Supplementary Section Economics Master of Science Economic Research: Core Section Economic Research					
9	Module Manager Univ.-Prof. Dr. Andreas Schabert					
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 <ul style="list-style-type: none"> • Experimental Methods in economics • Experimental designs • Analysing experimental data 					
3	Learning Objectives Students... <ul style="list-style-type: none"> ... understand advanced, specialized theories / methods in the area of experimental Economics. ... analyse current questions and challenges in the area of Microeconomics. ... assess and discuss findings and research results of specialized methods. ... analyse data for selected scientific questions using quantitative methods. ... present scientific results in a way that is appropriate for the target audience. ... critically evaluate current social developments and develop alternative solutions. ... use techniques of scientific work and good scientific practice. 					
4	Teaching and Learning Methods lecture practice					
5	Module Entry Requirements Recommendation: Bachelor Level Microeconomics, Macroeconomics, Mathematics					
6	Mode of End-Of-Module Examination Written test: WT (60)					
7	Prerequisites for Awarding of Credit Points Passing the module examination					
8	Other Programmes that Use the Module Master of Science Economics: Specialisation Section Economics Supplementary Section Economics Master of Science Economic Research: Core Section Economic Research					
9	Module Manager Prof. Christopher Roth					
10	Miscellaneous					

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

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

CM Advanced Macroeconomics I					
Module Code 1302MBAMA1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Advanced Macroeconomics I		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Stylized facts: growth and business cycles • Dynamic optimization in continuous time and in discrete time under uncertainty • Stability and uniqueness of dynamic systems • The canonical neoclassical growth model • Exogenous and endogenous growth • Real business cycles (TFP and fiscal policy shocks) • Numerical solutions, simulation and evaluation of structural models • Calibration and introduction in structural estimation of model parameter 				
3	Learning Objectives Students... ... analyse and solve the canonical models of real business cycle and growth theory at an advanced methodological level. ... apply the mathematical and numerical methods necessary to do so. ... tailor and apply these models to answer positive and normative research questions in the areas of growth and business cycle fluctuations. ... discuss the strengths and weaknesses of these models in terms of their assumptions and implications. ... parameterize models using filtered data und assess the goodness of fit. ... develop analytical skills required for research activities and further studies (doctorate). ... gain an understanding of the most important strands of the literature that prepares them for their own research at an advanced level.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economic Research: Core Section Economic Research Specialisation Section Economic Research				
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.
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CM Advanced Macroeconomics II					
Module Code 1302MBAMA2	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Advanced Macroeconomics II		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Complete markets and representative agents • Incomplete markets and heterogeneous agents • Fiscal policy, public debt, and optimal taxation • Transaction frictions and monetary policy • Open economy macroeconomics • New Keynesian macroeconomics • Labour market frictions and Labour market fluctuations 				
3	Learning Objectives Students... ... master core macroeconomic concepts for solving positive and normative problems and acquire skill for innovative research. ... deepen their knowledge of short- and medium-run macroeconomic developments and of efficient conduct of policy measures. ... evaluate and discuss the impact of empirically relevant frictions in goods, financial and labour markets. ... recognize possibilities to enhance social welfare in a general equilibrium framework with incomplete markets. ... Identify the optimal implementation of macroeconomic instruments under relevant policy trade-offs. ... question and assess societal developments, in particular, inequality and unemployment, and reflect current policy measures with regard to potential research projects.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economic Research: Core Section Economic Research Specialisation Section Economic Research				
9	Module Manager Univ.-Prof. Michael Krause, Ph.D. Univ.-Prof. Dr. Andreas Schabert				

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

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

3.6.2 Specialisation Section

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 <ul style="list-style-type: none"> • Optimal income taxation • Optimum excise duties • Optimal combination of direct and indirect taxes • Taxation of capital income • Corporate taxation • Political economy of redistributive taxes • Sufficient statistics approaches • Perturbation method • Mechanism design 				
3	Learning Objectives Students... ... analyse tax and expenditure policy. ... discuss conflicts between efficiency and distribution targets. ... apply methods for the formal analysis of optimal tax systems. ... apply methods for the formal analysis of tax reforms.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: basic knowledge of differential calculus, optimisation problems with constraints, knowledge of consumer theory, knowledge of game theory				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economics: Supplementary Section Economics Master of Science Economic Research: Specialisation Section Economic Research Supplementary Section Economic Research				
9	Module Manager Univ.-Prof. Dr. Felix Bierbrauer				

