



UNIVERSITY
OF MANNHEIM

Department of Economics

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Course Catalog Fall Semester 2023

MASTER OF ECONOMICS

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Preparatory Course in Mathematics

Module number and title	E600 Mathematics
Form and usability of the module	Preparatory module for M.Sc. Economics
Responsible teacher of the module	Johannes Gessner
Cycle of offer	Every fall semester
Module language	English
Prerequisites	Basic knowledge in logic and set theory (please read Chapter 0, available on the course website). We will go rather superficially over these topics in the first lecture and you will get the most out of it if you are well prepared.
Goals and contents of the module	<p>This module is a preparatory math course. I will thus try to make sure that you do not start the program without mastering what can be considered as the most basic mathematical concepts for a graduate student in economics. The plan therefore is as follows:</p> <ul style="list-style-type: none"> • Motivation and fundamental concepts (sets, functions) • Introduction to vector spaces • Introduction to matrix algebra • Multivariate calculus and integral calculus • Optimization <p>Order of content may be subject to change, the final outline will be announced in the first session.</p> <p>While the lecture sessions will be concept- rather than proof-oriented, by the end of the course, at the very least you should be comfortable with mathematical notation and logic, and should know that you need not be scared of formal proofs. At the same time, while the exercises will not be of the “cookbook” form, they should serve as a good warm-up for what will follow in the first semester master modules.</p>
Expected competences acquired after completion of the module	By the end of the course the students should have a solid understanding of the most basic mathematical concepts for a graduate student in economics. Participants develop an intuition for basic mathematical constructs (for example derivatives, integrals and matrices), get familiar with mathematical notation and logic (such as distinguishing between axioms and theorems, following formal proofs), and learn when and how to apply the main theorems covered in this course (in particular Lagrange theorem).
Further information	This is an intensive course and will take place in the week prior to the beginning of the semester. The course will consist of lectures and exercise

sessions. More information on the course structure can be found on the course website.

As in most courses, you will need to put some extra time into preparing the exercises for the next session on your own. Problem sets will be handed out during the lecture and most of them will be discussed during the next days. I expect every participant to actively contribute to the discussions.

If you feel you need some additional readings, you may want to have a look at Carl P. Simon / Lawrence Blume (1994): Mathematics for Economists, 1st Edition. W.W. Norton & Company, but there are many other good books around and I recommend you to have a look at many of them before you buy any to find one which best suits your personal needs.

Expected number of students in class

65

Contact information

Name: Johannes Gessner (lecturer); Email: johannes.gessner@uni-mannheim.de
 Name: Sebastian Herdtweck (administration); Email: econgrad@uni-mannheim.de; Office: L7, 3-5, room 4.05

Introductory Phase

The descriptions of modules of the module combination “Economic Research Preparatory Courses” can be found in the [CDSE course catalog](#) on the website of the Graduate School of Economic and Social Sciences.

Module number and title	E601 Advanced Microeconomics
Form and usability of the module	Core module for M.Sc. Economics with module combination “Economics”
Responsible teacher of the module	Prof. Dr. Peter Duersch
Cycle of offer	Every fall semester
ECTS credits	10
Teaching method (hours per week)	Lecture (4) + exercise (2)
Workload	300 hours in total; 63 hours class time and 237 hours for independent studies and exam preparation
Module language	English

Prerequisites	Students are expected to have solid mathematical skills at the level reviewed in preparatory module E600 Mathematics. Students without these skills are expected to prepare prior to the start of the program and to attend E600 Mathematics. Undergraduate level of microeconomics.
Grading	Written exam (120 min, 100%)
Goals and contents of the module	<p>The module is a foundational module for the whole master's program, as all theories and applications of modern economics are based on microeconomic foundations. The module has two objectives. First, it provides a self-contained advanced introduction to the core concepts, notions, and tools of much of microeconomics, such as rational individual decision making, general equilibrium, and strategic interactions. Second, it acquaints the students with the formal reasoning and economic intuition behind modern economic analysis.</p> <p>The module covers the following broad areas:</p> <ul style="list-style-type: none"> • Consumer and producer theory • General equilibrium and welfare • Games of complete information • Games of incomplete information
Expected competences acquired after completion of the module	Upon successful completion of the module, students will know and be able to apply advanced concepts of microeconomic theory. In particular, they will be able to use the formal mathematical tools necessary for understanding economic research and for analyzing problems in economics and other social sciences. With these conceptual and formal competences, students will be able to critically evaluate economic arguments and conduct and communicate their own research in microeconomics and related areas.
Further information	<p>A list of textbooks will be announced at the start of the lecture. The following two books cover all topics discussed in the module and much more:</p> <ul style="list-style-type: none"> • Mas-Colell, Andreu, Michael Whinston, Jerry Green: Microeconomic Theory, Oxford University Press, 1995. • Varian, Hal: Microeconomic Analysis, Norton, New York and London, 1992. <p>The mathematics needed for this and other modules in the program is covered, e.g., by:</p> <ul style="list-style-type: none"> • Simon, Carl and Lawrence Blume: Mathematics for Economists, Norton, New York and London, 1994. • Hammond, Peter and Knut Sydsaeter: Essential Mathematics for Economic Analysis, Pearson Education, London, 2002.
Expected number of students in class	65
Contact information	Name: Peter Duersch; Email: duersch@uni-mannheim.de

Module number and title	E602 Advanced Macroeconomics
Form and usability of the module	Core module for M.Sc. Economics with module combination "Economics"
Responsible teacher of the module	Prof. Krzysztof Pytka, Ph.D
Cycle of offer	Every fall semester
ECTS credits	10
Teaching method (hours per week)	Lecture (4) + exercise (2)
Workload	300 hours in total; 63 hours class time and 237 hours for independent studies and exam preparation
Module language	English
Prerequisites	Good working knowledge of calculus (constrained optimization, Taylor expansion, geometric series). Undergraduate level of macroeconomics.
Grading	Written exam (120 min, 100%)
Goals and contents of the module	<p>The module familiarizes students with the essential concepts of modern macroeconomic theory at an advanced level. Apart from traditional analysis of business-cycle fluctuations, a particular focus will be placed on learning how to use formal micro-founded models to study and understand cross-sectional heterogeneity of households, one of key components for the most state-of-the-art macroeconomic models nowadays. During the module students will also learn the necessary techniques to solve dynamic programming models using MATLAB.</p> <p>Module roadmap:</p> <ol style="list-style-type: none"> 1. Introduction to the methodology. Scientific method in Macroeconomics. Ockham's razor. Lucas critique. 2. Building block of models. Preferences, production. Optimization problems of agents. 3. Permanent-income hypothesis. Lifecycle consumption. Permanent vs. transitory shocks. Public pensions in life-cycle economies. Consumption search and life-cycle prices. Consumption retirement puzzle. 4. Fiscal stimulus programs. Wealthy hand-to-mouth households. 5. Public debt in overlapping-generations economies. 6. (If time permits) Solow growth model vs. Piketty growth model. 7. Introduction to dynamic programming. 8. Optimal stochastic growth model. 9. McCall labor search.

