



UNIVERSITY  
OF MANNHEIM  
Department of Economics



# Course Catalog Spring Semester 2020

MASTER OF ECONOMICS

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## Compulsory Modules for the Competition and Regulation Economics Track

<b>Module number and title</b>	E505 Industrial Organization: Markets and Strategies
<b>Form and usability of the module</b>	Compulsory course for Master in Economics with specialization Competition and Regulation Economics, elective course for Master in Economics with specialization Economics
<b>Responsible teacher of the module</b>	Prof. Dr. Martin Peitz
<b>Cycle of offer</b>	Each spring semester
<b>ECTS credits</b>	14
<b>Teaching method (hours per week)</b>	Lecture (4) + exercise (2)
<b>Workload</b>	420 working hours, including 63 hours of class time and 357 hours of independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	E601- E603 (or equivalent; this course is only suitable for Economics students)
<b>Grading and ECTS credits</b>	Exam (180 min, 60%), two sets of graded take home exercises (20%), and class room discussion (20%)
<b>Goals and contents of the module</b>	<p>This course covers the theory of industrial organization. It provides an overview of modern industrial organization with an emphasis of the theory and formal models. Models are adapted to tackle concrete problems. Students are provided with a toolkit and are encouraged to think strategically. Theoretical analyses are complemented by case studies and background knowledge of competition policy. Organization:</p> <ol style="list-style-type: none"> <li>1. Introduction;</li> <li>2. Market Power;</li> <li>3. Sources of Market Power;</li> <li>4. Pricing and Market Segmentation</li> <li>5. Product Quality and Information;</li> <li>6. Theory of Competition Policy;</li> <li>7. R&amp;D and Intellectual Property;</li> <li>8. Networks, Standards, and Systems;</li> <li>9. Intermediation.</li> </ol>
<b>Expected competences acquired after completion of the module</b>	Ability to develop industrial organization models, ability to solve industrial organization models, ability to analyze business and competition cases.
<b>Further information</b>	<p>Essential reading:            Paul Belleflamme and Martin Peitz (2015), Industrial Organization: Markets and Strategies, 2<sup>nd</sup> edition, Cambridge University Press</p>

<b>Expected number of students in class</b>	30
<b>Contact person</b>	Name: Prof. Dr. Martin Peitz; Email: martin.peitz@gmail.com; Office: L7, 3-5, 3rd floor, room 330
<b>Module number and title</b>	<b>E5046 Empirical Industrial Organization</b>
<b>Form and usability of the module</b>	Compulsory course for M. Sc. Economics with specialization Competition and Regulation Economics, elective course for M. Sc. Economics
<b>Responsible teacher of the module</b>	Prof. Nicolas Schutz, Ph.D.
<b>Cycle of offer</b>	Each spring semester
<b>ECTS credits</b>	7
<b>Teaching method (hours per week)</b>	Lecture (2) + exercise (1)
<b>Workload</b>	210 working hours, including 31.5 hours of class time and 178.5 hours of independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	E601- E603 (or equivalent; this course is only suitable for Economics students)
<b>Grading and ECTS credits</b>	Final exam (120 min, 70%), graded take-home exercises (30%)
<b>Goals and contents of the module</b>	This course is designed to provide an introduction to empirical methods in industrial organization, focusing on competition policy/antitrust: demand estimation, supply estimation, measurement of market power, productivity estimation, and horizontal mergers. The aim is to provide students with the knowledge of the standard models and approaches and introduce them to modern research questions. This course is organized in lectures complemented by computer sessions. The software used is Matlab.
<b>Expected competences acquired after completion of the module</b>	Students acquire methodological skills and programming skills in the field of empirical industrial organization. Those skills can be applied to answer empirical questions in industrial organization and antitrust policy.
<b>Further information</b>	Essential reading: Reading will be taken from recent research articles which will vary over time. A reading list will be distributed during the first course.

<b>Expected number of students in class</b>	30
<b>Contact person</b>	Name: Prof. Nicolas Schutz, Ph.D.; Phone: (0621) 181-1872; Email: schutz@uni-mannheim.de
<b>Module number and title</b>	E5051 Mannheim Competition Policy Forum
<b>Information</b>	<p>The last couple of years have seen a remarkable increase in the application of economic insights to competition problems. In order to further promote and refine this development, practitioners need to understand how microeconomics can help to shed light on particular aspects of competition problems. At the same time, academics benefit from a better understanding of real-world challenges and institutional details.</p> <p>The forum aims at providing a platform for the discussion of recent cases, general competition policy issues, and relevant academic research in the field. Renowned practitioners and academics will be invited to present their views on cases and general policy questions, followed by a discussion of the economic implications with the audience.</p> <p>Starting from the autumn semester 2017, the MCPF is an official part of two master's programs at the University of Mannheim. Participation is compulsory for economics students in the competition and regulation track and for law students in the master on competition and regulation law.</p>

<b>Module number and title</b>	Competition Law
<b>Form and usability of the module</b>	Compulsory course for Master in Economics with specialization Competition and Regulation Economics
<b>Responsible teacher of the module</b>	Prof. Dr. Albrecht Bach
<b>Cycle of offer</b>	Each spring semester
<b>ECTS credits</b>	5
<b>Teaching method (hours per week)</b>	Lecture (2 SWS)
<b>Workload</b>	150 working hours, including 21 hours of class time and 129 hours of independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	none
<b>Grading and ECTS credits</b>	Final exam (120 min, 100%)
<b>Goals and contents of the module</b>	The aim of the module is to learn the basic provisions of EU competition law and to study the law in its economic and market context. The core of the course will be about cartels and collusive conduct (Art. 101 TFEU) and abuse of market power (Art. 102 TFEU) and its legal consequences. Merger control will also be subject to the course.
<b>Expected competences acquired after completion of the module</b>	Students will be able to understand competition policy in reaction to, e.g., price collusion, distribution agreements, licenses of intellectual property or joint ventures. They will be able to read cases of the European Court of Justice and apply their legal knowledge to new competition cases.
<b>Further information</b>	Legal texts will be provided. Further reading: Fox/Gerard, EU Competition Law, 2017; Lorenz, Introduction to EU Competition Law, 2013; Wish/Bailey, Competition Law, 8.ed., 2015.
<b>Expected number of students in class</b>	15
<b>Contact person</b>	Name: Prof. Dr. Friedemann Kainer

## Elective Modules: Lectures

<b>Module number and title</b>	E505 Industrial Organization: Markets and Strategies
<b>Form and usability of the module</b>	Compulsory course for Master in Economics with specialization Competition and Regulation Economics, elective course for Master in Economics with specialization Economics
<b>Responsible teacher of the module</b>	Prof. Dr. Martin Peitz
<b>Cycle of offer</b>	Each spring semester
<b>ECTS credits</b>	14
<b>Teaching method (hours per week)</b>	Lecture (4) + exercise (2)
<b>Workload</b>	420 working hours, including 63 hours of class time and 357 hours of independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	E601- E603 (or equivalent; this course is only suitable for Economics students)
<b>Grading and ECTS credits</b>	Exam (180 min, 60%), two sets of graded take home exercises (20%), and class room discussion (20%)
<b>Goals and contents of the module</b>	This course covers the theory of industrial organization. It provides an overview of modern industrial organization with an emphasis of the theory and formal models. Models are adapted to tackle concrete problems. Students are provided with a toolkit and are encouraged to think strategically. Theoretical analyses are complemented by case studies and background knowledge of competition policy. Organization: 1. Introduction; 2. Market Power; 3. Sources of Market Power; 4. Pricing and Market Segmentation 5. Product Quality and Information; 6. Theory of Competition Policy; 7. R&D and Intellectual Property; 8. Networks, Standards, and Systems; 9. Intermediation.
<b>Expected competences acquired after completion of the module</b>	Ability to develop industrial organization models, ability to solve industrial organization models, ability to analyze business and competition cases
<b>Further information</b>	Essential reading: Paul Belleflamme and Martin Peitz (2015), Industrial Organization: Markets and Strategies, 2 <sup>nd</sup> edition, Cambridge University Press
<b>Expected number of students in class</b>	30
<b>Contact person</b>	Name: Prof. Dr. Martin Peitz; Email: martin.peitz@gmail.com; Office: L7, 3-5, 3rd floor, room 330