SpM Advanced Behavioural Economics					
Module Code 1289MSABE1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Behavioural Economics		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content Departing from a general treatment effects framework, this module focuses on econometric methods that are of particular use to behavioural economists. Examples are sampling and power analysis, treatment effects with and without randomisation, discrete choice, mediation analysis, treatment effect decompositions as well as structural behavioural methods.				
3	Learning Objectives Students... ... understand what statistical/econometric considerations to take into account when generating their own data in a lab or field experiment. ... know how to choose appropriate estimators to tackle behavioural economic questions. ... know how to evaluate societally relevant policies (e.g. social or gender policies) from a behavioural economic perspective. ... know how to read/judge empirical papers in behavioural economics.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Core Module Advanced Microeconomics I				
6	Mode of End-Of-Module Examination Written test: PO				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economics: Supplementary Section Economics Master of Science Economic Research: Specialisation Section Economic Research Supplementary Section Economic Research				
9	Module Manager Univ.-Prof. Dr.' Pia Pinger				
10	Miscellaneous				

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

SpM Political Economy and Media Economics					
Module Code 1302MSPME1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Political Economics and Media Economics		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • 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 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... 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. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Knowledge of game theory, knowledge of consumer behaviour theory				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economics: Supplementary Section Economics Master of Science Economic Research: Specialisation Section Economic Research Supplementary Section Economic Research				
9	Module Manager Univ.-Prof. Dr. Johannes Münster				
10	Miscellaneous				

SpM Frictions, Technology, and Inequality					
Module Code 1302MSFT11	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Technical Change, Labour, and Inequality		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Balanced and imbalanced growth and the dynamics of inequality in standard models with capital, skilled labour, and unskilled labour • Directed technical change, balanced growth and persistent inequality • Automation in models with directed technical change: Causes and implications. Robots: Curse or Blessing? Robots and Taxes • Persistent inequality and the dynamics of skill acquisition and labour supply • Polarization in models with occupations and tasks. Assignment models • Technical change and labour market issues: Reallocation of employment, unemployment and labour market policy • Empirical analysis of the causes and consequences of technological change and earnings inequality • Episodes of fundamental technical change as quasi-experimental settings for causal inference 				
3	Learning Objectives Students... ... develop the analytical skills to apply theoretical models dealing with the issues of this specialization. ... master advanced methods to explain empirical facts and relevant social developments (e.g. automation) and to reflect policy measure. ... discuss distributional aspects of technological change, market incompleteness, and externalities. ... communicate and apply the appropriate methods for the economic and econometric analysis of issues in this specialisation. ... discuss and evaluate empirical results and econometric methods for hypothesis testing and causal inference.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommended: CM Advanced Macroeconomics I, CM Advanced Econometrics I; CM Advanced Macroeconomics II can be attended simultaneously				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination.				
8	Other Programmes that Use the Module Master of Science Economics: Supplementary Section Economics Master of Science Economic Research:				

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valid for students of the PhD Programme 2022 (enrolment from winter semester 2022/23)

	Specialisation Section Economic Research Supplementary Section Economic Research
9	Module Manager Univ.-Prof. Dr. Peter Funk Univ.-Prof. Dr. Erik Hornung Univ.-Prof. Michael Krause, Ph.D.
10	Miscellaneous