Expected competences acquired after completion of the module	Completion of this module is a core requirement for our master's program in Economics. It prepares students to successfully participate in advanced field modules offered in this program. Together with the companion modules in microeconomics and econometrics, this module will enable students to develop their own research agenda for the Master program as well as a PhD program that they may want to pursue subsequent to this Master program. Having completed these modules, students will feel comfortable reading journal articles at the frontier of modern economic research. A particular focus will be placed on obtaining technical skills, i.e. log-linearization techniques, solving linear rational expectations models, etc.
Further information	The mandatory textbook chapters and articles will be announced in the lecture.
Expected number of students in class	65
Contact information	Name: Krzysztof Pytka; Email: pytka@uni-mannheim.de
Module number and title	E603 Advanced Econometrics
Form and usability of the module	Core module for M.Sc. Economics with module combination "Economics"
Responsible teacher of the module	Prof. Dr. Markus Frölich
Cycle of offer	Every fall semester
ECTS credits	10
Teaching method (hours per week)	Lecture (4) + exercise (2)
Workload	300 hours in total; 63 hours class time and 237 hours for independent studies and exam preparation
Module language	English
Prerequisites	Undergraduate level of econometrics
Grading	Written exam (120 min, 100%)
Goals and contents of the module	The goal of the module is to offer advanced treatment of econometric theory and to serve as the gate way to further advanced theoretical and applied econometric modules offered in the economics graduate program at the Department of Economics in Mannheim. The module offers a revision of undergraduate level econometrics before moving on to extensive coverage of large-sample theory and some organizing estimation principles such as GMM estimators. Asymptotic properties of these estimators are also the focus of

Expected competences acquired after completion of the module

the module as well as non-linear models and the treatment of serial correlation.

On successful completion of the module, students are expected to attain the following competences:

- Attain advanced theoretical knowledge in econometrics in the specific topics the module covers at a high technical and mathematical level.
- Be familiar with current theories and recent developments in the specific topics of focus for the module.
- Attain a higher/advanced level of analytical capability.
- Be in a position to take on follow-up advanced theoretical and applied econometrics modules.
- Attain the level of competence that permits independent undertakings in search of new knowledge in the specialist areas the module covers.
- Attain the level of competence required to carry out (theoretical) research-oriented projects independently.
- To be in a position to exchange information, ideas, and solutions with experts of the field on a scientific level as well as with laymen.
- To be able to communicate and to work effectively and efficiently with people and in groups.
- Graduates are able to communicate precisely in the English specialist language.

Further information

Recommended textbooks:

- Econometrics; Bruce E. Hansen; University of Wisconsin; <https://www.ssc.wisc.edu/~bhansen/econometrics/>
- Wooldridge (2010): Econometric Analysis of Cross Section and Panel Data. MIT Press.

Expected number of students in class

65

Contact information

Name: Anja Dostert; Email: dostert@uni-mannheim.de

Specialization Phase: Lectures

The descriptions of modules for study track 3: Economic Research can be found in the [CDSE course catalog](#) on the website of the Graduate School of Economic and Social Sciences.

Module number and title	E526 Development Economics
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Prof. Minki Kim, Ph.D.
Cycle of offer	Irregular
ECTS credits	5
Teaching method (hours per week)	Lecture (2)
Workload	150 working hours, containing 21 hours class time and 129 hours independent study time and preparation for the exam
Module language	English
Prerequisites	E601-E603 (or equivalent)
Grading	Final paper (8 – 12 pages, 30%), midterm paper (5 – 8 pages, 25%), two referee reports (2 - 5 pages, 30%), classroom discussion (15%)
Goals and contents of the module	This course aims to introduce the students to the determinants of long-run economic growth/development and differences in real income per capita across countries. We will cover selected topics of frontier research at the intersection of macroeconomics and development. Topics will include demographic transition and the transition to modern growth, measuring and accounting of income across countries and time, structural transformation and agricultural productivity gap, human capital accumulation, misallocation of total factor productivity, health and economic growth, and rural-urban migration.
Expected competences acquired after completion of the module	Students will familiarize themselves with frontier academic discussions on development economics, particularly ones with macroeconomic approaches. They will also acquire skills how to assess academic articles critically.
Further information	The reading list will be distributed at the first meeting. Students will write referee reports on two papers from the reading list or otherwise approved by me. I will give some guidelines on the referee reports in class. The first referee

Expected number of students in class	report is due on October 4th. The deadline for the second report is November 15th.
Contact information	The following article will provide useful guidance on how to write referee reports: Berk, Jonathan B., Campbell R. Harvey, and David Hirshleifer (2017): " How to Write an Effective Referee Report and Improve the Scientific Review Process ." Journal of Economic Perspectives, 31 (1): 231-44.
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	Name: Minki Kim; Email: minki.kim@uni-mannheim.de
Module number and title	E5008 Economic Policy and the Financial System
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Prof. Dr. Hans Peter Grüner
Cycle of offer	Irregular
ECTS credits	5
Teaching method (hours per week)	Lecture (2)
Workload	150 working hours, containing 21 hours class time and 129 hours independent study time and preparation for the exam.
Module language	English
Prerequisites	E601- 603 (or equivalent). A background in development economics and Stata is helpful.
Grading	Written exam (60 min, 60%), case presentation (30 minutes, 30%), first draft of slides for case presentation (10%)
Goals and contents of the module	This course offers an introduction to several important economic policy questions that are related to the financial system. I first present basic analytical instruments and provide an overview of some fundamental results from general equilibrium theory. Based on this, we study why financial markets are useful in practice. We analyze the role of financial intermediaries and the future role that they may play in the context of the emergence of disintermediation and big tech banking. Next, we turn to cases in which financial markets fail to work properly, and we discuss appropriate policy responses. The rest of the course is devoted to the analysis of fiscal and monetary policy measures that affect financial markets and to the design of a new financial and economic architecture in Europe.

