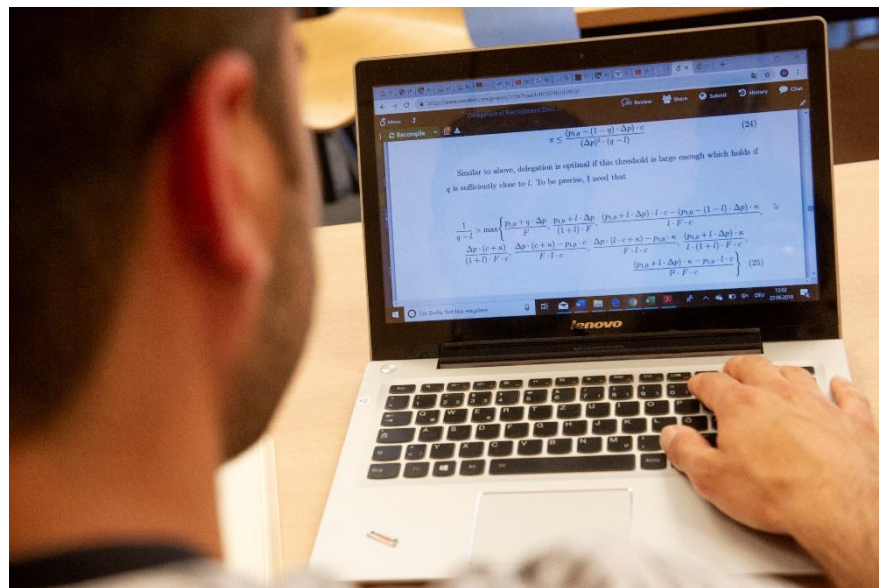


University of Bonn  
Faculty of Law and Economics  
Department of Economics

# Course Catalogue

Master of Science  
Economics



Summer Semester 2021

## Contents

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1	Master of Science in Economics .....	3
1.1	Aims of the Program .....	3
1.2	Structure of the Program and Workload .....	3
1.3	Course Plan .....	4
2	Course Advice .....	5
2.1	Course Offer .....	5
2.2	Examination Registration .....	5
2.3	E-Learning and eCampus .....	5
2.4	Advisors .....	6
3	Impressum .....	6
4	Course Catalogue .....	7

# 1 Master of Science in Economics

## 1.1 Aims of the Program

The program “Master of Science in Economics” at the University of Bonn is comprehensive research-oriented program offered in English. The four semester program provides students with the skills needed to succeed in an increasingly international job market and prepares them for challenging jobs in the public sector (ministries, central banks) and the private sector (banks, consulting firms, large industrial companies) as well as for jobs at universities, research institutions and international institutions. The Master program covers all areas of economics and provides advanced mathematical, statistical, and econometric knowledge. The program familiarizes graduate students with the methodological framework of current research and complex economic models and enables them to discuss the relevancy and limits of economic theories. Students graduating from the M. Sc. program in Economics will be qualified for a professional career as well as for a Ph.D. program.

## 1.2 Structure of the Program and Workload

The Master of Science in Economics is a two-year program consisting of basic modules, advanced modules, a research module and the Master thesis. During their first semester, students choose four out of five basic modules, thus earning 30 credit points. The basic modules provide them with an in-depth understanding of the field’s foundations and prepare them for the advanced modules. The following basic modules are offered: Mathematics for Economists (mandatory), Microeconomics, Macroeconomics, Finance, and Econometrics. In the second and third semester, students determine their individual study profile by selecting advanced module covering a minimum of two and a maximum of four areas of Economics. These advanced modules focus on current topics in economic research and provide students with a profound understanding of the conceptual and methodological assumptions of a variety of approaches. In the third semester, students also take a research module, which is taught as a seminar and helps them to further improve their academic and analytical skills while addressing recent topics of the respective study field. They learn to define research topics, to formulate specific research questions and to develop a research approach to investigate the project’s topic. Advanced modules and the research module are offered in the following fields: Microeconomic Theory, Macroeconomics and Public Economics, Management and Applied Microeconomics, Financial Economics, Econometrics and Statistics, and Economic Research. Students need to acquire a total of 90 credit points from basic and advanced modules (including the research module). They complete their Master degree by writing their Master thesis in the fourth semester, thus earning the remaining 30 credit points.

## 1.3 Course Plan

Master of Science (M.Sc.)

# Economics

Examination Regulations from 27 September 2017  
Valid from Winter Semester 2017/18

Study Course Economics				
Optional German Class / Orientation Session				
1st Sem Winter	Basic Module Mathematics	Basic Module (Study Field 1)	Basic Module (Study Field 2)	Basic Module (Study Field 3)
30 CP	7,5 CP	7,5 CP	7,5 CP	7,5 CP
2nd Sem Summer	Advanced Module (Study Field optional)	Advanced Module (Study Field 1)	Advanced Module (Study Field 2)	Advanced Module (Study Field optional)
30 CP	7,5 CP	7,5 CP	7,5 CP	7,5 CP
3rd Sem Winter	Research Module (Study Field 1)		Advanced Module (Study Field optional)	Advanced Module (Study Field optional) or Basic Module
30 CP	15 CP		7,5 CP	7,5 CP
4th Sem Summer	Master Thesis			
30 CP	30 CP			
M.Sc. Economics 120 CP				
Legend:				
Basic Modules		Advanced Modules	Research Module	

October 2017



## 2 Course Advice

### 2.1 Course Offer

Students acquire 7.5 ECTS for all modules except for the research module and the Master thesis, which are weighted 15 ECTS and 30 ECTS respectively. All basic modules and the research module are offered in winter semesters only, all advanced modules in a yearly cycle. Information on the content of all modules offered in the Master program is available on the pages of the Department of Economics through the module descriptions which also indicate the semester in which a course is offered and the type of exam for each module. Information on the courses offered in any given semester is available on the online platform BASIS (accessible via <https://basis.uni-bonn.de/>) which also allows students to register for courses and exams. Generally, no course registration is required for basic and advanced modules, the only exception is the research module as it is taught as a seminar with a limited number of participants.

### 2.2 Examination Registration

At the end of every semester, students have to take written or oral examinations to complete their courses. Examinations can be taken during two examination periods; the first usually begins shortly after the end of the lecture period, the second usually takes place during the last two weeks of the semester. Students can decide in which examination period they want to write their exams, the exam registration takes place via BASIS.

### 2.3 E-Learning and eCampus

E-Campus is the online platform of the University of Bonn. It acts as an online interface between lecturers and students. This is where the lecturers upload any necessary course material like lecture slides, problem sets and mock exams.

## 2.4 Advisors

### **Master Coordinator and International Coordinator**

Sabine Hübner-Monien, Ph.D.

E-Mail: [master.econ@uni-bonn.de](mailto:master.econ@uni-bonn.de)

Tel.: 0228/73-94 50

Office Hours: <https://www.econ.uni-bonn.de/de/studium/service/ansprechpartner>

### **Bachelor Coordinator, Study Advice, Studying with Handicap, Course Management, Quality Management, Equal Opportunities and Treatment**

Dipl. Verw. Wiss. Vera Häckel

Email: [studienmanagement.wiwi@uni-bonn.de](mailto:studienmanagement.wiwi@uni-bonn.de)

Tel.: 0228 / 73-94 51

Office Hours: <https://www.econ.uni-bonn.de/de/studium/service/ansprechpartner>

### **Examination Office of the Department of Economics**

Email: [vwlp@uni-bonn.de](mailto:vwlp@uni-bonn.de)

Tel.: 0228/73-91 88

Office Hours: <https://www.vwlpamt.uni-bonn.de/pruefungsamt>

## 3 Impressum


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E-Mail: [studienmanagement.wiwi@uni-bonn.de](mailto:studienmanagement.wiwi@uni-bonn.de)  
Date: 20.04.2021