SpM Survey Research Design						
Module Code 1289MSMMD1		Workload 180h	ECTS Credits 6	Module Language English	Module Availability irregular	Duration 1 Term
1	Courses Survey Design Research		Contact Hours a) 30h	Self-Studies a) 150h	Course Language a) English	
2	<p>Module Content</p> <p>Over the last decades, there has been a steady increase in the use of survey methods in economics and the social sciences providing important insights. This course will critically evaluate how survey methods are applied to study topics in economics. By the end of the advanced course, students should be able to autonomously design and conduct surveys and survey experiments.</p> <ul style="list-style-type: none"> • Measuring Beliefs • Measuring preferences • measuring narratives • experimenter demand effects • designing information interventions • lab-in-the-field experiments • hypothetical vignettes • measuring narratives 					
3	<p>Learning Objectives</p> <p>Students...</p> <p>... understand advanced, specialized theories / methods.</p> <p>... assess and discuss findings and research results of specialized theories / methods.</p> <p>... prepare independently a research design for a question.</p> <p>... write an academic paper on a selected topic and achieve thereby their own scientific contribution.</p> <p>... communicate continuously and purposefully in diverse teams.</p> <p>... justify and defend (independently developed) positions or problem solutions.</p> <p>... present scientific results in a way that is appropriate for the target audience.</p> <p>... evaluate their own action processes in self- and external reflection and identify development potentials.</p> <p>... act responsibly considering ecological, social and ethical criteria.</p> <p>..... use techniques of scientific work and good scientific practice.</p>					
4	<p>Teaching and Learning Methods</p> <p>lecture</p>					
5	<p>Module Entry Requirements</p> <p>The course is open to Research Master and PhD students, but is advanced and tailored towards the PhD level. Advantages and disadvantages of several experimental methods will be covered.</p>					
6	<p>Mode of End-Of-Module Examination</p> <p>term paper</p>					
7	<p>Prerequisites for Awarding of Credit Points</p> <p>Passing the module examination.</p>					

PHD PROGRAMME

valid for students of the PhD Programme 2022 (enrolment from winter semester 2022/23)

8	Other Programmes that Use the Module
9	Module Manager Univ.-Prof. Chris Roth
10	Miscellaneous

SpM Empirical Methods and Data Analysis II					
Module Code 1314MSEMD2	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses a) Microeconometrics b) Machine Learning for Economists c) Topics in Econometrics and Statistics II		Contact Hours a) 45h b) 45h c) 45h	Self-Studies a) 135h b) 135h c) 135h	Course Language a) English c) English
2	Module Content <ul style="list-style-type: none"> • Limited dependent variables • Evaluation of treatment effects • Duration analysis • Panel data and factor models 				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods. ... analyse current questions and challenges. ... collect and analyse data material for selected scientific questions using quantitative / qualitative methods. ... discuss scientific topics in a professional manner and appropriate to the situation with (non-) specialists. ... use techniques of scientific work and good scientific practice.				
4	Teaching and Learning Methods lecture				
5	Module Entry Requirements Recommendation: CM Econometrics or CM Applied Econometrics (Business Administration) or CM Advanced Econometrics				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the examination. One course is to be attended; the examination relates to the content of one course.				
8	Other Programmes that Use the Module Master of Science Mathematik: Economics Master of Science Wirtschaftsmathematik: Economics Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation Master of Science Business Administration - Finance: Supplementary Section Finance Master of Science Business Administration - Marketing: Supplementary Section Marketing Master of Science Information Systems: Supplementary Section Information Systems				

PHD PROGRAMME

valid for students of the PhD Programme 2022 (enrolment from winter semester 2022/23)

	<p>Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development</p> <p>Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management</p> <p>Master of Science Economics: Specialisation Section Economics Supplementary Section Economics</p> <p>Master of Science Economic Research: Specialisation Section Economic Research</p> <p>Master of Science Business Analytics & Econometrics: Specialisation Section Business Analytics & Econometrics Supplementary Section Business Analytics & Econometrics</p> <p>Master of Science International Management: Supplementary Section International Management</p> <p>Master of Science Informatik: Anwendungsfeld</p>
9	<p>Module Manager Univ.-Prof. Dr. Jörg Breitung</p>
10	<p>Miscellaneous</p>