Expected competences acquired after completion of the module	<p>Course structure:</p> <ol style="list-style-type: none"> 1. Analytical instruments and fundamental results in economics 2. Games, experiments and the design of rules for society 3. Financial intermediation and financial stability 4. Financial market imperfections and inequality I 5. Financial market imperfections and inequality II 6. Fiscal sustainability 7. Monetary policy institutions 8. Towards a consistent European economic policy framework <p>Understand role of financial markets, regulatory institutions and policy interventions. Perform individual literature research on policy related issues and present major insights.</p>
Further information	<p>The planned maximum number of students is 10. All students must apply for participation until 23 August, 9 a.m. via lswipol(at)uni-mannheim.de. The application must include the name, and the field of study. Priority is given to students in the MSc Economics program. Other students are permitted only if space permits. The selection of participants is done by lottery (if needed). Students will be notified about the admission by 24 August.</p>
Expected number of students in class	10
Contact information	Name: Astrid Reich; Email: lswipol@uni-mannheim.de
Module number and title	E5026 Programming in Stata
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Dr. Ingo Steinke, Nicholas Barton, Ph.D.
Cycle of offer	Every fall semester
ECTS credits	9.5
Teaching method (hours per week)	Lecture (3) + exercise (1)
Workload	285 hours in total; 42 hours class time and 243 hours for independent studies, project, and exam preparation
Module language	English
Prerequisites	E601-603 (or equivalent)

Grading	Written exam (90 min, 100%)
Goals and contents of the module	Although Stata already offers a large number of econometric tools, novel approaches are often not available and have to be implemented by users. This module offers an introduction to advanced programming in Stata. Since comparatively few people know how to do so, Stata programming skills can be a competitive advantage. The lecture will start with an introduction to efficiently written do-files (including data processing). We will look at and discuss different data types. In hands-on sessions students will be taught how to prepare the data for analysis. Variables will be generated and their distributions explored; data will be merged; and regression results will be critically discussed. Moreover, in this module students will learn how to implement new commands for Stata and to conduct Monte Carlo simulations. These are important for verification of implementations and are used as a very important tool to analyse the small sample properties of estimators and to complement the theoretical properties of estimators making them an integral part of econometric analyses. We will also touch upon Stata's matrix programming language Mata, non-linear optimization, e.g. ML estimation and bootstrap methods
Expected competences acquired after completion of the module	Students will be able to program quantitative methods using Stata independently. They are able to use Stata and Mata as programming languages and understand the standard syntax and the grammar of the languages. They will also be able to understand commands in Stata and edit these accordingly. Knowledge won from this module can be applied to various records. Students are capable of automatizing analysis and working efficiently. In addition to that, they will be able to conduct Monte Carlo simulations and interpret and use the results to estimate the quality of the estimation procedure. They can generate samples from a variety of distributions. Through Monte Carlo simulations, students will have a better comprehension of the uncertainty and quality of the estimation and test procedures.
Further information	Recommended reading: Cameron/ Trivedi (2009). Microeconometrics using Stata. Stata Press
Expected number of students in class	20
Contact information	Name: Nicholas Barton; Email: nibarton@mail.uni-mannheim.de Name: Ingo Steinke; Email: isteinke@rumms.uni-mannheim.de

Module number and title	E5040 Impact Evaluation and Causal Inference
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Prof. Dr. Markus Frölich
Cycle of offer	Every fall semester
ECTS credits	7
Teaching method (hours per week)	Lecture (2) + exercise (1)
Workload	210 working hours, containing 31.5 hours class time and 178.5 hours independent study time and exam preparation
Module language	English
Prerequisites	E601-603 (or equivalent)
Grading	Written exam (120 min, 100%)
Goals and contents of the module	This module will introduce students to theory and methods of modern impact evaluation. Topics will include counterfactual outcomes, heterogeneous treatment effects, (propensity) score matching, differences in differences, instrumental variables design, randomized control trials, and regression discontinuity design.
Expected competences acquired after completion of the module	The students are able to apply the main econometric models and estimators for impact evaluation and causal inference and are able to analyze and judge causal inference identification strategies.
Further information	Recommended literature: Impact Evaluation (Frölich, Sperlich, 2019, Cambridge University Press)
Expected number of students in class	20
Contact information	Name: Anja Dostert; Email: dostert@uni-mannheim.de
Module number and title	E5049 Topics in Macroeconomics and Labor Markets
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Prof. Anne Hannusch, Ph.D.

Cycle of offer	Every fall semester
ECTS credits	5
Teaching method (hours per week)	Lecture (2)
Workload	150 hours consisting of 21 hours class time and 129 hours for independent study, problem sets, and preparation of the exam.
Module language	English
Prerequisites	E601-603 (or equivalent)
Grading	Final Exam (90 min, 60%), and problem sets (5-10 pages, 40%)
Goals and contents of the module	In this course, we will summarize selected empirical observations on wages, earnings, income, consumption and wealth from cross-sectional, household level data and document some empirical puzzles. We will then develop extensions of standard macroeconomic theory to explain these puzzles. The overarching theme of the course will be how public policies impact consumption, savings and time allocation decisions of different types of households. Topics will include time allocation within the household, income dynamics, joint and individual taxation, and means-tested social programs.
Expected competences acquired after completion of the module	The course introduces students to important extensions of standard macroeconomic theory that give novel answers various policy-relevant questions. Students will also be familiar with data facts that motivate these theories.
Expected number of students in class	15
Contact information	Name: Anne Hannusch; Email: hannusch@uni-mannheim.de