## 4 Course Catalogue


M.Sc. Economics (Course Catalogue)	Study Field	Cycle	Form/h per week	Semester	120 CP
<b>Basic Modules (4 out of 5)</b>					<b>30 CP</b>
Econometrics		Winter	L/4	1. Sem.	7,5 CP
Finance		Winter	L/4	1. Sem.	7,5 CP
Macroeconomics		Winter	L/4	1. Sem.	7,5 CP
Mathematics for Economists (Compulsory)		Winter	L+E/4+2	1. Sem.	7,5 CP
Microeconomics		Winter	L/4	1. Sem.	7,5 CP
<b>Advanced Modules (6)</b>					<b>45 CP</b>
Applied Microeconomics	MAM, ER	Summer	L/4	2. Sem	7,5 CP
Asset Pricing	FE	Winter	L/4	3. Sem	7,5 CP
Banking and Securitization	FE, ER	Summer	L/4	2. Sem	7,5 CP
Behavioral Economics	MAM	Summer	L/4	2. Sem	7,5 CP
Computational Statistics	ES	Summer	L/4	2. Sem	7,5 CP
Household Finance	FE	Summer	L/4	2. Sem	7,5 CP
Corporate Finance	FE	Winter	L/4	3. Sem	7,5 CP
Dynamic Macroeconomics	MPE, ER	Summer	L/4	2. Sem	7,5 CP
Dynamic Methods and Applications	MT, MAM, MPE, ES, ER	Summer	L/4	2. Sem	7,5 CP
Econometric Theory	ES, ER	Winter	L/4	3. Sem	7,5 CP
Econometrics II	ES, ER	Summer	L/4	2. Sem	7,5 CP
Economics and Psychology	MAM, ER	Winter	L/4	3. Sem	7,5 CP
Economics of Contracts and Information	MT	Summer	L/4	2. Sem	7,5 CP
Effective Programming Practices	MAM, ER	Winter	L/4	3. Sem	7,5 CP
Empirical Banking and Finance	FE	Summer	L/4	2. Sem	7,5 CP
Game Theory	MT	Summer	L/4	2. Sem	7,5 CP
Growth and Development Economics	MPE	Summer	L/4	2. Sem	7,5 CP
Industrial Organization	MAM	Winter	L/4	3. Sem	7,5 CP
Information and Dynamic Incentives	MT	Winter	L/4	3. Sem	7,5 CP
Institutional Economics	MAM	Summer	L/4	2. Sem	7,5 CP
International Economics and Finance	MPE	Summer	L/4	2. Sem	7,5 CP
Labor Economics	MAM, MPE	Summer	L/4	2. Sem	7,5 CP
Labor Market Policy and Institutions	MAM, ES	Winter	L/4	3. Sem	7,5 CP
Macroeconomics II	MPE, ER	Summer	L/4	2. Sem	7,5 CP
Managerial Accounting	MAM	Summer	L/4	2. Sem	7,5 CP
Mechanism Design and Social Choice	MT	Winter	L/4	3. Sem	7,5 CP
Microeconometrics	ES	Summer	L/4	2. Sem	7,5 CP
Microeconomics II	MT, ER	Summer	L/4	2. Sem	7,5 CP
Monetary Economics	FE, MPE	Winter	L/4	3. Sem	7,5 CP
Option Pricing	FE	Summer	L/4	2. Sem	7,5 CP
OSE - Scientific Computing for Economists	MAM, ER	Winter	L/4	3. Sem	7,5 CP
Personnel Economics	MAM	Winter	L/4	3. Sem	7,5 CP
Probability Theory	ES	Summer	L/4	2. Sem	7,5 CP
Public Economics	MPE	Summer	L/4	2. Sem	7,5 CP
Stochastic Processes	ES	Winter	L/4	3. Sem	7,5 CP
Time Series Econometrics	ES, ER	Summer	L/4	2. Sem	7,5 CP
Topics in Applied Microeconomics	ER	Summer	L/4	2./3. Sem	7,5 CP
Topics in Econometrics and Statistics	ER	Summer	L/4	2./3. Sem	7,5 CP
Topics in Financial Economics	ER	Summer	L/4	2./3. Sem	7,5 CP
Topics in Macroeconomics and Public Economics	ER	Summer	L/4	2./3. Sem	7,5 CP
Topics in Microeconomic Theory	ER	Summer	L/4	2./3. Sem	7,5 CP
<b>Research Module (1 Module)</b>					<b>15 CP</b>
Research Module in Microeconomic Theory	MT	Winter	S/4	3. Sem	15 CP
Research Module in Macroeconomics and Public Economics	MPE	Winter	S/4	3. Sem	15 CP
Research Module in Applied Microeconomics	MAM	Winter	S/4	3. Sem	15 CP
Research Module in Econometrics and Statistics	ES	Winter	S/4	3. Sem	15 CP
Research Module in Finance	FE	Winter	S/4	3. Sem	15 CP
<b>Final Module</b>					<b>30 CP</b>
Master Thesis		Summer		4. Sem	30 CP

**Abbreviations:**


Winter = Winter Semester; Summer = Summer Semester, Form = Kind of Lecture, L = Lecture E = Exercise S = Seminar, hpw = Hours per Week, Sem. = Semester, CP = Creditpoints, Study Fields: MT = Microeconomic Theory, FE = Financial Economics, MAM = Management and Applied Microeconomics, MPE = Macroeconomics & Public Economics, ES = Econometrics & Statistic, ER = Economic Research

Econometrics MA ECON BM ECONOM			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	This course is to provide a thorough introduction to classic econometric methods including linear and nonlinear regression, (generalized) method of moments, or maximum likelihood in a cross-section and/or time series context. Theoretical analysis as well as practical implementation of these methods is part of this course as well.				
Learning outcome	This course is primarily conceived to acquire a firm understanding of why certain econometric methods work and provide possible remedies for departures from the standard modeling assumptions. An important goal is to show the benefits of combining economic theory, statistical methods to analyze empirical problems in economics.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Econometrics or Econometrics (Ph.D.)	English	120	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended	none				
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics M.Sc./ Basic Module /Econometrics: 332110005/332010005 Econometrics (Ph.D.) 332111005/332011005			elective	1 <sup>st</sup> /3 <sup>rd</sup>	
Export*/332191005/332010005					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	None			7,5 CP	
Types of Assessment Examination language	Written exam (graded, 100%) English				
Course Cycle		Workload	Duration		
Winter term <input checked="" type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Alois Kneip				
Institute/Department	Department of Economics				
Further Information					
Basic Modules	You must choose four out of five basic modules (Mathematics for Economists, Finance, Microeconomics, Macroeconomics, Econometrics). Mathematics for Economists is obligatory. The fifth basic module can be elected in the 3 <sup>rd</sup> semester instead of an advanced module.				

\* export into other study programs is only possible if contract between faculties exists

Finance MA ECON BM FINANCE			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	The course provides a rigorous introduction into the theory of finance and its implications for corporate financial management. It covers the main areas of modern finance, including the theory of investments under certainty and uncertainty, the pricing of assets and derivatives, and an introduction into corporate financial policy.				
Learning outcome	The aim of this course is to provide students with an understanding of the most important theories in financial economics. It enables students to read and understand original research literature, to take a stand on current issues in finance, and it lays the foundation for specialized courses in finance.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Finance	English	120	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended					
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Basic Module/332110004/332010004			elective	1 <sup>st</sup> /3 <sup>rd</sup>	
Export*/332191004/332010004					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	None				7,5 CP
Types of Assessment	Written exam (graded, 100%)				
Examination language	English				
Course Cycle		Workload	Duration		
Winter term <input checked="" type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Hendrik Hakenes				
Institute/Department	Department of Economics				
Further Information					
Basic Modules	You must choose four out of five basic modules (Mathematics for Economists, Finance, Microeconomics, Macroeconomics, Econometrics). Mathematics for Economists is obligatory. The fifth basic module can be elected in the 3 <sup>rd</sup> semester instead of an advanced module.				

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Macroeconomics MA ECON BM MACRO			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	This course provides an introduction into the current state of macroeconomic theory for graduate students. It is divided in three parts: growth theory, real business cycle theory, and financial macroeconomics. The first part deals with the question what makes economies grow in the long run, while in the last two parts dynamic stochastic equilibrium models are developed and solved.				
Learning outcome	The main goal of this course is to acquaint students with the methodological framework underlying current research and academic debates in dynamic macroeconomics. This will provide them with the background required to understand current research literature and a rigorous foundation for the discussion of macroeconomic policies.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Macroeconomics or Macroeconomics (Ph.D.)	English	120	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended					
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Basic Module/Macroeconomics: 332110003/332010003/Macroeconomics (Ph.D.): 332111003/332022018			elective	1 <sup>st</sup> /3 <sup>rd</sup>	
Export*/332191003/332010003					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	None			7,5 CP	
Types of Assessment	Written exam (graded, 100%)				
Examination language	English				
Course Cycle		Workload	Duration		
Winter term <input checked="" type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Christian Bayer				
Institute/Department	Department of Economics				
Further Information					
Basic Modules	You must choose four out of five basic modules (Mathematics for Economists, Finance, Microeconomics, Macroeconomics, Econometrics). Mathematics for Economists is obligatory. The fifth basic module can be elected in the 3 <sup>rd</sup> semester instead of an advanced module.				