<b>Module number and title</b>	E557 Public Economics
<b>Form and usability of the module</b>	Elective course for M. Sc. Economics
<b>Responsible teacher of the module</b>	Duk Gyoo Kim
<b>Cycle of offer</b>	Once a year
<b>ECTS credits</b>	7
<b>Teaching method (hours per week)</b>	Lecture (2) + exercise (1)
<b>Workload</b>	210 working hours, including 31.5 hours of class time and 178.5 hours of independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-E603 (or equivalent)
<b>Grading and ECTS-Credits</b>	Final exam (120 min, 100%)
<b>Goals and contents of the module</b>	<p>This course focuses on the state's role in correcting market failures and on the optimal use of taxes. We will take a normative perspective, i.e., we ask what an ideal state would do in order to achieve distributive objectives. It will be composed by two parts. The first part will deal with market failures and public intervention. The second part will be devoted to tax theory.</p> <p>Part I: Market failures and public intervention</p> <ol style="list-style-type: none"> <li>1. Public Goods</li> <li>2. Externalities</li> <li>3. Asymmetric Information</li> <li>4. Price vs. quantity regulations</li> <li>5. Local public goods</li> </ol> <p>Part II: Tax theory</p> <ol style="list-style-type: none"> <li>1. Introduction to Taxation</li> <li>2. Optimal commodity taxation</li> <li>3. Many Person Ramsey Tax Rule</li> <li>4. Production Efficiency Theorem</li> <li>5. Non-linear taxation of income</li> <li>6. Ricardian Equivalence</li> <li>7. Tax Smoothing problem</li> </ol>



<b>Expected competences acquires after completion of the module</b>	The course introduces the core topics in Public Economics. The course should prove useful for any student interested in analyzing policy issues.
<b>Further information</b>	Lecture notes will be available.  Useful references are: Atkinson and Stiglitz, Lectures on Public Economics, Mc Graw-Hill, 1980 Rosen, Public Finance, 3rd Edition, 1992, Irwin, Boston. Salanie: Microeconomics of market failures Cornes and Sandler: The theory of externalities, public goods and club goods Salanie, The economics of taxation, MIT Press, 2003 Myles, Public Economics, Cambridge University Press, 1995 Mas-Collel, Whinston, Green, Microeconomic Theory, Harvard University Press 1996 Stiglitz, "Economics of the Public sector", 3rd Edition, 2000, Norton & Company. Hindriks and Myles, "Intermediate Public Economics", MIT Press.
<b>Expected number of students in class</b>	8-10
<b>Contact person</b>	Name: Duk Gyoo Kim; Email: d.kim@uni-mannheim.de
<b>Module number and title</b>	<b>E563 Game Theory</b>
<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
<b>Responsible teacher of the module</b>	Prof. Dr. Volker Nocke / Daniel Savelle, Ph.D.
<b>Cycle of offer</b>	Each spring semester
<b>ECTS credits</b>	7
<b>Teaching method (hours per week)</b>	Lecture (2) + exercise (1)
<b>Workload</b>	210 working hours, including 31.5 hours of class time and 178.5 hours of independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-E603 (or equivalent)

<b>Grading and ECTS-Credits</b>	Written exam (120 min, 100%)
<b>Goals and contents of the module</b>	This course provides a thorough treatment of game theory, which is a formal framework for analyzing strategic interactions. It revisits, expands on, and complements the game-theoretic concepts introduced in E601 Advanced Microeconomics. Covering static and dynamic games of complete and incomplete information, this course defines suitable solution concepts and discusses various economic applications. The exercises allow students to familiarize themselves with the use of game-theoretic tools and to study further applications.
<b>Expected competences acquires after completion of the module</b>	The students know game theory at an advanced level. They are able to describe strategic interactions formally, identify and apply suitable solution concepts, and critically evaluate the resulting prediction of behavior and outcomes. Moreover, the students understand the key ideas of game-theoretic reasoning used in academic research in economics and other disciplines.
<b>Further information</b>	-
<b>Expected number of students in class</b>	20
<b>Contact person</b>	Name: Daniel Savelle, Ph.D.; Email: dss3ej@virginia.edu; Office: L7, 3-5 Room 3.08
<b>Module number and title</b>	<a href="#">E581 International Trade</a>
<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
<b>Responsible teacher of the module</b>	Prof. Lei Li, Ph.D.
<b>Cycle of offer</b>	Each spring semester
<b>ECTS credits</b>	7
<b>Teaching method (hours per week)</b>	Lecture (3)
<b>Workload</b>	210 working hours, including 31.5 hours of class time and 178.5 hours of independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-603 (or equivalent)
<b>Grading and ECTS credits</b>	Assignments (100%)

<b>Goals and contents of the module</b>	The goal of the course is to provide a good understanding of international trade theory and empirical method in international trade. This seminar covers varying topics in international economics, including the core trade models as well as their empirical applications. A tentative list of topics includes Ricardian model, Heckscher-Ohlin model, trade with monopolistic competition, gravity equation, the labor market consequences of international trade and other closely related topics.
<b>Expected competences acquired after completion of the module</b>	Students will have a comprehensive knowledge of the core trade models and their empirical applications.
<b>Further information</b>	-
<b>Expected number of students in class</b>	15 (max. 20)
<b>Contact person</b>	tba

<b>Module number and title</b>	<a href="#">E5031 Applied Labour Economics</a>
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<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
<b>Responsible teacher of the module</b>	Dr. Asmus Zoch
<b>Cycle of offer</b>	Each spring semester
<b>ECTS credits</b>	9
<b>Teaching method (hours per week)</b>	Lecture (2) + exercise (2)
<b>Workload</b>	270 working hours, including 42 hours of class time and 228 hours of independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-603 (or equivalent)
<b>Grading and ECTS credits</b>	Written exam (100 min, 70%) and exercises (30%)
<b>Goals and contents of the module</b>	This course will focus on different micro-econometric models using actual empirical studies from the field of labor economics. Starting from the standard theory of competitive labor markets, we introduce the concept of human capital, to explain wage differences between