Module number and title	E5064 Empirical Methods in Competition Policy
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Prof. Helena Perrone, Ph.D.
Cycle of offer	Every fall semester
ECTS credits	7
Teaching method (hours per week)	Lecture (2) + exercise (1)

Workload	210 working hours, containing 31.5 hours class time and 178.5 hours for independent study, solution of assignments, and exam preparation
Module language	English
Prerequisites	E601-603 (or equivalent)
Grading	Written exam (60 min, 70%) and assignments (8 - 12 pages, 30%)
Goals and contents of the module	The objective of the course is to introduce students the empirical analysis of market power and applications to competition policy. The first part of the course will cover the main methods to measure market power, such as the identification of conduct and estimation of demand systems with differentiated products. The second part will provide competition policy applications, including empirical approaches to market definition, methods to evaluate the impact of mergers, methods to identify cartels and estimate cartel damages, and analysis of anticompetitive effects of vertical restrictions. The material is illustrated with several European or U.S. cases. In contrast to E5046 Empirical Industrial Organization, this course is more focused on the practice of competition policy rather than research.
Expected competences acquired after completion of the module	The students will get familiarized with the main techniques used to measure market power and identify cartels, as well as to evaluate non-competitive behavior of oligopolistic firms. They will be able to apply these techniques in different competition cases and also evaluate and identify weakness and strength in competition studies. Furthermore, students will develop the skill to adapt and extend the empirical techniques presented to specific cases in which there is limited time and data availability.
Further information	The reading list for this class is composed of a number of recent academic articles and competition cases. The list of articles will be presented as the subject develops.
Expected number of students in class	15
Contact information	Name: Prof. Helena Perrone, Ph.D.; Email: helena.perrone@uni-mannheim.de
Module number and title	E5070 Economics of Social Insurance and Labor Market Policies
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Prof. Han Ye, Ph.D.
Cycle of offer	Every fall semester
ECTS credits	7,5

Teaching method (hours per week)	Lecture (3)
Workload	225 working hours, containing 31.5 hours class time and 183.5 hours for independent study, research proposal, and referee report
Module language	English
Prerequisites	E601-603 (or equivalent); econometrics at the master level; experience with statistical software such as Stata will be helpful
Grading	Research proposal (6 - 8 pages, 35%), presentation of the research proposal (30 min, 35%), referee report (2 - 3 pages, 15%), presentation of referee report (15 minutes, 35%)
Goals and contents of the module	This course focuses on the role of public policy and government regulation in the labor market using the tools of applied economics. The overarching theme of the course will be to consider how public policies influence labor market outcomes such as employment, wages, and the distribution of income. It covers topics the impact of public policies such as social welfare programs, taxation, income transfer programs, minimum wage laws; and the impacts of mandated employer benefits such as health insurance, unemployment insurance and public pension insurance. The class will teach some basic econometrics.
Expected competences acquired after completion of the module	The goal of the course is to provide a thorough understanding of central concepts in social insurance and public policies, learn mathematical models to clarify economic interactions and problems and to provide an introduction into empirical research in public policy.
Expected number of students in class	15
Contact information	Name: Han Ye; Email: han.ye@uni-mannheim.de
Module number and title	E5086 Chinese Economy
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Prof. Lei Li, Ph.D.
Cycle of offer	Every fall semester
ECTS credits	7,5
Teaching method (hours per week)	Lecture (3)

Workload	225 working hours, containing 31.5 hours class time and 183.5 hours independent study time and preparation for the exam
Module language	English
Prerequisites	E601-603 (or equivalent), especially econometrics at the master level. Experience with statistical software such as Stata will be helpful.
Grading	Assignments (8 – 12 pages, 85%) and classroom discussion (15%)
Goals and contents of the module	<p>This module is designed for graduate students interested in international trade, labor economics, development economics, applied econometrics, and the Chinese Economy. Our first goal is to provide an introduction to a set of important topics related to the economic development of China so that students have a good understanding of the Chinese Economy and China's impact on the rest of the world. A tentative list of topics includes China's trade liberalization, the US-China trade war, China's population control policy and its impact on China's economic development, labor market dynamics (wage, employment, and human capital accumulation), agricultural reforms, and firm reforms.</p> <p>The second goal is to present the empirical tools used to test related economic theories in the context of China and to discuss the empirical relevance of related theories. We will emphasize the conceptual issues and basic statistical techniques, such as instrumental variable strategy and differences-in-differences-type strategies. Students will also get familiar with several widely used Chinese datasets and learn how to conduct empirical analysis.</p> <p>Our third goal is to introduce frontier researches to students. We will draw on some recent academic papers from international trade, labor economics, finance, development economics, macroeconomics, and economic growth, which will allow students to have a good understanding of cutting-edge researches and help students outline future research questions.</p>
Expected competences acquired after completion of the module	<p>Students are expected to have a good understanding of topics on the US-China trade war, China's entering the WTO, China's population control policy, aging, income inequality, firm reforms, agricultural reform, and several important economic reforms. Students are expected to have a good understanding of several widely used applied econometric tools, such as instrumental variable strategy and differences-in-differences-type strategies. Students will be able to summarize and compare various theories that explain China's economic development. Students will also be able to use STATA to conduct empirical analysis.</p>
Expected number of students in class	15
Contact information	Name: Lei Li; Email: lei.li@uni-mannheim.de

Module number and title	E5090 Internet Economics
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Anton Sobolev, Ph.D.
Cycle of offer	Irregular
ECTS credits	7
Teaching method (hours per week)	Lecture (2) + exercise (1)
Workload	210 working hours, containing 31.5 hours class time and 178.5 hours independent study time and preparation for the exam
Module language	English
Prerequisites	E601-603 (or equivalent), advanced knowledge in Industrial Organization and Game Theory is advantageous.
Grading	Written exam (120 min, 100%)
Goals and contents of the module	The last two decades have seen the striking emergence of new Internet platforms for search, e-commerce, online media, job matching, social networking and other online activities. This module is aimed at exploring how online businesses are organized, what role search intermediaries play in getting together buyers and sellers, the optimal design of online platforms and related efficiency issues. The topics we are going to cover are based on real world examples, such as consumer search using search engines, competition between online platforms, sponsored search auctions used by Google and online reputation mechanisms on Amazon. The module will be mainly theory-orientated. The theoretical models we will cover thus require a solid microeconomics and math background. However, we will also discuss related case studies, empirical works and experiments.
Expected competences acquired after completion of the module	Students are expected to acquire knowledge of the internet markets and learn how to explain online phenomena by using economics language. They should be able to discuss the key mechanisms on online platforms, platform pricing structure, online participant interactions, consumer surplus and related policy issues.
Further information	There is no required textbook for this module. The lecture will be mainly based on lecture notes and some research papers. However, the following books might be useful for both refreshing basic IO knowledge and selective reading of topics: <ul style="list-style-type: none"> 1. Paul Belleflamme and Martin Peitz, Industrial Organization: Markets and Strategies, 2010, Cambridge University Press.