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# Mathematics for Economists

MA ECON BM MATH



## Content and learning outcome

<b>Content</b>	<p>The course covers optimization methods as they are used in economic research. Both static and dynamic methods are treated. Existence and comparative statics properties of solutions are covered.</p> <p>Difference and differential equations are discussed, as mastering these techniques is essential for macroeconomic applications in particular but not exclusively.</p> <p>Basic concepts in linear algebra are discussed with a view to their applications in other basic and advanced modules.</p>
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<b>Learning outcome</b>	<p>Students become familiar with the use of mathematics to study economic problems. The course aims to equip students with the necessary technical toolkit to read economic research independently.</p>
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## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Mathematics for Economists or Mathematics for Economists (Ph.D.)	English	120	4 hours	60
Self-study					165

## Prerequisites

<b>obligatory</b>	none
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<b>recommended</b>	
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## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/Basic Module/Mathematics for Economists: 332110001/332010001/Mathematics for Economists (Ph.D.): 332111001/332011001	obligatory	1 <sup>st</sup>

## Requirements for the awarding of credit points (ECTS)

Requirements for the awarding of credit points (ECTS)		Credits
<b>Prerequisites for participation</b>	None	7,5 CP
<b>Types of Assessment</b> <b>Examination language</b>	Written exam (graded, 100%) English	

Course Cycle	Workload	Duration
Winter term <input checked="" type="checkbox"/> Winter and Summer term <input type="checkbox"/> Summer term <input type="checkbox"/>	225 h	1 Term

## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
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<b>Module coordinator</b>	Prof. Dr. Dezső Szalay
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<b>Institute/Department</b>	Department of Economics
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## Further Information

<b>Basic Modules</b>	<p>You must choose four out of five basic modules (Mathematics for Economists, Finance, Microeconomics, Macroeconomics, Econometrics). Mathematics for Economists is obligatory. The fifth basic module can be elected in the 3<sup>rd</sup> semester instead of an advanced module.</p>
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Microeconomics MA ECON BM MICRO			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content		The course covers the core topics in microeconomic theory. It includes the fundamentals of individual decision making, game theory, and general equilibrium theory. The lecture provides a rigorous foundation for common modelling techniques and solutions concepts, and gives an introduction to their application in fields like information economics.			
Learning outcome		The course aims to expose the students to the basic paradigms of modern microeconomics, on an advanced formal level. Another important goal is the exposure to a variety of modelling techniques that will be often used in subsequent courses.			
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Microeconomics or Microeconomics (Ph.D.)	English	120	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended					
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Basic Module/Microeconomics: 332110002/332010002/Microeconomics (Ph.D.): 332111002/332011002			elective	1 <sup>st</sup> /3 <sup>rd</sup>	
Export*/332191002/332010002					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites For participation		None		7,5 CP	
Types of Assessment Examination language		Written exam (graded, 100%) English			
Course Cycle		Workload	Duration		
Winter term <input checked="" type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person		See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>			
Module coordinator		Prof. Dr. Dezső Szalay			
Institute/Department		Department of Economics			
Further Information					
Basic Modules		You must choose four out of five basic modules (Mathematics for Economists, Finance, Microeconomics, Macroeconomics, Econometrics). Mathematics for Economists is obligatory. The fifth basic module can be elected in the 3 <sup>rd</sup> semester instead of an advanced module.			

\* export into other study programs is only possible if contract between faculties exists

# Applied Microeconomics

MA ECON AM MAM ER APPMICRO



## Content and learning outcome

<b>Content</b>	The course covers the basics of modern applied microeconomic research. Based on recent literature, we will go through the main approaches for advancing our knowledge of individuals' economic behavior based on empirical data. This includes conducting laboratory, survey and field experiments, exploiting quasi-random variation of policy reforms and similar changes, and estimating the parameters of fully specified economic models. We highlight the opportunities, challenges, and pitfalls of all approaches.
<b>Learning outcome</b>	Students judge the pros and cons of different ways to answer research questions by means of applied microeconomic methods. They understand the basic differences between design-based and model-based approaches to answering causal questions, the revealed preference paradigm, the role of presenting stylised facts as a research contribution as well as stylised facts as a motivation for a deeper research question and the state of the art econometric tools for causal identification. Students can apply different means of explaining stylised facts and the methodology of conducting experiments (lab, survey, field). They can identify situations where it is fruitful to estimate an explicit economic model and they can analyse papers with respect to the assumptions they make with respect to the revealed preferences paradigm and respect to the approaches to causality they employ.

## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Applied Microeconomics	English	30	4 hours	60
Self-study					165

## Prerequisites

<b>obligatory</b>	none
<b>recommended</b>	Econometrics, Microeconomics

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/Applied Microeconomics, Economic Research/332123030/332023030	elective	2 <sup>nd</sup>
Export*/332192330/332023030		

## Requirements for the awarding of credit points (ECTS)

		Credits
<b>Prerequisites for participation</b>	None	7,5 CP
<b>Types of Assessment</b>	Written or oral exam or term paper (graded, 100%)	
<b>Examination language</b>	English	

Course Cycle	Workload	Duration
Winter term <input type="checkbox"/> Summer term <input checked="" type="checkbox"/>	225 h	1 Semester


## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Matthias Kräkel
<b>Institute/Department</b>	Department of Economics

## Further Information

<b>Literature</b>	Papers and additional materials will be distributed each week.
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\* export into other study programs is only possible if contract between faculties exists

Asset Pricing MA AM ASSPRIC			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	This course introduces students to modern asset pricing, portfolio theory, and derivatives pricing in static and continuous-time dynamic models. The main covered topics include (i) no-arbitrage theory and equivalent martingale measures; applications to (ii) interest rate and fixed income securities; (iii) derivatives (forward, futures, options, swaps and, - time permitting - CDS); (iv) dynamic mean-variance analysis and ICAPM (also time permitting).				
Learning outcome	Students acquire a solid theoretical understanding of the no-arbitrage theory and of its application for pricing and evaluating the risk of basic and derivative financial products. This content of this course enables them to critical approach more advanced models and to decompose complex instruments into their primitive components.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Asset Pricing	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended					
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Finance/332124031/332024031			elective	3 <sup>rd</sup>	
Export*/332192431/332024031					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	None			7,5 CP	
Types of Assessment Examination language	Written or oral exam or term paper (graded, 100%) English				
Course Cycle		Workload	Duration		
Winter term <input checked="" type="checkbox"/>	Winter and	225 h	1 Semester		
Summer term <input type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Hendrik Hakenes				
Institute/Department	Department of Economics				
Further Information					
Literature	Björk, T. (2009) <i>Arbitrage theory in continuous time</i> . Oxford University press Hull, J. (2009) <i>Options, futures and other derivatives</i> “ Prentice Hall Back, K. (2010) <i>Asset Pricing and Portfolio Choice Theory</i> , Oxford University Press				

\* export into other study programs is only possible if contract between faculties exists

# Banking and Securitization

MA ECON AM FIE BANKSEC



## Content and learning outcome

<b>Content</b>	This course provides an overview of current topics in banking and securitization. It is an applied course that builds on the basic knowledge in financial economics. The course is organized around methodologies frequently employed in this literature, and will be enriched by frequent references to applications. The focus is on topical research related to the financial crises of 2008. In particular, papers analyzing the incentives problems related to the securitization process are discussed.
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<b>Learning outcome</b>	This course builds on the current literature on banking and securitization with a focus on the financial crisis of the year 2008. The students will be required to thoroughly read the research papers discussed in class. Further, students are required to present an unpublished research paper and write a referee report on this paper.
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## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Banking and Securitization	English	30	4 hours	60
Self-study					165

## Prerequisites

<b>obligatory</b>	none
<b>recommended</b>	

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/Financial Economics, Economic Research/ 332124029/332024029	elective	2 <sup>nd</sup>
Export*/332192429/332024029		

## Requirements for the awarding of credit points (ECTS)

Prerequisites for participation	Types of Assessment Examination language	Credits
none	Written or oral exam or term paper (graded, 100%) English	7,5 CP

## Course Cycle

Workload	Duration
Winter term <input type="checkbox"/> Winter and Summer term <input checked="" type="checkbox"/> Summer term <input type="checkbox"/>	225 h 1 Term


## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Hendrik Hakenes
<b>Institute/Department</b>	Department of Economics


## Further Information

<b>Literature</b>	The recommended literature will be announced at the beginning of the course.
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\* export into other study programs is only possible if contract between faculties exists

Behavioral Economics MA ECON AM MAM BEHECON			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	This course presents psychological and experimental evidence of departures from perfect rationality, self interest, and other assumptions of more traditional economic studies. The course then explores different ways of how departures from standard as- sumptions can be captured by formal models. It also discusses the implications of these findings for positive and normative predictions in various institutional settings.				
Learning outcome	The course has three aims: (i) making students familiar with the lively debate in exper- imental and behavioral economics; (ii) providing them with basic formal models of de- cision making that account for psychological determinants of individual behaviour, (iii) enabling them to apply those models to applied economic questions.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Behavioral Economics	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended	Basic Module <i>Microeconomics</i>				
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Management and Applied Microeconomics / 332123019/332023019			elective	2 <sup>nd</sup>	
Export*/332192319/332023019					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	none			7,5 CP	
Types of Assessment Examination language	Written or oral exam or term paper (graded, 100%) English				
Course Cycle		Workload	Duration		
Winter term <input type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input checked="" type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Matthias Kräkel				
Institute/Department	Department of Economics				
Further Information					
Literature	The recommended literature will be announced at the beginning of the course.				