<b>Expected competences acquired after completion of the module</b>	<p>individuals, and explore the role of education. Exploring the Mincer earnings function, discrimination and unemployment, the students will learn how to analyze actual labor data sets using Stata. The first part of the course will deal with linear panel data models and instrumental regressions, the second part will focus on discrete choice models. This course will end with the introduction of non-parametric estimators.</p> <p>Ability to use Stata to conduct independent micro-econometric analysis and apply advanced micro-economic models.</p>
<b>Further information</b>	<p>Introductory literature:</p> <ul style="list-style-type: none"> <li>• Wooldridge, Jeffrey M. (2002), <i>Econometric Analysis of Cross Section and Panel Data</i>, Cambridge, Mass.: MIT Press. Chapters 10-20.</li> <li>• George J. Borjas, <i>Labor Economics</i></li> </ul>
<b>Expected number of students in class</b>	25
<b>Contact person</b>	Name: Dr. Asmus Zoch; Phone: (0621) 181-1842; Email: zoch@uni-mannheim.de; Office: Room 123
<b>Module number and title</b>	<a href="#">E5035 Environmental Economics</a>
<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
<b>Responsible teacher of the module</b>	Prof. Ulrich Wagner, Ph.D. / Dr. Andreas Gerster
<b>Cycle of offer</b>	Each spring semester
<b>ECTS credits</b>	9.5
<b>Teaching method (hours per week)</b>	Lecture (3) + exercises (1)
<b>Workload</b>	285 working hours, including 42 hours of class time and 243 hours of independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-603 (or equivalent)
<b>Grading and ECTS credits</b>	Final exam (120 min, 100%)
<b>Goals and contents of the module</b>	This course is an introduction to the field of environmental economics at the graduate level. The first part of the course presents the

<b>Expected competences acquired after completion of the module</b>	<p>economic theory of environmental policy. Based on the theory of externalities, a broad range of instruments for environmental policy will be analyzed from an economic point-of-view. The second part of the course deals with empirical methods for the valuation of environmental quality, which is required for cost-benefit-analysis and in the implementation of environmental policies. The third part of the course is dedicated to the economic analysis of international environmental problems.</p> <p>Ability to formulate and solve problems in environmental regulation using advanced economic theory and mathematical techniques. Ability to estimate willingness-to-pay for environmental quality using statistical methods. Understanding of strategic incentives in international negotiations over environmental problems.</p>
<b>Further Information</b>	<p>Literature:</p> <ol style="list-style-type: none"> <li>1. Daniel J. Phaneuf and Till Requate. A course in environmental economics. Cambridge University Press.</li> <li>2. William J. Baumol and Wallace E. Oates, The theory of environmental policy. Cambridge University Press</li> </ol>
<b>Expected number of students in class</b>	20
<b>Contact person</b>	<p>Name: Prof. Ulrich Wagner, Ph.D.; Phone: (0621) 181-1420; Email: wagner@vwl.uni-mannheim.de; Office: L7, 3-5 Room 211/212; Office hours: Thu, 2-3pm</p> <p>Name: Dr. Andreas Gerster; Phone: (0621) 181-1791; Email: gerster@uni-mannheim.de; Office: L7, 3-5 Room 232</p>
<b>Module number and title</b>	<a href="#">E5038 Empirical Macroeconomics</a>
<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
<b>Responsible teacher of the module</b>	Prof. Dr. Matthias Meier
<b>Cycle of offer</b>	Each spring semester
<b>ECTS credits</b>	5
<b>Teaching method (hours per week)</b>	Lecture (2)
<b>Workload</b>	150 working hours, including 21 hours of class time and 129 hours of independent studies and exam preparation
<b>Course language</b>	English

<b>Prerequisites</b>	E601-603 (or equivalent)
<b>Grading and ECTS credits</b>	Final exam (90 min, 60%) and problem sets (40%)
<b>Goals and contents of the module</b>	This course covers both methods and applications in empirical macroeconomics. On the methodological side, we first discuss narrative approaches to identify structural shocks and univariate methods to study their propagation. The second and larger methodological block covers structural vector autoregressive (SVAR) models. The focus will be on various identification strategies (e.g., short-run/long-run restrictions, sign restrictions, external instruments), but we will also cover inference, factor models, nonlinear models. The lectures, and even more so the assignment, introduce a range of applications. Those include the analysis of technology shocks, monetary policy shocks, and fiscal policy shocks.
<b>Expected competences acquired after completion of the module</b>	The course introduces students to the econometric theory and macroeconomic applications of structural vector autoregressions.
<b>Further information</b>	Recommended literature: Ramey (Handbook of Macroeconomics, Volume 2A, Chapter 2: Macroeconomic Shocks and Their Propagation) Kilian and Lütkepohl (Structural Vector Autoregressive Analysis, preliminary: see <a href="http://www-personal.umich.edu/~lkilian/book.html">http://www-personal.umich.edu/~lkilian/book.html</a> ) Lütkepohl (New Introduction to Multiple Time Series Analysis, 2005)
<b>Expected number of students in class</b>	10
<b>Contact person</b>	Name: Prof. Dr. Matthias Meier; Email: <a href="mailto:m.meier@uni-mannheim.de">m.meier@uni-mannheim.de</a>
<b>Module number and title</b>	<b>E5046 Empirical Industrial Organization</b>
<b>Form and usability of the module</b>	Compulsory course for M.Sc. Economics with specialization Competition and Regulation Economics, elective course for M. Sc. Economics
<b>Responsible teacher of the module</b>	Prof. Nicolas Schutz, Ph.D.
<b>Cycle of offer</b>	Each spring semester
<b>ECTS credits</b>	7
<b>Teaching method (hours per week)</b>	Lecture (2) + exercise (1)

<b>Workload</b>	210 working hours, including 31.5 hours of class time and 178.5 hours of independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	E601- E603 (or equivalent; this course is only suitable for Economics students)
<b>Grading and ECTS credits</b>	Final exam (120 min, 70%), graded take-home exercises (30%)
<b>Goals and contents of the module</b>	This course is designed to provide an introduction to empirical methods in industrial organization, with a focus on antitrust issues. This course covers the traditional topics in empirical industrial organization and antitrust: Demand estimation, supply estimation, measurement of market power, productivity estimation, and horizontal mergers. The aim is to provide students with the knowledge of the standard models and approaches and introduce them to modern research questions. This course is organized in lectures complemented by computer sessions. The software used is Matlab.
<b>Expected competences acquired after completion of the module</b>	Students acquire methodological and programming skills in the field of empirical industrial organization. Those skills can be applied to answer empirical questions in industrial organization and antitrust policy.
<b>Further information</b>	Essential reading: Reading will be taken from recent research articles which will vary over time. A reading list will be distributed during the first course.
<b>Expected number of students in class</b>	30
<b>Contact person</b>	Name: Prof. Nicolas Schutz, Ph.D.; Phone: (0621) 181-1872; Email: schutz@uni-mannheim.de

<b>Module number and title</b>	<a href="#">E5059 Public Service Delivery in Developing Countries</a>
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<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
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<b>Responsible teacher of the module</b>	Dr. Nicholas Barton
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<b>Cycle of offer</b>	Irregular
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<b>ECTS credits</b>	9
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<b>Teaching method (hours per week)</b>	Lecture (2) + exercise (2)
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<b>Workload</b>	270 working hours, including 42 hours of class time and 228 hours of independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-603 (or equivalent)
<b>Grading and ECTS credits</b>	Final exam (90 min, 60%), take home assignment (20%), presentation (15%), and class room discussion (5%)
<b>Goals and contents of the module</b>	In this course, we will study both theoretically and empirically how best to motivate public servants with a focus on developing countries. We will start with the traditional theory of motivation, looking at how incentive contracts and selection can affect performance in the public sector and examine the results of experiments that have changed the incentive structure of public servants. We will also examine a newer literature that focusses on how identity is shaped in the work place and notes that workers who are intrinsically motivated to work may not respond well to explicit incentives. Again, we will look at experimental evidence that examines to what extent these theories are important in the real world.
<b>Expected competences acquired after completion of the module</b>	Students will gain an understanding of the theory of incentives as well as how these apply to the real world in developing countries. The course also aims to give students a better understanding of the empirical methods used in applied work on the subject of incentivizing public-sector workers.
<b>Further information</b>	Recommended literature will be discussed in class.
<b>Expected number of students in class</b>	15
<b>Contact person</b>	Name: Dr. Nicholas Barton; Email: nibarton@mail.uni-mannheim.de
<b>Module number and title</b>	<a href="#">E5068 Empirical Methods in Public Economics</a>
<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
<b>Responsible teacher of the module</b>	Prof. Arthur Seibold, Ph.D.
<b>Cycle of offer</b>	Each spring semester
<b>ECTS credits</b>	7.5
<b>Teaching method (hours per week)</b>	Lecture (3)