Expected number of students in class	<p>2. Martin Peitz and Joel Waldfogel, The Oxford Handbook of The Digital Economy, 2012, Oxford University Press.</p> <p>3. Hal Varian, Information Rules: A Strategic Guide to the Network Economy, 1998, Harvard Business Review Press.</p> <p>Notice that it is unnecessary to buy those books, as we will only cover a small fraction of each book.</p>
Contact information	Name: Anton Sobolev; Email: anton.sobolev@uni-mannheim.de
Module number and title	E5100 Topics in Economic History
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Dr. Alexander Donges
Cycle of offer	Every fall semester
ECTS credits	9
Teaching method (hours per week)	Lecture (2) + exercise (2)
Workload	270 hours in total, containing 42 hours class time and 228 hours for independent studies, exercises and exam preparation.
Module language	English
Prerequisites	E601-603 (or equivalent)
Grading	Written exam (100 min, 70%), presentation (20 min, 20%), classroom discussion (10%).
Goals and contents of the module	<p>Economic history is important to understand long-run economic development, in particular to study the question why some countries are rich and others remain poor. In this module, we focus on selected topics of quantitative economic history that applied economists and economic historians explored in recent years. Topics include trade, the importance of institutions for economic development, religion, human capital, innovation, market integration, financial development, inequality, migration, and epidemics. The weekly lecture (2 hours) gives you an overview on recent empirical research on each topic. In the weekly exercise sessions (2 hours), we then discuss important research papers in more depth. It is required that every module participant presents a critical discussion of one research paper.</p>

Expected competences acquired after completion of the module	Students will acquire thorough knowledge of empirical methods used in modern applied economics and quantitative economic history. They will be able to apply their knowledge of econometrics in analyzing research questions in economic history and discuss potential policy implications, for example with respect to development policies. The module also aims at enabling students to critically evaluate empirical research designs that may encounter in their future career.
Further information	A detailed syllabus (including literature) is available on my website (https://www.vwl.uni-mannheim.de/en/donges/).
Expected number of students in class	20
Contact information	Name: Alexander Donges; Email: donges@uni-mannheim.de

Module number and title	E5116 Programming Course for Economists
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Prof. Dr. Bernhard Ganglmair
Cycle of offer	Irregular
ECTS credits	2,5
Teaching method (hours per week)	Lecture (1)
Workload	75 working hours, including 10.5 hours of class time and 64.5 hours for independent studies, programming project, and project paper
Module language	English
Prerequisites	E601-603 (or equivalent)
Grading	Course paper (5 – 10 pages, 100%)
Goals and contents of the module	<p>This module aims to introduce students to the essential tools of text analysis (or: natural language processing, NLP). It turns unstructured text into quantitative data used for empirical research in economics, management science, and many other fields. We will use R for most of the module and Python to showcase some machine learning applications with text data at the end of the semester. Topics:</p> <ul style="list-style-type: none"> - Working with text: regular expressions/regex; text parsing; parts-of-speech tagging; web-scraping; dictionaries - Text as data: word-embeddings (from bag-of-words to word2vec/GloVe); topic models; sentiment analysis; text-similarity - ML with text (in Python): ML fundamentals; BERT; text-classification

Expected competences acquired after completion of the module	We will use recent economics and management science literature applications to illustrate methods and concepts. Students will be equipped with the basic concepts and programming skills to undertake independent text analysis projects in the software R. In addition, they will further be familiar with the resources needed to build on these basic concepts and dive deeper into an ever-growing literature.
Further information	We will dedicate the first two units to an introduction to R for those students who have no or limited prior experience with R. Students should bring their own laptops.
Expected number of students in class	20
Contact Information	Name: Bernhard Ganglmair; Email: ganglmair@uni-mannheim.de
Module number and title	E5119 Spatial Data Management and Analysis
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Prof. Kathrine von Graevenitz, Ph.D.
Cycle of offer	Irregular
ECTS credits	2,5
Teaching method (hours per week)	Lecture (1)
Workload	75 working hours, including 10.5 hours of class time and 64.5 hours for independent studies, programming project, and project paper
Module language	English
Prerequisites	E601-603 (or equivalent); helpful: Environmental Economics, International Trade
Grading	Presentation (15 min, 70%), presentation slides and code (30%), the course will be graded pass/fail.
Goals and contents of the module	This course provides an introduction to spatial data. We will discuss what is special about spatial data, introduce software to handle it, and learn to merge data and create simple maps. If time allows, we will also talk about how to geo-code data. The course is intended for students approaching their master's thesis to get them started with independent research using spatial data.

Expected competences acquired after completion of the module

Students will acquire an understanding of what spatial data is. They will also gain first insights into open source software used for spatial data (QGIS and R).

Further information

The course is limited to 12 participants. If necessary, students will be selected by lottery with preference for in higher semesters. Further sessions will be scheduled in the organizational meeting on 7 September.