\* export into other study programs is only possible if contract between faculties exists

Computational Statistics MA ECON AM ECS COMPSTAT			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	The course explains ideas and methodological issues of computationally intensive statistical methods. There will be a special emphasis on algorithmic and numerical aspects of practical implementation.				
Learning outcome	Successful students are able to solve methodological, numerical and algorithmic problems encountered in empirical work.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Computational Statistics	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended	Basic Module <i>Econometrics</i>				
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Econometrics & Statistics/332125033/332025033			elective	2 <sup>nd</sup>	
Export*/332025033/3320205033					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	none				7,5 CP
Types of Assessment Examination language	Written or oral exam or term paper (graded, 100%) English				
Course Cycle		Workload	Duration		
Winter term <input type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input checked="" type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Alois Kneip				
Institute/Department	Department of Economics				
Further Information					
Literature	Literature will be announced in class.				

\* export into other study programs is only possible if contract between faculties exists

# Corporate Finance

MA ECON AM FIE CORPPFIN



## Content and learning outcome

<b>Content</b>	During the course, we will do three things: go through some parts of the Tirole book on the theory of corporate finance, then (as an exercise) build own variations of the discussed models. Finally, see how the basic theory is applied in current financial theory. That way, the course gives an overview over corporate finance theory, but also increases the students' skills to write up own ideas. This will be helpful for the master thesis later on.
<b>Learning outcome</b>	Students know about the theory of corporate finance (first 11 chapters of the Jean Tirole book); they have an advanced knowledge about the financial structure of firms, liquidity structure, corporate governance, mergers and acquisitions; they can construct own theory models; they can read and assess current theoretical articles in corporate finance.

## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Corporate Finance	English	30	4 hours	60
Self-study					165

## Prerequisites

<b>obligatory</b>	none
<b>recommended</b>	Basic Module <i>Finance</i>

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/ Financial Economics, Economic Research/332124027/332024027	elective	3 <sup>rd</sup>

## Requirements for the awarding of credit points (ECTS)

Requirements for the awarding of credit points (ECTS)		Credits
<b>Prerequisites for participation</b>	none	7,5 CP
<b>Types of Assessment</b>	Written or oral exam or term paper (graded, 100%)	
<b>Examination language</b>	English	

## Course Cycle

Course Cycle	Workload	Duration
Winter term <input checked="" type="checkbox"/> Summer term <input type="checkbox"/>	225 h	1 Term

## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Hendrik Hakenes
<b>Institute/Department</b>	Department of Economics

## Further Information

<b>Literature</b>	<ul style="list-style-type: none"> <li>Jean Tirole, <i>Theory of Corporate Finance</i> (2006)</li> <li>plus a number of current research papers</li> </ul>
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# Dynamic Macroeconomics

MA ECON AM MPE DYNMAC



## Content and learning outcome

<b>Content</b>	The course studies first revisits basic algorithms to solve single agent dynamic programming problems, then discusses possibilities to improve on these algorithms, such as perturbation and projection methods. These techniques are applied to study the business cycle characteristics of model economies. Then algorithms are studied to solve recursive general equilibrium models with heterogeneous agents, such as Aiyagari's (1994) or Krusell and Smith's (1998) model.
<b>Learning outcome</b>	The course has two aims: First and foremost, it aims at acquainting students with the numerical techniques needed to understand modern macroeconomic analysis involving the solution of dynamic programming problems. Second, it repeats in an applied manner concepts and results studied theoretically in the macroeconomics basic course: e.g. business cycle theory, savings decisions, general equilibrium with imperfect capital markets, heterogeneous agent economies.

## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Dynamic Macroeconomics	English	30	4 hours	60
Self-study					165

## Prerequisites

<b>obligatory</b>	none
<b>recommended</b>	A basic understanding of numerical programming and MATLAB as programming language is helpful but not required.

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/ Macroeconomics and Public Economics, Economic Research/332122007/332022007	elective	2 <sup>nd</sup>

## Requirements for the awarding of credit points (ECTS)

		Credits
<b>Prerequisites for Participation</b>	None	7,5 CP
<b>Types of Assessment</b>	Written or oral exam or term paper (graded, 100%)	
<b>Examination language</b>	English	

## Course Cycle

Course Cycle	Workload	Duration
Winter term <input type="checkbox"/> Summer term <input checked="" type="checkbox"/>	225 h	1 Term


## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Christian Bayer
<b>Institute/Department</b>	Department of Economics


## Further Information

<b>Literature</b>	<p>Students having already passed exams in "Macroeconomics II: Dynamic Macroeconomics" cannot take exams in this module.</p> <p>Primary readings are:</p> <ul style="list-style-type: none"> <li><b>Burkhard und Alfred Maußner</b>, Dynamic General Equilibrium Modelling, Computational Methods and Applications, 2. Edition, Springer: Berlin 2008</li> <li><b>Jerome Adda and Russell W. Cooper</b>, Dynamic Economics: Quantitative Methods and Applications, MIT Press, Cambridge MA, 2003.</li> </ul>
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Dynamic Methods and Applications MA ECON AM FIE DYNAMAPP			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content		The course introduces the dynamic programming approach in discrete time, covering its mathematical underpinnings as well as applications to problems in microeconomics, macroeconomics and finance.			
Learning outcome		Students get acquainted with one of the most important techniques for forward-looking decision making, the method of dynamic programming, and with its manifold applications in economics.			
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Dynamic Methods and Applications	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended	Knowledge of the contents of the module “Mathematics for Economists”				
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/ Financial Economics, Macroeconomics and Public Economics, Management and Applied Microeconomics, Microeconomic Theory, Economic Research /332121011/332021011			elective	2 <sup>nd</sup>	
Export */tba/332021011					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation		none		7,5 CP	
Types of Assessment Examination language		Written or oral exam or term paper (graded, 100%) English			
Course Cycle		Workload	Duration		
Winter term <input type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input checked="" type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person		See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>			
Module coordinator		Prof. Dr. Hendrik Hakenes			
Institute/Department		Department of Economics			
Further Information					
Literature		The recommended literature will be announced at the beginning of the course.			

\* export into other study programs is only possible if contract between faculties exists

Econometric Theory MA ECON AM ECS ECONTHEO			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	The course deals with theoretical analysis of classical parametric estimators such as least squares, maximum likelihood or GMM estimators. Derivation of results for estimation and inference theory including consistency and asymptotic normality results.				
Learning outcome	Students acquire a firm understanding of the fundamental concepts of econometric theory. They should be able to understand and apply standard proof techniques.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Econometric Theory	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended	Basic Module <i>Econometrics</i>				
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Econometrics and Statistics, Economic Research/332125028/332025028			elective	3 <sup>rd</sup>	
Export*/332192528/332025028					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	none			7,5 CP	
Types of Assessment Examination language	Written or oral exam or term paper (graded, 100%) English				
Course Cycle		Workload	Duration		
Winter term <input checked="" type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Alois Kneip				
Institute/Department	Department of Economics				
Further Information					

\* export into other study programs is only possible if contract between faculties exists

Econometrics II MA ECON AM ECS ECONOMII			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	The course introduces students to advanced econometric methods, e.g. non- or semi-parametric regression, bootstrap techniques, computationally intensive methods in a cross-section and/or time series context.				
Learning outcome	Students acquire an expert understanding of advanced econometric procedures and of underlying theoretical reasoning. Using the advanced methods learned they should be able to solve methodological problems encountered in empirical work.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Econometrics II	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	Basic Module <i>Econometrics</i>				
recommended					
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Econometrics and Statistics, Economic Research/332125036/332025036			elective	2 <sup>nd</sup>	
Export*/332192536/332025036					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	none			7,5 CP	
Types of Assessment Examination language	Written or oral exam or term paper (graded, 100%) English				
Course Cycle		Workload	Duration		
Winter term <input type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input checked="" type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Alois Kneip				
Institute/Department	Department of Economics				
Further Information					

\* export into other study programs is only possible if contract between faculties exists