<b>Workload</b>	210 working hours, including 31.5 hours class time and 178.5 hours for independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	E601- E603 (or equivalent)
<b>Grading and ECTS credits</b>	Final exam (120 minutes, 80%) and, problem sets (20%)
<b>Goals and contents of the module</b>	This course aims at providing a thorough understanding of the main empirical methods used in modern public economics, while introducing students to the main topics of research in the field. Topics include both tax policies such as income taxation as well as public expenditure policies such as social insurance. The discussion of empirical methods focuses mostly on credible, quasi-experimental research designs including instrumental variables, difference-in-differences, regression discontinuity and bunching estimators. Recent research papers serve as examples to guide the discussion of empirical methods.
<b>Expected competences acquired after completion of the module</b>	Students will acquire thorough knowledge and understanding of empirical methods used in modern public economics and the main topics of research in the field. They will be able to apply their knowledge of econometrics in analyzing research and policy questions in public economics. The course aims at enabling students to critically assess and evaluate research designs they may encounter in their subsequent studies or professional life.
<b>Further information</b>	-
<b>Expected number of students in class</b>	20
<b>Contact person</b>	Name: Prof. Arthur Seibold, Ph.D.; Email: seibold@uni-mannheim.de
<b>Module number and title</b>	<a href="#">E5069 Power Analysis</a>
<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
<b>Responsible teacher of the module</b>	Dr. Ingo Steinke
<b>Cycle of offer</b>	Irregular
<b>ECTS credits</b>	5
<b>Teaching method (hours per week)</b>	Lecture (2)

<b>Workload</b>	150 working hours, including 21 hours of class time and 129 hours of independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	Advanced Econometrics I or equivalent
<b>Grading and ECTS credits</b>	Final exam (60 min)
<b>Goals and contents of the module</b>	For the planning of statistical studies, it is important to know how to choose the sample size in order to be able to prove a specific effect. Moreover, it is useful to compute the power of a test under certain alternatives in order to know what conclusion can be made even if the null hypothesis is not rejected. In the lecture the power of tests is derived and computed under alternatives in several models, e.g. for simple t-tests and in variance, regression, and meta-analysis models. The theory behind the formulas will be discussed. Using Stata the power of the tests is computed and sample size computations are performed.
<b>Expected competences acquired after completion of the module</b>	The students know distributional properties of the normal, t-, chi-square, and F-distribution and know how these distributions are constructed. For specific models the students can derive the formulas for the computation of the power. They can compute the power of tests using Stata and determine the sample size necessary to distinguish a specific effect.
<b>Further information</b>	-
<b>Expected number of students in class</b>	15
<b>Contact person</b>	Name: Ingo Steinke; Phone: (0621) 181-1940; Email: <a href="mailto:isteinke@rumms.uni-mannheim.de">isteinke@rumms.uni-mannheim.de</a> ; Office: L7, 3-5, Room 142; Office hours: Tue und Wed, 17:15-18:15
<b>Module number and title</b>	<a href="#">E5076 Topics in Time Series Analysis</a>
<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
<b>Responsible teacher of the module</b>	Dr. Mehdi Hosseinkouchack
<b>Cycle of offer</b>	Irregular
<b>ECTS credits</b>	9

<b>Teaching method (hours per week)</b>	Lecture (2) + exercise (2)
<b>Workload</b>	270 working hours, including 42 hours of class time and 228 hours of independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-603 (or equivalent)
<b>Grading and ECTS credits</b>	Final exam (120min, 70%) + assignments (30%)
<b>Goals and contents of the module</b>	<p>This module discusses the following topics:</p> <ol style="list-style-type: none"> <li>1. Univariate time series analysis – ARMA – Forecasting</li> <li>2. Unit root testing</li> <li>3. Spectral analysis</li> <li>4. Long Memory and fractional integration</li> <li>5. Conditional heteroscedasticity &amp; stochastic volatility models</li> <li>6. Panel Unit root testing</li> </ol> <p>This module is designed for Master students who already have some heard econometrics courses at the Bachelor's level and have a good knowledge on ordinary least squares and would like to delve into the world of time series analysis, possibly assume quantitative roles in financial industry or research centers in central banks or similar institutes. Those participants who would like to continue their studies at a PhD level will also benefit from this course. The course starts with a solid discussion on univariate time series models with a clear focus on the dynamics behind the well-known models for serial correlations, name <b>Autoregressive Moving Average</b> models [ARMA]. We then discuss <b>forecasting</b> time series, in details, both on theoretical and on applied grounds. We then delve into the realm of nonstationary time series, discussing how to tell stationary time series from non-stationary ones apart. <b>Unit root testing</b> is in particular important when assuming forecasting tasks and of course, when it comes to the analysis of macroeconomics or financial series. Discussing unit root testing, further, opens a natural path to follow towards the analysis of co-movements and the discussion of spurious regressions (which will just be briefly touched on but is out of the scope of this module). We will also discuss spectral analysis for time series that is aimed at detecting cyclical movements in time series. <b>Long memory processes</b> make for our next fruitful topic in this course. These processes play an important role for modeling time series whose temporal dependence dies out very slowly. After briefly discussing stochastic processes, we will discuss <b>conditional heteroscedasticity and stochastic volatility models</b> as our next topic. These are well-known models for time-varying variances, which are intrinsic to most financial series. The last topic we cover in this course is an extension of univariate unit root tests to panel data. <b>Panel unit root tests</b> are easy to trace in most international macroeconomic and international finance applications and in fact their</p>

<b>Expected competences acquired after completion of the module</b>	<p>name speaks for their relevance in such frameworks since the participants have already come to learn about unit root tests and their relevance for quantitative analysis. The course includes examples on each topic, analyzing different problems using a statistical software.</p>
<b>Further information</b>	<p>Upon completing this course, the students will have a deep understanding of many important tools in time series analysis as well as topics in panel data analysis. The course has both applied and theoretical flavors and is meant to prepare the participants to assume graduate level quantitative roles and to possibly continue their studies at a PhD level as well. In particular,</p> <ul style="list-style-type: none"> <li>• the participants will grasp the ideas behind the dynamics of forecasting models using Autoregressive Moving Average models;</li> <li>• the participants will learn how to detect seasonal behaviors in time series;</li> <li>• the participants will learn what unit root tests are and will be able to apply such tests in respective frameworks where the explosive behavior of times series shall be taken care of properly;</li> <li>• the participant will learn models for time series with quite persistent autocorrelations, e.g. U.S. unemployment rate, and exhibit the so-called long memory;</li> <li>• the participants will learn how to model volatility for financial time series;</li> <li>• the participants will finally learn how to apply unit root tests in a panel data framework and will be able to distinguish between different testing procedures and merits of each;</li> <li>• the participants will learn to conduct their analyses based on the methods discussed above using a statistical software.</li> </ul>
<b>Expected number of students in class</b>	20
<b>Contact person</b>	Name: Dr. Mehdi Hosseinkouchack; Email: <a href="mailto:hosseinkouchack@uni-mannheim.de">hosseinkouchack@uni-mannheim.de</a>
<b>Module number and title</b>	<a href="#">E5087 Banking and Banking Regulation</a>