SpM Empirical Methods and Data Analysis III					
Module Code 1314MSEMD3	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses a) Time Series Econometrics b) Stochastic Models and Processes c) Topics in Econometrics and Statistics III		Contact Hours a) 45h b) 45h c) 45h	Self-Studies a) 135h b) 135h c) 135h	Course Language a) English b) English c) English
2	Module Content a) Time Series Econometrics: • 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				
3	Learning Objectives Students... ... understand advanced, specialized theories / methods. ... analyse current questions and challenges. ... collect and analyse data material for selected scientific questions using quantitative / qualitative methods.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Solid basic knowledge of probability theory				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the written examination of one course. A course is to be attended; the written examination relates to the content of one course.				
8	Other Programmes that Use the Module Master of Science Mathematik: Economics Master of Science Wirtschaftsmathematik: Economics				

PHD PROGRAMME

valid for students of the PhD Programme 2022 (enrolment from winter semester 2022/23)

	<p>Master of Science Business Administration - Accounting and Taxation: Supplementary Section Accounting and Taxation</p> <p>Master of Science Business Administration - Finance: Supplementary Section Finance</p> <p>Master of Science Business Administration - Marketing: Supplementary Section Marketing</p> <p>Master of Science Information Systems: Supplementary Section Information Systems</p> <p>Master of Science Business Administration - Corporate Development: Supplementary Section Corporate Development</p> <p>Master of Science Business Administration - Supply Chain Management: Supplementary Section Supply Chain Management</p> <p>Master of Science Economics: Specialisation Section Economics Supplementary Section Economics</p> <p>Master of Science Economic Research: Specialisation Section Economic Research Supplementary Section Economic Research</p> <p>Master of Science Business Analytics & Econometrics: Supplementary Section Business Analytics & Econometrics</p> <p>Master of Science International Management: Supplementary Section International Management</p> <p>Master of Science Informatik: Anwendungsfeld</p> <p>Master of Science Business Administration - Marketing: Core Section Marketing</p>
9	<p>Module Manager Univ.-Prof. Dr. Dominik Wied</p>
10	<p>Miscellaneous</p>

CM Advanced Mathematics					
Module Code 1302MBAMT1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Advanced Mathematics for Economists		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Overview of elementary mathematical concepts • Metric and standardized spaces • Linear algebra • Differential calculus and applications • Convex sets and concave functions • Optimisation 				
3	Learning Objectives Students... ... apply mathematical argumentation and proof techniques correctly. ... formulate economic problems occurring in research mathematically and solve them.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written Test: Take-home-exam				
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				
9	Module Manager Univ.-Prof. Dr. Martin Barbie				
10	Miscellaneous				

AM Computational Methods					
Module Code 1302MACMT1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Computational Methods		Contact Hours 45h	Self-Studies 135h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Programming numerical algorithms • Numerical approximation • Numerical solution of zeroing and optimization problems • Application to canonical economic problems • Parametrization, solution and simulation of structural economic models 				
3	Learning Objectives Students... ... apply numerical methods and programs for the solution and simulation of quantitative structural economic models. ... interpret results of the application of numerical models. ... use the technical language in a way that is appropriate for the target group.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economics: Specialisation Section Economics Supplementary Section Economics Master of Science Economic Research: Core Section Economic Research				
9	Module Manager Univ.-Prof. Dr. Andreas Schabert				
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 <ul style="list-style-type: none"> • Experimental Methods in economics • Experimental designs • Analysing experimental data 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... understand advanced, specialized theories / methods in the area of experimental Economics. ... analyse current questions and challenges in the area of Microeconomics. ... assess and discuss findings and research results of specialized methods. ... analyse data for selected scientific questions using quantitative methods. ... present scientific results in a way that is appropriate for the target audience. ... critically evaluate current social developments and develop alternative solutions. ... use techniques of scientific work and good scientific practice. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: Bachelor Level Microeconomics, Macroeconomics, Mathematics				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economics: Specialisation Section Economics Supplementary Section Economics Master of Science Economic Research: Core Section Economic Research				
9	Module Manager Prof. Christopher Roth				
10	Miscellaneous				