# Economics and Psychology

MA ECON AM MAM ECOPSY



UNIVERSITÄT BONN

## Content and learning outcome

<b>Content</b>	In this course, we discuss psychological foundations of economic behavior and their implications. Providing the economic model with a more realistic foundation is important not only from a general research perspective, but also for improved predictions and policy recommendations. We will discuss empirical regularities from experiments and field studies that violate the predictions of the standard model, review models that integrate the underlying intuitions into a formal economic model and assess the predictions of this new model. The course has a heavy emphasis on testing the predictions of the model in the field and to assess the quantitative importance of the behavioural features.
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<b>Learning outcome</b>	Students will learn how to test key implications of the standard model of economics in a variety of settings (intertemporal choice, choice under uncertainty, strategic situations). They will learn how to interpret deviations from the predictions of the standard economic model and how these can be integrated into theory. They will learn how to test these predictions in a variety of settings.
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## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Economics and Psychology	English	30	4 hours	60
Self-study					165

## Prerequisites

<b>obligatory</b>	none
<b>recommended</b>	Basic Module <i>Microeconomics</i>

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics /(M.Sc.)/ Management and Applied Microeconomics, Economic Research/332123022/332023022	elective	3 <sup>rd</sup>
Export*(332192322/332023022)		

## Requirements for the awarding of credit points (ECTS)

Requirements for the awarding of credit points (ECTS)		Credits
<b>Prerequisites for participation</b>	none	7,5 CP
<b>Types of Assessment</b>	Written or oral exam or term paper (graded, 100%)	
<b>Examination language</b>	English	

Course Cycle	Workload	Duration
Winter term <input checked="" type="checkbox"/> Summer term <input type="checkbox"/>	225 h	1 Term


## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Matthias Kräkel
<b>Institute/Department</b>	Department of Economics

## Further Information

<b>Literature</b>	There is no textbook for this course. Reading will be based exclusively on research papers.
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\* export into other study programs is only possible if contract between faculties exists

Economics of Contracts and Information			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	Markets with asymmetric information, Signalling, Screening, Contracting under moral hazard and asymmetric information, Non-linear pricing, auctions.				
Learning outcome	Students study the impact of asymmetric information on market outcomes. They learn to apply game theoretic tools to understand contracts and institutions as optimal outcomes under asymmetric information.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Economics of Contract and Information	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended	Basic Module <i>Microeconomics</i>				
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics M.Sc./ Microeconomic Theory/332121008/332021008			elective	2 <sup>nd</sup>	
Export*/332192108/332021008					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	none			7,5 CP	
Types of Assessment Examination language	Written or oral exam or term paper (graded, 100%) English				
Course Cycle		Workload	Duration		
Winter term <input type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input checked="" type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Dezső Szalay				
Institute/Department	Department of Economics				
Further Information					
Literature	The recommended literature will be announced at the beginning of the course.				

\* export into other study programs is only possible if contract between faculties exists

# Effective Programming Practices for Economists

MA ECON AM ECS EFFPROPE



## Content and learning outcome

<b>Content</b>	This course introduces students to software development methods that will substantially reduce their time spent programming while at the same time making their programs more dependable and their results reproducible without extra effort. The course draws extensively on some simple techniques that are the backbone of modern software development, which most economists are simply not aware of. It shows the usefulness of these techniques for a wide variety of economic and econometric applications by means of hands on examples.
<b>Learning outcome</b>	Students acquire the programming and software development skills required to manage complex research projects and to make the results reproducible.

## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Effective Programming Practices for Economists	English	30	4 hours	60
Self-study					165

## Prerequisites

<b>obligatory</b>	none
<b>recommended</b>	Basic Module <i>Econometrics</i>

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/Econometrics and Statistics, Management and Applied Microeconomics, Economic Research/32123026/332023026	elective	2 <sup>nd</sup>
Export*/332192326/332023026		

## Requirements for the awarding of credit points (ECTS)

Requirements for the awarding of credit points (ECTS)		Credits
<b>Prerequisites for participation</b>	none	7,5 CP
<b>Types of Assessment Examination language</b>	Written or oral exam or term paper (graded, 100%) - English	

Course Cycle	Workload	Duration
Winter term <input checked="" type="checkbox"/> Winter and Summer term <input type="checkbox"/> Summer term <input type="checkbox"/>	225 h	1 Term

## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Alois Kneip
<b>Institute/Department</b>	Department of Economics

## Further Information

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\* export into other study programs is only possible if contract between faculties exists

# Empirical Banking and Finance

MA ECON AM FIE EMPBF



## Content and learning outcome

<b>Content</b>	<p>The course consists of lectures, tutorials, and student presentations. During the lectures, students are introduced to commonly used (micro-) econometric methods: finance and growth in the cross-section, panel methods/ fixed effects, differences-in-differences estimation, instrumental variables estimation, the method by Rajan and Zingales (1998). The goal is to get an intuitive grasp of these methods and to understand how they help to identify causal effects.</p> <p>During the tutorials, students learn how to implement the methods using the software Stata. Student presentations are integrated into the lectures. Each student (or team of 2-3 students) receives an empirical journal article, which is to be presented and discussed in class (research question, identification strategy, interpretation of empirical results, critical assessment of the paper, etc.).</p>
<b>Learning outcome</b>	<p>Students will learn the econometric methods used in the area of banking and finance and how to critically assess empirical research articles. The course's main focus is on the research question whether bank activities and financial development, such as the size of the banking market, matter for the real economy.</p>

## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Empirical Banking and Finance	English	30	4 hours	60
Self-study					165

## Prerequisites

<b>obligatory</b>	none
<b>recommended</b>	Knowledge of the contents of the module "Mathematics for Economists"

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/Financial Economics, Economic Research/332124030/332024030	elective	2 <sup>nd</sup>

## Requirements for the awarding of credit points (ECTS)

Requirements for the awarding of credit points (ECTS)		Credits
<b>Prerequisites for participation</b>	none	7,5 CP
<b>Types of Assessment</b>	Written or oral exam or term paper (graded, 100%)	
<b>Examination language</b>	English	

## Course Cycle


Course Cycle	Workload	Duration
Winter term <input type="checkbox"/> Winter and Summer term <input checked="" type="checkbox"/>	225 h	1 Term

## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Hendrik Hakenes
<b>Institute/Department</b>	Department of Economics

## Further Information

<b>Literature</b>	<p>Main textbook: "Introductory Econometrics – A Modern Approach" by <b>Jeffrey M. Wooldridge</b>. Further, the course is based on several journal articles in the area of banking and finance which will be provided in due course.</p>
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Game Theory MA ECON AM MIT GAMETHEO			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content		The course will cover recent topics and advances in game theory. It will focus on a topical theme in game theory and will cover recent development in this field. The course will emphasize the relevance to economic problems and the methods and techniques used in the current literature.			
Learning outcome		The successful student will learn to read advanced text, understand and critically question the modelling used in recent game theoretic papers, and will be able to follow and apply the techniques and the methods used in these papers.			
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Game Theory	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended	Basic Module <i>Microeconomics</i>				
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/ Microeconomic Theory/332121003/332021003			elective	2 <sup>nd</sup>	
Export*/332192103/332021003					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation		none		7,5 CP	
Types of Assessment Examination language		Written or oral exam or term paper (graded, 100%) English			
Course Cycle		Workload	Duration		
Winter term <input type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input checked="" type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person		See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>			
Module coordinator		Prof. Dr. Dezső Szalay			
Institute/Department		Department of Economics			
Further Information					
Literature		The recommended literature will be announced at the beginning of the course.			

\* export into other study programs is only possible if contract between faculties exists



# Growth and Development Economics

MA ECON AM MPE GRODEC



## Content and learning outcome

<b>Content</b>	This module starts with a broad overview about Economic Growth by documenting the staggering differences between (and within) countries and covering some of the theories that have been proposed to explain them. Further on the module focusses on smaller (but equally important) questions about nutrition, health, education and population. Methods used in modern empirical research will be explained. Lastly, some of the recent advances in the novel field of historical development will be presented.
<b>Learning outcome</b>	This course serves as an advanced introduction to the fields of economic growth, development economics and economic history. The idea is that students learn about the fundamental paradigms and schools of thought of economics development and that they are able to think critically and proactively about issues of economic growth and development.

## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Growth and Development Economics	English	30	4 hours	60
Self-study					165

## Prerequisites

<b>obligatory</b>	none
<b>recommended</b>	A good working knowledge of calculus, statistics and econometrics is recommended.