<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
<b>Responsible teacher of the module</b>	Prof. Ernst-Ludwig von Thadden
<b>Cycle of offer</b>	Irregular
<b>ECTS credits</b>	5
<b>Teaching method (hours per week)</b>	Lecture (2)
<b>Workload</b>	150 working hours, including 21 hours of class time and 129 hours of independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-603 (or equivalent); Students without sufficient prior mathematical skills are expected to have attended the Math Prep course.
<b>Grading and ECTS credits</b>	The entire grade will be based on the final examination taking place in the exam period after the end of teaching. This will be a written, closed-book exam of 180 minutes.
<b>Goals and contents of the module</b>	The course covers the basic theory of banking and its regulation, with an emphasis on the systemic problems of financial stability. The course will first cover classic theories of banking based on screening, monitoring, risk-sharing, maturity transformation, and liquidity provision. It will then address problems of financial stability with respect to banking as well as to shadow banking and discuss regulation in the context of the current debate about macroprudential regulation and the Basel reform process.
<b>Expected competences acquired after completion of the module</b>	Upon successful completion of the course, students should understand the most important economic functions of banks and the associated potential of banking failures. They will acquire the necessary analytical tools to understand the current regulatory debate about banking reform and should be able to critically assess the merits of different reform proposals.
<b>Further information</b>	There is no textbook for this course, as some of the material is still fairly new and subject to ongoing research. The following book provides a broad overview over modern banking and financial markets and covers many topics of the course in quite accessible form. Greenbaum, Stuart, Anjan Thakor, and Arnout Boot, Contemporary Financial Intermediation, Third Edition, Academic Press 2016. This book is written for a less advanced audience than the Mannheim MSc and therefore does not cover some of its themes in the same depth as our course. Another excellent and very accessible book on a central problem of

<b>Expected number of students in class</b>	banking is Admati, Anat and Martin Hellwig, The Bankers' New Clothes, Princeton University Press 2013.
<b>Contact person</b>	Name: Ernst-Ludwig von Thadden; Phone: (0621) 181-1914; Email: vthadden@uni-mannheim.de; Office: L7, 3-5, Room 319; Office hours: upon appointment.
<b>Module number and title</b>	E5093 Performance and Productivity Evaluation in R and Stata
<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
<b>Responsible teacher of the module</b>	Dr. Dominik Schober
<b>Cycle of offer</b>	Irregular
<b>ECTS credits</b>	9
<b>Teaching method (hours per week)</b>	Lecture (2) + exercise (2)
<b>Workload</b>	270 working hours, including 42 hours of class time and 228 hours of independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-603 (or equivalent)
<b>Grading and ECTS credits</b>	Final exam (90min, 70%), assignments (30%)
<b>Goals and contents of the module</b>	The goal of this course is to learn about the theoretical properties and characteristics of productivity measurement methods and to analyze their strengths and weaknesses. These methods are useful in many fields of applied economic research in all micro-based empirical economics such as industrial, public, environmental economics asf. The course material covers methods relying on assumptions of exogeneity of outputs, such as Data Envelopment Analysis of Stochastic Frontier Analysis. These are widely used in performance measurement of regulated public sectors, where outputs are assumed to be fixed and direct competition is not possible. Examples are water, electricity, gas or public transport sectors. In addition, these methods are frequently applied in companies for performance benchmarking of units.

<b>Expected competences acquired after completion of the module</b>	<p>Complementary to those sectors, there are sectors where investment and capacity choice makes outputs endogenous. A different set of methods is appropriate to study these more dynamic tools. Methods controlling for simultaneity and selection biases will be necessary and studied. Furthermore, allocative effects are central to many economic questions. An additional set of methods studied in this course therefore is devoted to the estimation of price mark-ups. The accompanying exercise is software-based and discusses properties of the above mentioned methods on the basis of detailed data. The course thus provides an introduction to Stata and R in order to analyze basic properties of efficiency and productivity measurement.</p> <p>Students learn the application of new statistical methods and optimization techniques exceeding the knowledge of a Bachelor's econometric and statistical education. In particular they learn the implementation and (optionally) the extension of existing methods. They learn to understand strength and weaknesses of those methods. Application to real-world cases enables students to understand practical implications in business and economic environments. This helps to quantitatively evaluate firm strategies as well as policy options. This includes knowledge in the application of typical statistical software and specific programs. Acquired knowledge can be directly applied as instruments of decision support as well in companies as for policy consulting. Students can therefore directly profit of the course by learning to assess and evaluate societal, scientific and ethical issues. Given the applied nature of the course, the students will contribute by short seminar paper assignments helping them to actively think about actual specifics and the implementation challenges of respective methods. Students apply the English language throughout the course.</p>
<b>Further information</b>	<p>Literature will be given presenting corresponding topics. There will be an empirical seminar on performance and productivity evaluation corresponding to this lecture/exercise in the subsequent spring semester. Students wanting to participate in this seminar are recommended to study the material of this course.</p>
<b>Expected number of students in class</b>	10
<b>Contact person</b>	Name: Dr. Dominik Schober; Email: dominik.schober@zew.de
<b>Module number and title</b>	<a href="#">E5095 Nonparametric Econometrics</a>
<b>Form and usability of the module</b>	Elective course for M.Sc. Economics

<b>Responsible teacher of the module</b>	Prof. Cathrine Aeckerle-Willems
<b>Cycle of offer</b>	Irregular
<b>ECTS credits</b>	5
<b>Teaching method (hours per week)</b>	Lecture (2)
<b>Workload</b>	150 working hours, including 21 hours of class time and 129 hours of independent studies and exam preparation
<b>Course language</b>	English
<b>Prerequisites</b>	E603 (or equivalent)
<b>Grading and ECTS credits</b>	Final exam (90 min)
<b>Goals and contents of the module</b>	<p>This course gives an introduction to nonparametric estimation from a theoretical and applied perspective. Nonparametric methods do not rely on the assumption that models can be described by finite-dimensional parameters. Instead, infinite-dimensional classes of targets under smoothness conditions are considered, e.g. a class of smooth density functions. The discussed methods are suitable in situations in which there is no apriori knowledge of the functional structures of the underlying models. Theoretical foundations will be provided and the techniques will be applied using statistical software. The course covers density estimation and regression problems based on kernel estimators. The theoretical part includes the introduction to concepts that are crucial to investigate the quality of estimation procedures in general. Within this framework, statistical properties of the estimators will be discussed such as consistency, upper bounds for estimation risk, asymptotic normality. We will encounter typical phenomena like the curse of dimensionality, which has attracted a great deal of attention and is a starting point for numerous developments in the analysis of big data.</p>
<b>Expected competences acquired after completion of the module</b>	<p>Upon completing this course, the students will have a working knowledge of classical nonparametric methods for estimation of functions that are statistically relevant. They will understand the theoretical background of these methods and they will be familiar with concepts that allow them to describe and assess the behavior of estimators with regard to the quality of estimation. The students can apply the discussed estimation procedures to data using statistical software. They are aware of the strengths and limitations of the nonparametric techniques introduced in the course.</p>
<b>Further information</b>	-



<b>Expected number of students in class</b>	15
<b>Contact person</b>	Name: Prof. Cathrine Aeckerle-Willems

## Elective Modules: Seminars

<b>Module number and title</b>	<a href="#">E506 Seminar on Human Capital Formation</a>
<b>Form and usability of the module</b>	Elective course for M. Sc. Economics
<b>Responsible teacher of the module</b>	PD Dr. Friedhelm Pfeiffer
<b>Cycle of offer</b>	Each spring semester
<b>ECTS-Credits</b>	5
<b>Teaching method (hours per week)</b>	Block seminar (2)
<b>Workload</b>	150 hours working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-603 (or equivalent).; interest in research on the economics and econometrics of education and human capital formation
<b>Grading and ECTS credits</b>	Seminar paper (50%), presentation (25%), and class room discussion (25%)
<b>Goals and Contents of the module</b>	In the seminar education and human capital formation will be discussed from a theoretical and empirical point of view. We will study initial life conditions, the role of investments by the individual, the family and educational institutions and their expected returns. Especially optimal investments into human capital over the life cycle are examined together with the role of families and educational institutions in financing and producing skills. The intentions, structures and limitations of important empirical studies in the field, like SOEP, PISA or NEPS will be investigated, together with educational policies and reforms.
<b>Expected Competences acquired after completion of the module</b>	Ability to write, present and defend an academic essay.