Expected number of students in class

12

Contact information

Name: Kathrine von Graevenitz; Email: Kathrine.vonGraevenitz@zew.de

Specialization Phase: Seminars

Module number and title	E568 International Macroeconomics
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Dr. Jan Schymik
Cycle of offer	Irregular
ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Module language	English
Prerequisites	E601-603 (or equivalent)
Grading	Seminar paper (12 – 14 pages, 50%), presentation (45 min, 40%) + discussion and oral participation (10%)
Goals and contents of the module	The seminar deals with the macroeconomics of open economies. Covered topics include (i) the foreign exchange market and the determination of exchange rates in international money markets; (ii) determinants of the trade balance, national income, the balance of payments, money flows, and interest rates; (iii) capital flows in integrated financial markets; monetary and fiscal policy in open economies; (iv) international macroeconomic interdependence and policy coordination; (v) supply-chain relationships. Expected competences acquired after completion of the module: The students will acquire the ability to understand and critically evaluate academic articles in the field. They will improve their competencies in scientific writing and further their presentation skills by presenting an academic paper.
Expected competences acquired after completion of the module	The students will acquire the ability to understand and critically evaluate academic articles in the field. They will improve their competencies in scientific writing and further their presentation skills by presenting an academic paper.
Expected number of students in class	15
Contact information	Name: Jan Schymik; Email: jschymik@mail.uni-mannheim.de

Module number and title	E574 Internet Economics
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Anton Sobolev, Ph.D.
Cycle of offer	Irregular
ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Module language	English
Prerequisites	E601-603 (or equivalent)
Grading	Presentation (40 min, 30%), seminar paper (8 – 12 pages, 60%), classroom discussion (10%)
Goals and contents of the module	The rapid development of Internet provides not only new business models and life styles but also a novel area for economists to explore. In this seminar, students will present research papers on related topics including two-sided market, price dispersion, information congestion, search engine pricing, and so on.
Expected competences acquired after completion of the module	Students should acquire good understanding of business organization on Internet and be able to analyze them using economics models.
Expected number of students in class	15
Contact information	Name: Anton Sobolev; Email: anton.sobolev@uni-mannheim.de

Module number and title	E599 Empirical Environmental Economics
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Prof. Kathrine von Graevenitz, Ph.D.
Cycle of offer	Every fall semester

ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Module language	English
Prerequisites	E601-603 (or equivalent)
Grading	Presentation (30 min, 40%), report (3 – 5 pages, 40%), classroom discussion (20%)
Goals and contents of the module	This seminar covers recent empirical research in environmental economics. The reading list for the class will focus on a particular research topic in environmental economics, such as climate policy or air pollution control. Each student will present a paper chosen from the list to the class and write a report critiquing the paper. Emphasis will be on identifying the central questions addressed in the paper, evaluating the methodology and data, and making suggestions for improvements and extensions.
Expected competences acquired after completion of the module	Ability to present academic research to semi-expert audience, ability to critically reflect on academic research, and to articulate criticism and suggestions for improvement.
Expected number of students in class	15
Contact information	Name: Kathrine von Graevenitz; Email: Kathrine.vonGraevenitz@zew.de
Module number and title	E5009 Topics in Heterogeneity in Macroeconomics
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Prof. Miren Azkarate-Askasua, PhD
Cycle of offer	Every fall semester
ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.

Module language	English
Prerequisites	E601-603 (or equivalent)
Grading	Presentation (50 min, 40%), seminar paper (8 – 12 pages, 50%), classroom discussion (10%)
Goals and contents of the module	This seminar covers current research at the intersection of macroeconomics, labor economics and economic geography. We will study immigration, labor market power, inequality in the labor market, wealth inequality, minimum wage, employment protection legislation, the effects of trade on the labor market, the gender wage gap and topics broadly related to geography. Students will choose a paper from the reading list and present it in the seminar. The specific topics covered in the blockseminar will depend on the students' choice of papers. Moreover, students will write a short seminar paper which summarizes and critically evaluates the chosen paper and will present their critical evaluation. Active in-class participation is encouraged.
Expected competences acquired after completion of the module	Learn about recent papers, summarize and critically evaluate them. Students will improve their critical thinking, their communication skills and writing skills.
Expected number of students in class	13
Contact information	Name: Miren Azkarate-Askasua; Email: azkarate-askasua@uni-mannheim.de
Module number and title	E5060 Interdisciplinary Competition and Regulation Seminar
Form and usability of the module	Compulsory module for M.Sc. Economics in study track 2: Competition and Regulation Economics
Responsible teacher of the module	Prof. Nicolas Schutz, Ph.D. /Prof. Dr. Jens-Uwe Franck, LL.M. (Yale)
Cycle of offer	Irregular
ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Module language	English
Prerequisites	E601-603 (or equivalent)

Grading	Written report (25 – 30 pages, 30%), presentation (90 minutes, 50%), classroom discussion (20%)
Goals and contents of the module	In this seminar economics and law students will form mixed teams to analyze competition cases as well as regulatory proposals from a law and economics perspective. These case teams will take the perspective of the different parties involved and present their line of argument in class.
Expected competences acquired after completion of the module	Students learn to read, present, and critically evaluate cases. Students in economics will also improve their communication skills regarding the practice of competition law.
Expected number of students in class	20
Contact information	Name: Prof. Nicolas Schutz, Ph.D.; Email: schutz@uni-mannheim.de
Module number and title	E5106 Historical Economic Development
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Prof. Philipp Ager, Ph.D.
Cycle of offer	Every fall semester
ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Module language	English
Prerequisites	E601-603 (or equivalent)
Grading	Seminar paper (10 – 15 pages, 50%), presentation (30 min, 40%), classroom discussion (10%)
Goals and contents of the module	This module uses a historical and comparative approach to understanding the evolution and development of societies. We will examine research that asks whether differences in economic development today have historical roots. Our focus will be on discussing recent and classical studies that analyze the underlying forces that led to industrialization and sustainable growth in Europe and North America. In addition, we will study different mechanisms and channels through which history matters. Particular focus will be on