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/Macroeconomics and Public Economics/332122020/332022020	elective	2 <sup>nd</sup>

## Requirements for the awarding of credit points (ECTS)

		Credits
<b>Prerequisites for participation</b>	none	7,5 CP
<b>Types of Assessment</b>	Written or oral exam or term paper (graded, 100%)	
<b>Examination language</b>	English	

## Course Cycle


Course Cycle	Workload	Duration
Winter term <input type="checkbox"/> Winter and Summer term <input checked="" type="checkbox"/> Summer term <input type="checkbox"/>	225 h	1 Term

## Module coordination


<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Christian Bayer
<b>Institute/Department</b>	Department of Economics


## Further Information

<b>Literature</b>	<ul style="list-style-type: none"> <li>• <b>Ray, Debraj.</b> Development Economics. Princeton University Press, 1998. (DE)</li> <li>• <b>Banerjee, Abhijit and Esther Duflo.</b> Poor Economics: A radical rethinking of the way to fight global poverty. Public Affairs, 2011. (PE)</li> <li>• <b>More</b> advanced and specific articles that serve as complementary reading will be posted as we go along.</li> </ul>
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Industrial Organization MA ECON AM MAM INDORG			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	The first part of the course presents models in industrial organization (IO) that aim at explaining firm behaviour in different strategic environments. Within the context of static and dynamic oligopoly models, standard tools of theoretical IO are taught and some key theoretical results are confronted with empirical evidence. The second part of the course will focus on selected topics such as mergers, collusion or predatory behaviour.				
Learning outcome	Students become acquainted with basic tools and selected topics in modern industrial organization. In particular, they learn how to (i) apply key theoretical ideas and important formal techniques to selected questions, (ii) link theory to empirical work, and (iii) relate theoretical results to policy issues.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Industrial Organization	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended	Basic Module <i>Microeconomics</i>				
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Management and Applied Microeconomics/ 332123016/33202301			elective	2 <sup>nd</sup>	
Export* (332192316/332023016)					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	none			7,5 CP	
Types of Assessment Examination language	Written or oral exam or term paper (graded, 100%) English				
Course Cycle		Workload	Duration		
Winter term <input checked="" type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Matthias Kräkel				
Institute/Department	Department of Economics				
Further Information					
Literature	The recommended literature will be announced at the beginning of the course.				

\* export into other study programs is only possible if contract between faculties exists

Information and Dynamic Incentives MA ECON AM MIT INFODIN			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	Dynamic models of signaling and communication; models of repeated contracting under moral hazard and adverse selection with and without commitment.				
Learning outcome	Students study the impact of asymmetric information on market and contracting outcomes in dynamic environments. They learn to apply game theoretic tools to understand contracts and institutions as optimal outcomes under asymmetric information.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Information and Dynamic Incentives	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended	Basic Module <i>Microeconomics</i>				
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Microeconomic Theory/332121012/33202101			elective	3 <sup>rd</sup>	
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	none			7,5 CP	
Types of Assessment Examination language	Written or oral exam or term paper (graded, 100%) - English				
Course Cycle		Workload	Duration		
Winter term <input checked="" type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Dezső Szalay				
Institute/Department	Department of Economics				
Further Information					
Literature	The recommended literature will be announced at the beginning of the course				

Institutional Economics MA ECON AM MAM INSTECON			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	In this course, the methods of contract theory are applied to the economic analysis of institutions. In this context, the course covers the analysis of moral hazard and adverse selection models as well as hold-up problems and the optimal allocation of property rights.				
Learning outcome	The students learn to analyze formal institutions from an economic point of view, taking the prevailing information structures into account. In particular, they investigate strategic interaction and they compare incentive structures arising from different institutions.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Institutional Economics	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended	The basic module <i>Microeconomics</i> is strongly recommended.				
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Management and Applied Microeconomics / 332123018/332023018			elective	2 <sup>nd</sup>	
Export*/332192318/332023018					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	none			7,5 CP	
Types of Assessment Examination language	Written or oral exam or term paper (graded, 100%) English				
Course Cycle		Workload	Duration		
Winter term <input type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input checked="" type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Matthias Kräkel				
Institute/Department	Department of Economics				
Further Information					
Literature	The recommended literature will be announced at the beginning of the course.				

\* export into other study programs is only possible if contract between faculties exists

# International Economics and Finance

MA ECON AM MPE INTECON



## Content and learning outcome

<b>Content</b>	International macroeconomics and finance is concerned with international linkages through trade in goods/services and through financial markets. This course aims at providing the basis for understanding the role of shocks and frictions in shaping fluctuations in the open economy. And to understand policy options. Towards this end, the course discusses stylized facts of fluctuations in open economies. It, then, introduces the workhorse models and how different shocks and frictions may shape the business cycle in the open economy. With nominal rigidities, there will be a role to the monetary policy regime and the nominal exchange rate. This allows discussing the effect of the monetary and fiscal policy mix for fluctuations.
<b>Learning outcome</b>	Students acquire skills for solving dynamic optimization problems as they frequently arise in international economics and finance. In addition, applications to topical issues in international economics and finance are discussed. Students also learn to solve numerical and/or empirical exercises using standard software packages.

## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	International Economics and Finance	English	30	4 hours	60
Self-study					165

## Prerequisites

<b>obligatory</b>	none
<b>recommended</b>	Basic Module Macroeconomics

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/ Macroeconomics and Public Economics/332122010/ 332022010	elective	2 <sup>nd</sup>
Export*/332192210/332022010		

## Requirements for the awarding of credit points (ECTS)

		Credits
<b>Prerequisites for participation</b>	none	7,5 CP
<b>Types of Assessment</b>	Written or oral exam or term paper (graded, 100%)	
<b>Examination language</b>	English	

## Course Cycle

Course Cycle	Workload	Duration
Winter term <input type="checkbox"/> Summer term <input checked="" type="checkbox"/>	225 h	1 Term

## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Christian Bayer
<b>Institute/Department</b>	Department of Economics

## Further Information

<b>Literature</b>	The lecture draws on material covered in <b>M. Obstfeld and K. Rogoff (1996)</b> : Foundations of International Macroeconomics and in <b>Schmitt-Grohé and Uribe (2017)</b> : open economy macroeconomics; or comparable sources.
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\* export into other study programs is only possible if contract between faculties exists

# Labor Economics

MA ECON AM MAM LABECON



## Content and learning outcome

<b>Content</b>	The course sheds light on the employment decisions from the perspective of the firm and the worker. Examples of topics include neoclassical model of labor supply model, labor demand, wages and employment determination with reference to labor market institutions (e.g. minimum wages, unemployment insurance, employment protection), search and matching theory, human capital theory, and the design of incentive schemes. There will be an emphasis on the interaction between theoretical and empirical modeling. Insights from state-of-the art empirical work will be discussed alongside theory.
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<b>Learning outcome</b>	Students will gain a solid knowledge of labor economics and acquire an up-to-date understanding of the functioning of labor markets. Students will become competent to critically evaluate economic theory in light of empirical evidence.
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## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Labor Economics	English	30	4 hours	60
Self-study					165

## Prerequisites

<b>obligatory</b>	none
<b>recommended</b>	Basic Module <i>Microeconomics</i>

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/Management and Applied Microeconomics, Macroeconomics and Public Economics/332123027/332023027	elective	2 <sup>nd</sup>

## Requirements for the awarding of credit points (ECTS)

Prerequisites for participation	Types of Assessment	Examination language	Credits
none	Written or oral exam or term paper (graded, 100%) - English		7,5 CP

Course Cycle	Workload	Duration
Winter term <input type="checkbox"/> Summer term <input checked="" type="checkbox"/>	225 h	1 Term

## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Matthias Kräkel
<b>Institute/Department</b>	Department of Economics

## Further Information

<b>Literature</b>	The recommended literature will be announced at the beginning of the course.
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# Labor Market Policy and Institutions

MA ECON AM MAM ES LMPI



## Content and learning outcome

<b>Content</b>	This will be an applied course on the microeconomic analysis labor market institutions and policy. It will acquaint students with the empirical methods and tools to analyze the functioning of labor markets. Aside from factual knowledge and economic models, it provides hands-on experience of analyzing observational data and communicating the results in an effective way to audiences in academia, business, and policy. A core theme of the course will be how to combine institutional knowledge, economic models, and real-world data to gain sound insight into important policy questions.
<b>Learning outcome</b>	The general goal of the course is to provide skills in (i) the economic modeling of labor market policy and institutions; (ii) the application of microeconomic methods for policy evaluation; (iii) hands-on data analysis and communication of empirical results. A more specific goal is to inform students' understanding of labor market institutions and public policies, such as taxes and income support programs, minimum wages, immigration policies, training programs, active labor market policies, anti-discrimination policies, etc.

## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Labor Market Policy and Institutions	English	30	4 hours	60
Self-study					165

## Prerequisites

<b>obligatory</b>	none
<b>recommended</b>	Students who have already attended the "Labor Economics" module receive an additional empirical perspective on labor market policy issues in this course.