<b>Further information</b>	The course shall take place on Wednesday, 15:30 – 17:00 in room 310, ZEW Mannheim.
<b>Expected number of students in class</b>	10
<b>Contact person</b>	Name: PD Dr. Friedhelm Pfeiffer; Phone: (0621) 123-150; Email: friedhelm.pfeiffer@zew.de
<b>Module number and title</b>	<b>E530 Topics in Industrial Organization</b>
<b>Form and usability of the module</b>	Elective course for M. Sc. Economics
<b>Responsible teacher of the module</b>	Prof. Ph.D. Nicolas Schutz
<b>Cycle of offer</b>	Each spring semester
<b>ECTS-Credits</b>	5
<b>Teaching method (hours per week)</b>	Block seminar (2)
<b>Workload</b>	150 hours working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-603 (or equivalent).; no prerequisites for MMM students. Not suitable for Business Mathematics students.
<b>Grading and ECTS credits</b>	Seminar paper (70%) and presentation (30%)
<b>Goals and Contents of the module</b>	The seminar covers recent research papers in theoretical industry organization. Potential topics include horizontal merger, oligopolistic behavior, vertical relations, advertising, and consumer search. A reading list will be distributed at a later stage.
<b>Expected Competences acquired after completion of the module</b>	Students will gain knowledge in the modern literature on theoretical industry organization. Through reading recent research article, they will acquire an excellent command of the technical tools used by researchers contributing to this field. Relevant techniques include advanced game-theoretical tools (perfect Bayesian equilibrium and its refinements, repeated games) as well as mathematical tools (multivariate analysis and proof-writing skills). Students taking this course will be able to use this new knowledge as a starting point to start contributing in a research-oriented way to the theoretical

<b>Further information</b>	industrial organization literature. Students will also broaden their presentation and discussion skills.
<b>Expected number of students in class</b>	-
<b>Contact person</b>	Name. Prof. Ph. D. Nicolas Schutz; Phone: (0621) 181-1872 Email: schutz@uni-mannheim.de
<b>Module number and title</b>	<b>E5016 Topics in International Finance</b>
<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
<b>Responsible teacher of the module</b>	Dr. Ronald Beck
<b>Cycle of offer</b>	irregular
<b>ECTS credits</b>	5
<b>Teaching method (hours per week)</b>	Block seminar (2)
<b>Workload</b>	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-603 or equivalent
<b>Grading and ECTS credits</b>	Presentation (40%), term paper (40%), and class room discussion (20%)
<b>Goals and contents of the module</b>	The course reviews selected topics in International Finance with an emphasis on their policy implications. It requires familiarity with basic concepts in international economics and finance, macroeconomics, banking and econometrics. The reading list combines classic academic papers, recent working papers as well as reports by central banks and international organizations. The course is targeted at Master students who are interested in empirical research on international issues or aim at pursuing a career in a large central bank or an international organization (e.g. IMF, BIS, OECD etc.).
<b>Expected competences acquired after</b>	After completing this module, students will be familiar with selected recent empirical research in international finance which has proven to be relevant for central banks, regulators and international

**completion of the module**

organizations. Students will also get exposed to data sources and empirical strategies used by researchers to identify causal effects in international finance. The seminar will also enable participants to provide constructive criticism of the papers discussed and to put them into a broader context. Finally, the seminar will help students to improve their presentation and writing skills and to get ideas for own empirical research in the area of international economics and finance.

**Further information**

1. Financial Development
  - The basic Finance-and-Growth Nexus
  - Non-linearities in the Finance-and-Growth Nexus
  - The “dark side” of Finance
2. Financial Integration
  - Benefits of international financial integration
  - Risk-taking, global diversification and growth
  - Welfare gains from financial integration in a simple neoclassical model
3. Capital Flow Volatility
  - Macroeconomic effects of capital flows
  - Domestic credit growth and international capital flows
  - Boom-and-bust cycles in international capital flows
  - Thresholds in the process of international financial integration
4. Capital Flow Management, Macroprudential Policy and Financial Protectionism
  - Pigouvian taxation of excessive capital flows
  - Economic effects of capital flow management measures
  - The IMF’s New Institutional View
  - Financial de-globalization after the financial crisis
5. Global Liquidity and the Global Financial Cycle
  - Defining and measuring global liquidity
  - Global drivers of international capital flows
  - Global financial cycles and monetary policy autonomy
6. Global Public Investors
  - Central banks and Sovereign Wealth Funds (SWFs) as investors
  - Objectives of public investment strategies
  - Optimal reserve composition in the presence of sudden stops
7. The International Monetary System
  - International currencies and dollar dominance
  - A model of the International Monetary System
  - The transition to a multipolar system
  - Digital currencies as alternatives to the US dollar
8. The Global Financial Safety Net

<b>Expected number of students in class</b>	<ul style="list-style-type: none"> <li>• Reserve adequacy</li> <li>• Currency swap lines</li> <li>• Regional Financial Arrangements</li> </ul>
<b>Contact person</b>	<p>9. Central Banks and Globalization</p> <ul style="list-style-type: none"> <li>• Co-movements of macroeconomic and financial variables</li> <li>• The globalization of inflation</li> <li>• Financial globalization and financial crises</li> <li>• The backlash against open markets</li> </ul> <p>tba</p> <p>Name: Dr. Ronald Beck; Email: rbeck@uni-mannheim.de</p>
<b>Module number and title</b>	<p><a href="#">E5020 Topics in Empirical Microeconomics</a></p>
<b>Form and usability of the module</b>	<p>Elective course for M.Sc. Economics</p>
<b>Responsible teacher of the module</b>	<p>Prof. Michelle Sovinsky, Ph.D.</p>
<b>Cycle of offer</b>	<p>irregular</p>
<b>ECTS credits</b>	<p>5</p>
<b>Teaching method (hours per week)</b>	<p>Block seminar (2)</p>
<b>Workload</b>	<p>150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation</p>
<b>Course language</b>	<p>English</p>
<b>Prerequisites</b>	<p>E601-603 or equivalent</p>
<b>Grading and ECTS credits</b>	<p>Presentation (50%) and paper (50%)</p>
<b>Goals and contents of the module</b>	<p>This course is intended for master's students interested in conducting research in empirical microeconomics. Students will be required to write a paper on a topic in the field and present it during the class.</p>
<b>Expected competences acquired after completion of the module</b>	<p>Students will be familiar with recent research in empirical IO and will be able to provide constructive criticism of work and gain skills in presenting.</p>