Expected competences acquired after completion of the module	<p>articles that look for direct evidence on path dependence, the role of institutions, technological change and innovation. While the material covered in the module is grounded in the field of economic history, there is a natural overlap with other fields in economics, such as development economics, economic geography and political economy.</p> <p>Participants of this seminar will acquire a deeper understanding of a well-established literature that studies historical events to understand why some countries today are so rich and others are still so poor. The students will learn to critically evaluate research papers. They will engage in academic discussions in-class. Finally, they will improve their presentation skills and they will learn how to handle feedback and questions from their peers in class.</p>
Further information	The reading list will be provided in the first meeting. Presentations will be on two consecutive days in December.
Expected number of students in class	15
Contact information	Name: Philipp Ager; Email: pager@uni-mannheim.de
Module number and title	E5113 Optimal Corrective Taxation
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Dr. Andreas Gerster
Cycle of offer	Irregular
ECTS credits	5
Teaching method (hours per week)	Block seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Module language	English
Prerequisites	E601-603 (or equivalent)
Grading	Seminar paper (8 – 12 pages, 50%), presentation (30 min, 30%), classroom discussion (20%)
Goals and contents of the module	In recent years, policy makers have increasingly made use of taxation in order to steer consumers' decisions into socially desirable directions. Corrective taxation has been applied in settings where consumers disregard the impact of their decision-making on other consumers (externalities) and when they make mistakes in their decision-making process (internalities). Prominent

Expected competences acquired after completion of the module	<p>examples include the taxation of carbon emissions and of so-called sin goods such as cigarettes and sugar.</p> <p>Drawing on empirical and theoretical research, this seminar analyzes the optimal design of corrective taxation. The theoretical papers covered investigate the rationale of optimal externality and internality taxes and explore how such taxes can improve efficiency. We will also discuss how a concern about the distributional implications of corrective taxes affects optimal taxation formulas. The empirical papers covered in the seminar aim at empirically quantifying optimal corrective taxes or subsidies in settings such as energy efficiency investments, carbon emissions, and sin good consumption. Students will write a 10-page paper on a particular aspect and present their work in class.</p> <p>Students will have to write a research paper of at least 10 pages on a clearly defined topic within the context of the seminar topic. This helps them to develop their skills of in terms of absorbing the current literature and in terms of academic writing, both of which will be useful to them when working on their master's thesis. Moreover, students will have to present their paper in class to their fellow students in a clear and succinct way. Finally, students learn how to engage in a scientific debate. All of the above skills are outstanding importance in many professional careers for economics graduates, especially so in English, the language of instruction for this class.</p>
Expected number of students in class	15
Contact information	Name: Andreas Gerster; Email: gerster@uni-mannheim.de
Module number and title	E5120 Topics in Econometrics
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Prof. Mengshan Xu, PhD.
Cycle of offer	Each fall term
ECTS credits	5
Teaching method (hours per week)	Seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Module language	English
Prerequisites	E601-603 (or equivalent)

Grading	Presentation (40 – 60 min, 50%), seminar paper (5 – 20 pages, 50%)
Goals and contents of the module	This seminar focuses on recent research developments in Econometrics, covering both theoretical and applied aspects. Each student is required to present a paper selected from the reading list and write a course paper on a topic related to the subject of their presentation. The course paper may be structured as a discussion paper or an empirical application of an econometric method.
Expected competences acquired after completion of the module	The students will develop the capability to comprehend and critically assess academic articles within the field. This will enhance their proficiency in scientific writing. Additionally, by presenting an academic paper, they will further refine their presentation skills.
Expected number of students in class	15
Contact information	Name: Mengshan Xu; Email: Mengshan.Xu@uni-mannheim.de
Module number and title	E5121 Personnel Economics: Making sense of HR data
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Dr. Felix Holub
Cycle of offer	Once
ECTS credits	5
Teaching method (hours per week)	Seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Module language	English
Prerequisites	E601-603 (or equivalent)
Grading	Presentation (30 min, 40%), short report (3 – 5 pages, 40%), classroom discussion (20%)
Goals and contents of the module	This seminar covers recent empirical research in economics on the management of human resources within organizations. The reading list for this course will focus on topics such as the impact of training on productivity, the effectiveness of incentive pay systems, the effects of performance evaluations on employee motivation, and the within-firm drivers of the gender pay gap. Each student will present a paper chosen from the list to the

Expected competences acquired after completion of the module	<p>class. Emphasis will be on identifying the central questions addressed in the paper, evaluating the methodology and data, and making suggestions for improvements and extensions. As part of this seminar, we will work with the HR database from a large firm in a hands-on session. Students will have the opportunity to use statistical software such as Stata or R to run their own analyses and test their own research questions.</p> <p>Students who have successfully completed the course will be able to demonstrate a working knowledge of some important findings from the personnel economics literature. They will have improved their ability to critically evaluate empirical evidence in economics and to articulate suggestions for improvement. Students will also have applied their knowledge by analyzing real-life data from an economist's point of view.</p>
Expected number of students in class	7
Contact information	Name: Felix Holub; Email: feholub@mail.uni.mannheim.de
Module number and title	E5122 Green Finance
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Responsible teacher of the module	Prof. Achim Wambach, Ph.D.
Cycle of offer	Irregular
ECTS credits	5
Teaching method (hours per week)	Seminar (2)
Workload	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation.
Module language	English
Prerequisites	E601-603 (or equivalent)
Grading	Seminar paper (22,000 characters including spaces, 50%), presentation and discussion (30 minutes, 50%).
Goals and contents of the module	The seminar covers recent research on financial market mechanisms for the green transformation of the economy, focusing on theoretical and empirical studies with policy relevance. Based on theoretical considerations and empirical findings in the literature, different market players and mechanisms are to be analyzed and evaluated. The focus will be on the (green) preferences of households and institutional investors, transmission mechanisms on stock and bond markets through which these preferences translate into different

Expected competences acquired after completion of the module	funding conditions for green vs. brown projects, the role that banks can play in the transition, the impact of green finance, and (green) monetary policy. Students have gained knowledge in green finance and, in particular, in various financial market players and mechanisms and their ability to support the net-zero transformation of the economy. They can apply their expertise and methods to analyze and evaluate ongoing debates in both the academic and the policy-oriented literature. The students have broadened their analytical and empirical abilities as well as their presentation and discussion skills.
Additional teachers	Dr. Karolin Kirschenmann
Expected number of students in class	15
Contact information	Name: Karolin Kirschenmann; Email: karolin.kirschenmann@zew.de