## Degree program allocation

Study Program (Module No/Lecture No)	obligatory/ elective	Semester
Economics (M.Sc.)/ Management & Applied Microeconomics, Econometrics & Statistics /332123028/332023028	elective	3 <sup>rd</sup>
Export*/332129328/332023028		

## Requirements for the awarding of credit points (ECTS)

		Credits
<b>Prerequisites for participation</b>	None	7,5 CP
<b>Types of Assessment</b> <b>Examination language</b>	Written or oral exam or term paper (graded, 100%) English	

Course Cycle	Workload	Duration
Winter term <input checked="" type="checkbox"/> Summer term <input type="checkbox"/>	225 h	1 Semester

## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Matthias Kräkel
<b>Institute/Department</b>	Department of Economics

## Further Information

<b>Background reading on empirical methods</b>	<p>The course will be based on high-impact and recent research papers in the field.</p> <ul style="list-style-type: none"> <li>• <b>Angrist, Joshua D., and Jörn-Steffen Pischke.</b> Mostly harmless econometrics: An empiricist's companion. Princeton university press, 2008.</li> <li>• <b>Cameron, A. Colin, and Pravin K. Trivedi.</b> Microeconometrics: methods and applications. Cambridge university press, 2005.</li> </ul>
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\* export into other study programs is only possible if contract between faculties exists

# Macroeconomics II

MA ECON AM MPE MACROII



## Content and learning outcome

<b>Content</b>	The plan is to cover consumption-saving theory in standard incomplete markets models and in models with endogenously incomplete markets. The course will cover both infinite horizon and overlapping generation models. In addition, the course covers investment decisions of firms and topics on labor markets and income dynamics.
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<b>Learning outcome</b>	The course aims at providing students with the state-of-the-art methods to answer questions from different fields in macroeconomics. The course will introduce several widely used modelling frameworks and introduces students to the analysis of these frameworks. The goal is that students at the end of the course can perform independent analysis of macroeconomic questions using the theoretical frameworks and methods from the course.
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## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Macroeconomics II	English	30	4 hours	60
Self-study					165

## Prerequisites

<b>obligatory</b>	Basic Module <i>Macroeconomics</i>
<b>recommended</b>	

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/Macroeconomics and Public Economics, Economic Research/332122018/332022018	elective	2 <sup>nd</sup>

## Requirements for the awarding of credit points (ECTS)

Requirements for the awarding of credit points (ECTS)		Credits
<b>Prerequisites for participation</b>	none	7,5 CP
<b>Types of Assessment</b>	Written or oral exam or term paper (graded, 100%)	
<b>Examination language</b>	English	

## Course Cycle

Course Cycle	Workload	Duration
Winter term <input type="checkbox"/> Winter and Summer term <input checked="" type="checkbox"/> Summer term <input type="checkbox"/>	225 h	1 Term


## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Christian Bayer
<b>Institute/Department</b>	Department of Economics

## Further Information

<b>Literature</b>	The recommended literature will be announced at the beginning of the course.
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Managerial Accounting MA ECON AM MAM MANACC			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	This course analyzes the use of information in firms. Special emphasis is placed on the coordination of decisions in decentralized organizations. The course covers information systems as well as instruments of coordination. Theoretical concepts are derived and then used to evaluate the potential of management control systems.				
Learning outcome	The students learn the economic effects arising from the use of information systems in firms. It enables them to assess information sources and arrangements with respect to their opportunities and drawbacks under different operational and organizational structures.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Managerial Accounting	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended	Basic Module <i>Microeconomics</i>				
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Management and Applied Microeconomics/ 332123015/332023015			elective	3 <sup>rd</sup>	
Export*/332192315/332023015					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	none			7,5 CP	
Types of Assessment Examination language	Written or oral exam or term paper (graded, 100%) English				
Course Cycle		Workload	Duration		
Winter term <input checked="" type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Matthias Kräkel				
Institute/Department	Department of Economics				
Further Information					
Course Cycle	The course was cancelled in the winter semester 2020/21 and is exceptionally offered during the summersemester 2021.				
Literature	The recommended literature will be announced at the beginning of the course.				

\* export into other study programs is only possible if contract between faculties exists

# Mechanism Design and Social Choice

MA ECON AM MIT MEDSOCC



## Content and learning outcome

<b>Content</b>	This course presents a thorough treatment of mechanism design and contract theory by highlighting the common themes and methodologies that unite the field. The main topics covered are hidden information models, hidden action models and incomplete contracts.
<b>Learning outcome</b>	The course aims at providing its participants with the methodological competence to understand and critically evaluate current research in mechanism design and contract theory. It thus complements other courses which cover similar ground from a more applied perspective.

## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Mechanism Design and Social Choice	English	30	4 hours	60
Self-study					165

## Prerequisites

<b>obligatory</b>	none
<b>recommended</b>	Basic Module <i>Microeconomics</i>

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc./Microeconomic Theory/332121007/332021007	elective	3 <sup>rd</sup>
Export*/332192107/332021007		

## Requirements for the awarding of credit points (ECTS)

		Credits
<b>Prerequisites for participation</b>	none	7,5 CP
<b>Types of Assessment</b>	Written or oral exam or term paper (graded, 100%)	
<b>Examination language</b>	English	

Course Cycle	Workload	Duration
Winter term <input checked="" type="checkbox"/> Winter and Summer term <input type="checkbox"/> Summer term <input type="checkbox"/>	225 h	1 Term


## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Dezső Szalay
<b>Institute/Department</b>	Department of Economics


## Further Information

<b>Literature</b>	The recommended literature will be announced at the beginning of the course.
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\* export into other study programs is only possible if contract between faculties exists

Microeconometrics MA ECON AM ECS MICROEC			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content		The course deals with methods that are commonly used in the analysis of microeconomic datasets, including methods to deal with discrete and limited-dependent variables, discrete choice models, censored regression, models for self-selection, models for duration data and panel data. The emphasis is on the specification, estimation, interpretation, and testing of microeconomic models rather than a rigorous treatment of the asymptotic properties of estimators.			
Learning outcome		Students are provided with a broad encyclopaedic knowledge of methods for the analysis of microeconomic data and to let him/her obtain an active command of the mathematical and computational aspects of the various methods.			
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Microeconometrics	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	Basic Module <i>Econometrics</i>				
recommended					
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/ Econometrics and Statistics/332125027/332025027			elective	2 <sup>nd</sup>	
Export*/332192527/332025027					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	none			7,5 CP	
Types of Assessment Examination language	Written or oral exam or term paper (graded, 100%) English				
Course Cycle		Workload	Duration		
Winter term <input type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input checked="" type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Alois Kneip				
Institute/Department	Department of Economics				
Further Information					

\* export into other study programs is only possible if contract between faculties exists

Microeconomics II MA ECON AM MIT MICROII			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content		The course covers the core topics in microeconomic theory. It includes the fundamentals of information in economics, social choice and mechanism design. The lecture provides a rigorous foundation for common modeling techniques and solutions concepts, and gives an introduction to their applications.			
Learning outcome		The course aims to expose the students to the basic paradigms of modern microeconomics, on an advanced formal level. Another important goal is the exposure to a variety of modeling techniques that will be often used in subsequent courses.			
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Microeconomics II	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	Basic Module <i>Microeconomics</i>				
recommended					
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Microeconomic Theory, Economic Research/332121010/332021010			elective	2 <sup>nd</sup>	
Export*/332192110/332021010					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation		none			7,5 CP
Types of Assessment Examination language		Written or oral exam or term paper (graded, 100%) - English			
Course Cycle		Workload	Duration		
Winter term <input type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input checked="" type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person		See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>			
Module coordinator		Prof. Dr. Dezső Szalay			
Institute/Department		Department of Economics			
Further Information					
Literature		The recommended literature will be announced at the beginning of the course.			

\* export into other study programs is only possible if contract between faculties exists

Monetary Economics MA ECON AM MPE MONEC			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content		The course will analyze monetary economics within the class of dynamic general equilibrium models. First, conditions under which money has real effects are identified. Second, optimal policy is discussed. Further topics cover the interaction of monetary and fiscal policy, empirical findings, and the influence of the financial sector.			
Learning outcome		Students will be familiar with the methods and concepts necessary to understand monetary economics and policy. Analyzing monetary policy quantitatively using value function iteration, Ramsey optimal policy, linearization techniques of DSGE models			
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Monetary Economics	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended	Basic Module <i>Macroeconomics</i>				
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective		Semester
Economics (M.Sc.)/Macroeconomics and Public Economics, Financial Economics/332122011/332022011			elective		2 <sup>nd</sup>
Export*/332192211/332022011					
Requirements for the awarding of credit points (ECTS)					Credits
Prerequisites for participation		none			7,5 CP
Types of Assessment Examination language		Written or oral exam or term paper (graded, 100%) English			
Course Cycle		Workload		Duration	
Winter term <input checked="" type="checkbox"/>	Winter and	225 h		1 Term	
Summer term <input type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person		See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>			
Module coordinator		Prof. Dr. Christian Bayer			
Institute/Department		Department of Economics			
Further Information					
Literature		The recommended literature will be announced at the beginning of the course.			