<b>Further information</b>	Paper topics will be selected from current publications in empirical microeconomics
<b>Expected number of students in class</b>	15
<b>Contact person</b>	Name: Prof. Michelle Sovinsky, Ph.D.; Email: msovinisky@econ.uni-mannheim.de
<b>Module number and title</b>	<a href="#">E5036 Economics of Arts and Culture</a>
<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
<b>Responsible teacher</b>	Dr. Andrej Svorenčik
<b>Cycle of offer</b>	Once a year
<b>ECTS credits</b>	5
<b>Teaching method (hours per week)</b>	Block seminar (2)
<b>Workload</b>	150 hours working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-E603 (or equivalent); for MMM and Business Mathematics students: good foundations in economic theory
<b>Grading and ECTS credits</b>	Presentation (40%), seminar paper (40%), class room discussion (10%), and preparation (10%),
<b>Goals and contents of the module</b>	Economics of Arts & Culture or cultural economics is the application of economic analysis to the creative and performing arts, the heritage and cultural industries, in both the public and private sectors. It is concerned with the economic organization of the cultural sector and with the behavior of producers, consumers and governments in that sector. Topics from which students can choose their presentation include for instance: economics of art (demand and supply for art, art auctions), economics of luxury goods, economics of the performing arts, economics of cultural heritage, economics of creative industries (music industry, film industry, festivals, museums), economics of broadcasting, book publishing, and cultural policy.
<b>Expected competences acquired after</b>	Students develop skills in analyzing cultural economics issues and understanding their effects on economic agents using models, case studies and empirical methods.

<b>completion of the module</b>	
<b>Further information</b>	<ul style="list-style-type: none"> <li>• Towse, Ruth. 2010. A Textbook of Cultural Economics. Cambridge, UK; New York: Cambridge University Press.</li> <li>• Ginsburgh, Victor A. and Throsby, David (Eds.) 2006 &amp; 2014. Handbook of the Economics of Art and Culture. 2 volumes. Available online through the university library:  <a href="http://www.sciencedirect.com/science/handbooks/15740676/1">http://www.sciencedirect.com/science/handbooks/15740676/1</a>  and <a href="http://www.sciencedirect.com/science/handbooks/1574067">http://www.sciencedirect.com/science/handbooks/1574067</a></li> </ul>
<b>Expected number of students in class</b>	10 students maximum
<b>Contact person</b>	Name: Dr. Andrej Svorenčik; Email: <a href="mailto:svorencik@uni-mannheim.de">svorencik@uni-mannheim.de</a>
<b>Module number and title</b>	<a href="#">E5047 Digital Markets and Platforms</a>
<b>Form and usability of the module</b>	Elective module for M. Sc. in Economics
<b>Responsible teacher of the module</b>	Prof. Achim Wambach, Ph.D. / Dr. Dominik Rehse
<b>Cycle of offer</b>	Once
<b>ECTS credits</b>	5
<b>Teaching method (hours per week)</b>	Block seminar (2)
<b>Workload</b>	150 hours working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-603 (or equivalent)
<b>Grading and ECTS credits</b>	Seminar participants have to write a seminar paper (22,000 characters including spaces), in which they analyse a problem related to digital markets. The paper has to be presented in class (20 minutes presentation + 10 minutes discussion). Seminar presentation (50%) + report (50%)
<b>Goals and content of the module</b>	The seminar covers recent research on the economics of digital markets and platforms, focusing on empirical studies as well as combinations of theoretical and empirical studies with policy relevance. This includes research on how digital platforms change the design of markets and how they use machine learning algorithms for this purpose.

<b>Expected competences acquired after completion of the module</b>	Students have gained a broad understanding on the economics of digital markets and platforms. They are able to apply their expertise and methods to analyze and evaluate issues of digital markets. The students have broadened their analytical abilities as well as their presentation and discussion skills.
<b>Further information</b>	Additional teacher: Dr. Dominik Rehse
<b>Expected number of student in class</b>	10
<b>Contact person</b>	Name: Dr. Dominik Rehse; Email: dominik.rehse@zew.de
<b>Module number and title</b>	<a href="#">E5054 Topics in Environmental and Energy Economics</a>
<b>Form and usability of the module</b>	Elective module for M. Sc. in Economics
<b>Responsible teacher of the module</b>	Harim Kim, Ph.D.
<b>Cycle of offer</b>	Irregular
<b>ECTS credits</b>	5
<b>Teaching method (hours per week)</b>	Block seminar (2)
<b>Workload</b>	150 hours working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-603 or equivalent. Basic knowledge of empirical industrial organization and econometrics are advantageous.
<b>Grading and ECTS credits</b>	Seminar participants will choose a paper from the reading list and present it in the seminar. Also, participants have to write a short seminar paper (max 10 pages) that summarizes and critically evaluates the paper they presented. The seminar paper and the presentation contribute equally to the final grade (presentation 50 %, seminar paper 50%).
<b>Goals and content of the module</b>	The seminar covers recent research in environmental and energy economics. The course gives introduction to empirical studies of important topics in environmental and energy economics. The empirical papers we will study use a wide array of methods and approaches, ranging from theoretical modeling, to quasi-experimental research designs, to structural modelling and estimation. Topics include



<b>Expected competences acquired after completion of the module</b>	emissions reduction policy in the U.S. and EU, electricity market (market power and regulation) and natural resource market etc.  Students have gained a broad understanding on selected recent trends in environmental and energy economics. They are able to apply their expertise and methods to analyze, discuss and evaluate issues of environmental and energy economics. The students have broadened and sharpened their analytical abilities as well as their presentation and discussion skills.
<b>Further information</b>	-
<b>Expected number of student in class</b>	10
<b>Contact person</b>	Name: Harim Kim, Ph.D.; Phone: (0621) 181-1873; Email: harimkim@uni-mannheim.de; Office: L7, 3-5 - 3.09; Office hours: by appointment
<b>Module number and title</b>	<b>E5063 IO and Development</b>
<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
<b>Responsible teacher of the module</b>	Prof. Helena Perrone
<b>Cycle of offer</b>	Each spring semester
<b>ECTS credits</b>	5
<b>Teaching method (hours per week)</b>	Block seminar (2)
<b>Workload</b>	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-603 or equivalent
<b>Grading and ECTS credits</b>	Seminar paper (50 %), presentation (40 %), and classroom discussion (10 %)
<b>Goals and contents of the module</b>	The course aims to cover relevant contributions in the recent but growing area Industrial Organization and Development, including IO of Developing Economies, how to adapt standard Competition Policy and productivity measurement models when markets are incomplete or inexistent, and IO methods applied to Development questions. The focus of the course is on empirical work.

<b>Expected competences acquired after completion of the module</b>	Students will acquire knowledge of the latest papers in the area of IO and Development. They will be able to recognize new possible applications and how previous literature in the area can be extended. By being exposed to the literature and participating in discussions, they will also develop skills that will enable them to approach problems related to IO in developing.
<b>Further information</b>	The reading list will be provided in the first meeting (in February). Presentations will be blocked in 2 days in April.
<b>Expected number of students in class</b>	10
<b>Contact person</b>	Name: Prof. Helena Perrone; Email: <a href="mailto:helena.perrone@upf.edu">helena.perrone@upf.edu</a>
<b>Module number and title</b>	<a href="#">E5083 Current Topics in Social Policy and Labor Economics</a>
<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
<b>Responsible teacher of the module</b>	Ph.D. Han Ye
<b>Cycle of offer</b>	Each spring semester
<b>ECTS-Credits</b>	5
<b>Teaching method (hours per week)</b>	Block seminar (2)
<b>Workload</b>	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-603
<b>Grading and ECTS credits</b>	Presentation and Seminar Paper
<b>Goals and Contents of the module</b>	This seminar covers current research topics in empirical labor and public economics in order to expose students to some of the most recent open questions and tools used to address them in the field. We will study immigration; inequality and intergenerational mobility; how public policy and labor policy affect workers' decision makings; theories of gender discrimination in the labor market and explore the link between family structure; etc. Students will choose a paper from the reading list and present it in the seminar. Moreover, they will write a short seminar paper which summarizes and critically evaluates / presents the chosen paper.