Specialization Phase: Internship

Module number and title	E5998 Internship
Form and usability of the module	Elective module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Cycle of offer	Every semester
ECTS credits	6
Teaching method (hours per week)	Internship
Workload	175 internship working hours; 5 hours for the preparation of an internship report in line with the Internship Report form.
Module language	Language of the internship: any; Language of documents of proof: German or English
Participation requirements	Bachelor's degree
Requirements for the Award of ECTS Credits, and Grading	Proof that the intern worked at least 175 hours, typically to be completed within a period of eight to twelve weeks; internship report and confirmations in accordance with the corresponding form; the internship is not graded
Goals and contents of the module	Application of specialized knowledge and approaches from the field of the economic sciences to practical problems; getting to know practical

Expected competences acquired after completion of the module	<p>approaches relevant to the respective field of work; acquisition of key competences</p> <p>Upon completion of the module, students are able to apply the knowledge and understanding gained from the degree program in a professional context. They have developed and enhanced explanations and solutions in their area of work and obtained specialized knowledge relating to this field. They have reflected on work processes, evaluated them and, if applicable, (re)designed them. They have exchanged with their colleagues about information, ideas, problems and solutions and have formulated and defended positions and solutions. By completing an internship abroad, they may have developed their proficiency in a foreign language for use in business contexts.</p>
Additional information	<p>The internship meets the requirements for mandatory internships set out in the federal regulations on employing interns dated 1 January 2015 (Praktikantenrichtlinie Bund) and the supplementary information on internships (Durchführungsrundschreiben D5-31005/1#11 dated 4 May 2020, page 4: „Sehen Studiengänge ein Praktikum als Wahlpflichtmodul (Wahl zwischen einem Praktikum oder Seminar, Hausarbeit, Forschungsaufenthalt etc.) vor und entscheidet sich eine Studentin oder ein Student für ein Praktikum, gilt dieses als Pflichtpraktikum nach dieser Richtlinie.“)</p>
Contact information	<p>Name: Sebastian Herdtweck; Email: econgrad@uni-mannheim.de; Office: L7, 3-5, room 405; Office hours: upon appointment</p>

Research Phase

Module number and title	E5999 Master's Thesis
Form and usability of the module	Compulsory module for M.Sc. Economics in study track 1: Economics and study track 2: Competition and Regulation Economics
Cycle of offer	Every semester
ECTS credits	30
Teaching method (hours per week)	Written final thesis, length to be agreed with the supervisor, typically 20 to 70 pages
Workload	900 hours, optionally including a master's colloquium
Module language	English
Participation requirements	Completion of at least 45 ECTS credits in the specialization phase and successful completion of at least one seminar

Requirements for the Award of ECTS Credits, and Grading	The master's thesis is passed if it is graded "fair" (4.0) ("ausreichend") or better.
Goals and contents of the module	The students work independently on a topic from the fields of Economics, Statistics, Econometrics, and/or Economic History. The thesis should demonstrate the ability to identify and apply relevant theories and methods in academic research and to present the results in a linguistically and formally appropriate way. The topic, assignment, and scope of the master's thesis shall be limited by the supervisor so that its completion is possible within the given period of time.
Expected competences acquired after completion of the module	<p>Upon completion of the module, students have demonstrated the ability to apply the knowledge and understanding gained from the degree program in a research context, in particular:</p> <ul style="list-style-type: none"> - largely independently develop a research idea and line of inquiry, - identify and evaluate scientific literature relevant for the research topic, - deepen and integrate specialized knowledge in the chosen field of research and independently close knowledge gaps, - identify and apply scientific concepts and methods suitable for the respective line of inquiry, - demonstrate profound skills in data collection, compilation, preparation, processing, and presentation, - exchange with their supervisor about information, ideas, problems, and solutions and formulate and defend positions and solutions, - recognize the specifics and limitations of their research, - reflect on the results obtained scientifically, socially and, if necessary, ethically, - present their results in a precise and consistent manner and in accordance with the formal requirements of a scientific work, - organize their scientific work process independently and - use English flexibly and effectively and produce clear, well-structured, detailed text on complex subjects.
Contact information	Name: Sebastian Herdtweck; Email: econgrad@uni-mannheim.de; Office: L7, 3-5, room 405; Office hours: upon appointment
Module number and title	E8999 Master's Thesis (Dissertation Proposal)
Form and usability of the module	Compulsory module for M.Sc. Economics in study track 3: Economic Research
Cycle of offer	Every semester
ECTS credits	20
Teaching method (hours per week)	Written final thesis, length to be agreed with the supervisor, typically 10 to 35 pages

Workload	600 hours
Module language	English
Participation requirements	Completion of at least 45 ECTS credits in the specialization phase
Requirements for the Award of ECTS Credits, and Grading	The master's thesis is passed if it is graded "fair" (4.0) ("ausreichend") or better.
Goals and contents of the module	The students work independently on a topic from the fields of Economics, Statistics, Econometrics, and/or Economic History. The thesis has two goals. Firstly, it should demonstrate the ability to identify and apply cutting-edge theories and methods to academic research and to present the results in a linguistically and formally appropriate way. Secondly, it should indicate the extent and nature of the student's dissertation research interests. The topic, assignment, and scope of the thesis shall be limited by the supervisor so that its completion is possible within the given period of time.
Expected competences acquired after completion of the module	<p>Upon completion of the module, students have demonstrated the ability to apply the knowledge and understanding gained from the degree program in a research context, in particular:</p> <ul style="list-style-type: none"> - independently develop a research idea and line of inquiry, - identify and evaluate scientific literature relevant for the research topic, - deepen and integrate highly specialized knowledge in the chosen field of research and independently close knowledge gaps, - identify, develop, and apply scientific concepts and methods suitable for the respective line of inquiry, - demonstrate profound skills in data collection, compilation, preparation, processing, and presentation, - exchange with their supervisor about information, ideas, problems, and solutions and formulate and defend positions and solutions, - recognize and evaluate the specifics and limitations of their research with special consideration of most recent academic research, - reflect on the results obtained scientifically, socially and, if necessary, ethically, - present their results in a precise and consistent manner and in accordance with the formal requirements of a scientific work, - organize their scientific work process independently and - use English flexibly and effectively and produce clear, well-structured, detailed text on complex subjects.
Contact information	Name: Sebastian Herdtweck; Email: econgrad@uni-mannheim.de; Office: L7, 3-5, room 405; Office hours: upon appointment