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

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

CM Advanced Macroeconomics I					
Module Code 1302MBAMA1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Advanced Macroeconomics I		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Stylized facts: growth and business cycles • Dynamic optimization in continuous time and in discrete time under uncertainty • Stability and uniqueness of dynamic systems • The canonical neoclassical growth model • Exogenous and endogenous growth • Real business cycles (TFP and fiscal policy shocks) • Numeral solutions, simulation and evaluation of structural models • Calibration and introduction in structural estimation of model parameter 				
3	Learning Objectives Students... ... analyse and solve the canonical models of real business cycle and growth theory at an advanced methodological level. ... apply the mathematical and numerical methods necessary to do so. ... tailor and apply these models to answer positive and normative research questions in the areas of growth and business cycle fluctuations. ... discuss the strengths and weaknesses of these models in terms of their assumptions and implications. ... parameterize models using filtered data und assess the goodness of fit. ... develop analytical skills required for research activities and further studies (doctorate). ... gain an understanding of the most important strands of the literature that prepares them for their own research at an advanced level.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economic Research: Core Section Economic Research Specialisation Section Economic Research				
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.
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CM Advanced Macroeconomics II					
Module Code 1302MBAMA2	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Advanced Macroeconomics II		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Complete markets and representative agents • Incomplete markets and heterogeneous agents • Fiscal policy, public debt, and optimal taxation • Transaction frictions and monetary policy • Open economy macroeconomics • New Keynesian macroeconomics • Labour market frictions and Labour market fluctuations 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... master core macroeconomic concepts for solving positive and normative problems and acquire skill for innovative research. ... deepen their knowledge of short- and medium-run macroeconomic developments and of efficient conduct of policy measures. ... evaluate and discuss the impact of empirically relevant frictions in goods, financial and labour markets. ... recognize possibilities to enhance social welfare in a general equilibrium framework with incomplete markets. ... Identify the optimal implementation of macroeconomic instruments under relevant policy trade-offs. ... question and assess societal developments, in particular, inequality and unemployment, and reflect current policy measures with regard to potential research projects. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Written test: WT (90)				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economic Research: Core Section Economic Research Specialisation Section Economic Research				
9	Module Manager Univ.-Prof. Michael Krause, Ph.D. Univ.-Prof. Dr. Andreas Schabert				

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

CM Advanced Econometrics II					
Module Code 1314MBAEM2	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Advanced Econometrics: Applications		Contact Hours 60h	Self-Studies 120h	Course Language English
2	Module Content <ul style="list-style-type: none"> • Evaluation of causal effects • Fixed effects and difference-in-difference estimator • Regression discontinuity designs • Robust standard errors and clustering • Structural estimates with experimental data 				
3	Learning Objectives Students... <ul style="list-style-type: none"> ... implement estimation methods and test procedures. ... discuss situation estimation and testing procedures. ... apply appropriate econometric models and the corresponding inference methods. ... carry out empirical studies in modern macro- and microeconometrics. ... report on their approach and their results. 				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements none				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economic Research: <ul style="list-style-type: none"> Core Section Economic Research Specialisation Section Economic Research Master of Science Business Analytics & Econometrics: <ul style="list-style-type: none"> Supplementary Section Business Analytics & Econometrics 				
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 Selected Issues in Economic Research I					
Module Code 1287MSSIE1	Workload 180h	ECTS Credits 6	Module Language German and English	Module Availability irregular	Duration 1 Term
1	Courses See KLIPS		Contact Hours	Self-Studies	Course Language
2	Module Content				
3	Learning Objectives Students... ... acquire knowledge and skills depending on course choice.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: depends on chosen course				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the module examination in one of the courses offered.				
8	Other Programmes that Use the Module Master of Science Economic Research: Specialisation Section Economic Research				
9	Module Manager Univ.-Prof. Dr. Andreas Schabert				
10	Miscellaneous				