<b>Expected Competences acquired after completion of the module</b>	An important goal of the course is to provide students with the necessary knowledge to understand the most discussed labor topics. Students should have a good understanding of the application of economic theory and empirical methods to issues in current labor policy topics; learn to actively read and critically discuss research papers, and learn the necessary presentation skills to deliver their findings and work.
<b>Further info</b>	-
<b>Expected number of students in class</b>	Max. 15
<b>Contact person</b>	Name: Ph.D. Han Ye; Email: han.ye@uni-mannheim.de; Office: L7, 3-5 Room 2.23
<b>Module number and title</b>	<a href="#">E5094 Empirical Seminar in Performance and Productivity Evaluation</a>
<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
<b>Responsible teacher of the module</b>	Dr. Dominik Schober
<b>Cycle of offer</b>	Once
<b>ECTS-Credits</b>	5
<b>Teaching method (hours per week)</b>	Block seminar (2)
<b>Workload</b>	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-603, it is recommended to attend "E5093 Performance and Productivity Evaluation in R and Stata" simultaneously
<b>Grading and ECTS credits</b>	Seminar paper (80%) and presentation (20%)
<b>Goals and Contents of the module</b>	Students will conduct an own empirical study in order to become familiar with applied research, what includes the ability to interpret empirical results in a meaningful way. Based on the material covered in the basic courses E601-603 and E5093, students will extend their knowledge on models of performance and productivity evaluation, estimation methods and test procedures in order to solve empirical

<b>Expected Competences acquired after completion of the module</b>	<p>problems. The seminar topics will refer to the material covered in E5093. Thereby, students should gain a broad overview on the various model classes through their own and their colleagues' projects. The goal is to learn about the theoretical properties and characteristics of productivity measurement methods and to analyze their strengths and weaknesses. These methods are useful in many fields of applied economic research in all micro-based empirical economics such as industrial, public, environmental economics asf.</p> <p>Students will have acquired advanced expertise in econometrics and empirical research. They are able to understand and use the corresponding literature for their projects. They will have the required competence for empirical data work (data search, preparation and analysis). In particular they learn the implementation and (optionally) the extension of existing methods. They learn to understand strength and weaknesses of those methods. Application to real-world cases will enable students to understand practical implications in business and economic environments. This helps to quantitatively evaluate firm strategies as well as policy options.</p> <p>Students are able to divide a comprehensive empirical research project into appropriate sub-problems to be addressed, to interpret and prepare the obtained empirical results in an adequate way, to present the results in oral and written form as well as to defend them within a discussion with their fellow students and the instructor. Students are able to follow specialist presentations and to critically discuss the content of such presentations.</p>
<b>Further info</b>	-
<b>Expected number of students in class</b>	tba
<b>Contact person</b>	Name: Dr. Dominik Schober; Email: dominik.schober@zew.de
<b>Module number and title</b>	<a href="#">E5096 Economics of Corruption</a>
<b>Form and usability of the module</b>	Elective course for M.Sc. Economics
<b>Responsible teacher of the module</b>	Franziska Heinicke
<b>Cycle of offer</b>	Once
<b>ECTS-Credits</b>	5
<b>Teaching method (hours per week)</b>	Block seminar (2)

<b>Workload</b>	150 working hours for organizational meeting, block seminar, preparation of the seminar paper and presentation
<b>Course language</b>	English
<b>Prerequisites</b>	E601-603 (or equivalent)
<b>Grading and ECTS credits</b>	Term paper (60%) and presentation (40%)
<b>Goals and Contents of the module</b>	Corruption, defined as the abuse of entrusted power, remains a prevalent phenomenon across the world. Since democratic processes and economic interactions rely on well-functioning institutions, the political debate around corruption is focusing on how to fight corruption. In this seminar, we will consider economic literature on corruption in order to better understand the drivers of corruption; the impact corruption has on societies and possible tools to fight corruption. We will consider the relation between corruption and, among others, public institutions, culture, economic growth, foreign aid and education. Further, we will discuss policy interventions to reduce corruption such as information provision and whistleblower programs. The course focuses on empirical literature including studies utilizing cross-country corruption measures as well as experimental studies.
<b>Expected Competences acquired after completion of the module</b>	Corruption, defined as the abuse of entrusted power, remains a prevalent phenomenon across the world. Since democratic processes and economic interactions rely on well-functioning institutions, the political debate around corruption is focusing on how to fight corruption. In this seminar, we will consider economic literature on corruption in order to better understand the drivers of corruption; the impact corruption has on societies and possible tools to fight corruption. We will consider the relation between corruption and, among others, public institutions, culture, economic growth, foreign aid and education. Further, we will discuss policy interventions to reduce corruption such as information provision and whistleblower programs. The course focuses on empirical literature including studies utilizing cross-country corruption measures as well as experimental studies.
<b>Further info</b>	-
<b>Expected number of students in class</b>	10
<b>Contact person</b>	Name: Franziska Heinicke; Email: f.heinicke@uni-mannheim.de; Office: L7, 3-5, Room 4.04; Office hours: by appointment

## Curriculum

The Economics Track			The Competition and Regulation Economics Track			The Economic Research Track		
Introductory Phase	Exam (min)	ECTS credits	Introductory Phase	Exam (min)	ECTS points	Introductory Phase	Exam (min)	ECTS points
Advanced Microeconomics	120	10	Advanced Microeconomics	120	10	Mathematics for Economists	120	6
Advanced Macroeconomics	120	10	Advanced Macroeconomics	120	10	Advanced Microeconomics	120	8
Advanced Econometrics	120	10	Advanced Econometrics	120	10	Advanced Macroeconomics	120	8
						Advanced Econometrics	120	8
<b>Specialization Phase</b>			<b>Specialization Phase: <i>Compulsory Modules</i></b>			<b>Specialization Phase : <i>Compulsory Modules</i></b>		
Specialized master courses including 2-4 seminars		60-66	Industrial Organization - Markets and Strategies		14	Advanced Microeconomics II	120	5
			Empirical Industrial Organization		7	Advanced Microeconomics III	120	5
			Competition Law		5	Advanced Macroeconomics II	120	5
			Interdisciplinary Competition and Regulation Seminar		5	Advanced Macroeconomics III	120	5
						Advanced Econometrics II	120	5
						Advanced Econometrics III	120	5
			<b>Specialization Phase : <i>Elective Modules</i></b>			<b>Specialization Phase: <i>Elective Modules</i></b>		
			Specialized courses including 1-3 seminars		29 - 35	Specialized PhD courses and 1-2 seminars		40-46
						<b>Specialization Phase: <i>Research Seminars</i></b>		
						CDSE seminar in the 3rd and 4th semester		0
			Faculty seminar		0			
<b>Research Phase</b>			<b>Research Phase</b>			<b>Research Phase</b>		
Master's thesis (4 months), possibly including a thesis colloquium		30	Master's thesis (4 months), possibly including a thesis colloquium		30	Research thesis (11 weeks)		20
<b>Total</b>		<b>120-126</b>	<b>Total</b>		<b>120-126</b>	<b>Total</b>		<b>120-126</b>