SpM Selected Issues in Economic Research II					
Module Code 1287MSSIE2	Workload 180h	ECTS Credits 6	Module Language German and English	Module Availability irregular	Duration 1 Term
1	Courses See KLIPS		Contact Hours	Self-Studies	Course Language
2	Module Content				
3	Learning Objectives Students... ... acquire knowledge and skills depending on course choice.				
4	Teaching and Learning Methods lecture practice				
5	Module Entry Requirements Recommendation: depends on chosen course				
6	Mode of End-Of-Module Examination Written test: WT (60)				
7	Prerequisites for Awarding of Credit Points Passing the module examination in one of the courses offered.				
8	Other Programmes that Use the Module Master of Science Economic Research: Specialisation Section Economic Research				
9	Module Manager Univ.-Prof. Dr. Andreas Schabert				
10	Miscellaneous				

SpM Selected Issues in Economic Research III						
Module Code 1287MSSIE3		Workload 180h	ECTS Credits 6	Module Language German and English	Module Availability irregular	Duration 1 Term
1	Courses See KLIPS			Contact Hours 30h	Self-Studies 150h	Course Language English
2	Module Content					
3	Learning Objectives Students... ... acquire knowledge and skills depending on course choice.					
4	Teaching and Learning Methods lecture practice					
5	Module Entry Requirements Recommendation: depends on chosen course					
6	Mode of End-Of-Module Examination Combined examination: PRES, TP					
7	Prerequisites for Awarding of Credit Points Passing the module examination					
8	Other Programmes that Use the Module Master of Science Economic Research: Specialisation Section Economic Research					
9	Module Manager Univ.-Prof. Dr. Andreas Schabert					
10	Miscellaneous					

SpM Reading Group Microeconomics					
Module Code 1289MSGM1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - summer term	Duration 1 Term
1	Courses Reading Group Microeconomics		Contact Hours 30h	Self-Studies 150h	Course Language English
2	Module Content Current literature				
3	Learning Objectives Students... ... discuss current research in the field of microeconomics. ... judge academic professional articles. ... develop their own research designs against the background of existing literature.				
4	Teaching and Learning Methods seminar				
5	Module Entry Requirements Recommendation: Core Modules Advanced Mathematics, Advanced Microeconomics I				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economic Research: Specialisation Section Economic Research				
9	Module Manager Univ.-Prof. Dr. Alexander Westkamp				
10	Miscellaneous				

SpM Reading Group Macroeconomics					
Module Code 1302MSGMA1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Reading Group Macroeconomics		Contact Hours 30h	Self-Studies 150h	Course Language English
2	Module Content The contents are oriented towards fundamental or current scientific questions of macroeconomics.				
3	Learning Objectives Students... ... independently deal with current scientific questions in the field of macroeconomics. ... apply the theoretical and empirical methodological knowledge gained during their studies. ... critically examine the topic-related scientific literature. ... present their state of knowledge in a lecture and discuss it with the other seminar participants. ... draft an independent scientific contribution and develop first innovative project results. ... are engaged in a scientific discourse.				
4	Teaching and Learning Methods seminar				
5	Module Entry Requirements Recommendation: Core Module Macroeconomics I				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economic Research: Specialisation Section Economic Research				
9	Module Manager Univ.-Prof. Dr. Andreas Schabert				
10	Miscellaneous				

SpM Reading Group Econometrics					
Module Code 1314MSGEM1	Workload 180h	ECTS Credits 6	Module Language English	Module Availability every 2nd term - winter term	Duration 1 Term
1	Courses Reading Group Econometrics		Contact Hours 30h	Self-Studies 150h	Course Language English
2	Module Content The module deals with selected contents from econometrics and statistics, covering both methods and applications. A course can be based on a specialized textbook and recently published research papers. The module should prepare the students for their own research (which can also be the content of the respective course).				
3	Learning Objectives Students... ... discuss current research in the field of microeconomics. ... judge academic professional articles. ... develop their own research designs against the background of existing literature.				
4	Teaching and Learning Methods seminar				
5	Module Entry Requirements Recommendation: Advanced Econometrics				
6	Mode of End-Of-Module Examination Combined examination: PRES, TP				
7	Prerequisites for Awarding of Credit Points Passing the module examination				
8	Other Programmes that Use the Module Master of Science Economic Research: Specialisation Section Economic Research				
9	Module Manager Univ.-Prof. Dr.' Anna Bindler				
10	Miscellaneous				