\* export into other study programs is only possible if contract between faculties exists

# Option Pricing

MA ECON AM FIE OPTPR



## Content and learning outcome

<b>Content</b>	The course presents the pricing and hedging of options in the continuous time model by Black and Scholes. The model dependency of the perfect duplication strategy and its applications to risk management will be discussed. This includes a discussion of the differences between dynamic hedging strategies and static or robust hedging. Beside standard options the pricing of more complex financial contracts will be analysed. Numerical approximations like the Monte Carlo method will be applied to these contracts.
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<b>Learning outcome</b>	The course aims to provide students with an understanding of the Black and Scholes option pricing model. It enables them to recognize the significant role of risk neutral pricing as the basis of modern option pricing theory. Students learn to apply the technique including numerical methods of risk neutral pricing to nonstandard financial products and to review the hedging strategies with respect to the risk management of options.
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## Teaching and learning methods

Type of course/learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Option Pricing	English	30	4 hours	60
Self-study					165

## Prerequisites

<b>obligatory</b>	none
<b>recommended</b>	Basic Module <i>Finance</i>

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/Financial Economics/332124023/332024023	elective	2 <sup>nd</sup>
Export*(332192423/332024023)		

## Requirements for the awarding of credit points (ECTS)

		Credits
<b>Prerequisites for participation</b>	none	7,5 CP
<b>Types of Assessment</b>	Written or oral exam or term paper (graded, 100%)	
<b>Examination language</b>	English	

## Course Cycle


Course Cycle	Workload	Duration
Winter term <input type="checkbox"/> Summer term <input checked="" type="checkbox"/>	225 h	1 Term

## Module coordination


<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Hendrik Hakenes
<b>Institute/Department</b>	Department of Economics

## Further Information

<b>Literature</b>	The recommended literature will be announced at the beginning of the course.
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OSE Scientific Computing for Economists			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	The sound analysis of computational economic models requires expertise in economics, statistics, numerical methods, and software engineering. The module provides first an overview of basic numerical methods for optimization, numerical integration, approximation methods, and uncertainty quantification. Then deepens the understanding of each of these topics in the context of a dynamic model of human capital accumulation using <a href="#">respy</a> . Finally concludes by showcasing basic software engineering practices such as the design of a collaborative and reproducible development workflow, automated testing, and high-performance computing.				
Learning outcome	Students learn how to use <a href="#">Python</a> for advanced scientific computing. They acquire a toolkit of numerical methods frequently needed for the analysis of computational economic models, obtain an overview of basic software engineering tools such as <a href="#">GitHub</a> and <a href="#">pytest</a> , and are exposed to high-performance computing using <a href="#">multiprocessing</a> and <a href="#">mpi4py</a> .				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	OSE Scientific Computing for Economists	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended					
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Management & Applied Microeconomics, Econometrics & Statistics/332123029/332023029			elective	3 <sup>rd</sup>	
Export*/332129329/332023029					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	None			7,5 CP	
Types of Assessment Examination language	Written or oral exam or term paper (graded, 100%) English				
Course Cycle		Workload	Duration		
Winter term <input checked="" type="checkbox"/>	Winter and	225 h	1 Semester		
Summer term <input type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Matthias Kräkel				
Institute/Department	Department of Economics				
Further Information					
Literature	<ul style="list-style-type: none"><li>• <b>Ken Judd</b>. Numerical methods in economics. MIT University Press, Cambridge, MA, 2013.</li><li>• <b>Hans Petter Langtangen</b>. A primer on scientific programming with Python. Springer, Heidelberg, Germany, 2016.</li></ul>				


\* export into other study programs is only possible if contract between faculties exists

Personnel Economics MA ECON AM MAM PERSECON			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	From the view of personnel economics, efficiency of the firm can be enhanced by providing appropriate incentives, by matching employees to positions they fit and by investments in human capital. This course deals with advanced wage theories and it addresses employees' motivation. In addition, it covers career theoretical aspects pertinent to the allocation of employees within the firm.				
Learning outcome	The Students obtain an understanding of (1) how employees react to an employer's personnel politics and (2) how an employer should choose his personnel politics in order to generate efficient incentives and an efficient internal allocation of employees. Students also learn to analyze and critically discuss empirical findings of both field and experimental studies.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Personnel Economics	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended	Basic Module <i>Microeconomics</i>				
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Management and Applied Microeconomics / 332123014/332023014)			elective	3 <sup>rd</sup>	
Export (332192314/332023014)					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	none				7,5 CP
Types of Assessment	Written or oral exam or term paper (graded, 100%)				
Examination language	English				
Course Cycle		Workload	Duration		
Winter term <input checked="" type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Matthias Kräkel				
Institute/Department	Department of Economics				
Further Information					
Literature	The recommended literature will be announced at the beginning of the course.				

\* export into other study programs is only possible if contract between faculties exists



Probability Theory MA ECON AM ECS PROBTHEO			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	The course introduces to the mathematical theory of probability such as integration, probability measures, random variables, expectations, concepts of convergence and limit theorems.				
Learning outcome	Students get acquainted with modern concepts and tools of probability. They obtain a rigorous basis for understanding and applying current research in statistics and probability theory.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Probability Theory	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended	Basic Module <i>Econometrics</i>				
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/ Econometrics and Statistics/332125032/332025032			elective	2 <sup>nd</sup>	
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	none			7,5 CP	
Types of Assessment Examination language	Written or oral exam or term paper (graded, 100%) English				
Course Cycle		Workload	Duration		
Winter term <input type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input checked="" type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Alois Kneip				
Institute/Department	Department of Economics				
Further Information					

Public Economics MA ECON AM MPE PUBECON			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	This course offers a modern analysis of the economics of the public sector. Topics include the theory and practice of taxation, government debt and sovereign default as well as issues in social security and health economics.				
Learning outcome	The students acquire solid knowledge of the quantitative methods and models for the analysis of public policies. They become familiar with the current state of research and learn the tools and techniques necessary for conducting their own research in this area.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Public Economics	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	none				
recommended	A solid background in macroeconomics is recommended.				
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Macroeconomics and Public Economics/ 332122019/332022019			elective	2 <sup>nd</sup>	
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	none			7,5 CP	
Types of Assessment Examination language	Written or oral exam or term paper (graded, 100%) English				
Course Cycle		Workload	Duration		
Winter term	<input type="checkbox"/> Winter and	225 h	1 Term		
Summer term	<input checked="" type="checkbox"/> Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Christian Bayer				
Institute/Department	Department of Economics				
Further Information					
Literature	The recommended literature will be announced at the beginning of the course				

# Stochastic Processes

MA ECON AM ECS STOPROC



## Content and learning outcome

<b>Content</b>	The course provides thorough treatment of structural and asymptotic properties, theory and application of stochastic processes.
<b>Learning outcome</b>	Students understand concepts of stochastic processes and achieve technical competence for understanding current research and developing stochastic models.

## Teaching and learning methods

Type of course/learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Stochastic Processes	English	30	4 hours	60
Self-study					165

## Prerequisites

<b>obligatory</b>	none
<b>recommended</b>	Basic Module <i>Econometrics</i>

## Degree program allocation

Study Program (Module No/Lecture No)	obligatory/ elective	Semester
Economics (M.Sc.)/Econometrics and Statistics, Economic Research/ 332125029/332025029	elective	3 <sup>rd</sup>

## Requirements for the awarding of credit points (ECTS)

Requirements for the awarding of credit points (ECTS)	Credits
<b>Prerequisites for participation</b>	7,5 CP
<b>Types of Assessment</b>	
<b>Examination language</b>	Written or oral exam or term paper (graded, 100%) English

## Course Cycle


Course Cycle	Workload	Duration
Winter term <input checked="" type="checkbox"/> Summer term <input type="checkbox"/>	225 h	1 Term

## Module coordination


<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Alois Kneip
<b>Institute/Department</b>	Department of Economics

## Further Information

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Time Series Econometrics MA ECON AM ECS TIMESEC			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content	The course shows time series methods used in economic and financial applications such as ARIMA, unit root processes, cointegration or vector autoregression.				
Learning outcome	Students should be able to understand and use tools for the analysis of uni- and multivariate time series.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Lecture	Time Series Econometrics	English	30	4 hours	60
Self-study					165
Prerequisites					
obligatory	Basic Module <i>Econometrics</i>				
recommended					
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Econometrics and Statistics, Economic Research/332125031/332025031			elective	3 <sup>rd</sup>	
Export*/332192531/332025031					
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	none				7,5 CP
Types of Assessment	Written or oral exam or term paper (graded, 100%)				
Examination language	English				
Course Cycle		Workload	Duration		
Winter term <input checked="" type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input type="checkbox"/>	Summer term <input type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Alois Kneip				
Institute/Department	Department of Economics				
Further Information					

\* export into other study programs is only possible if contract between faculties exists

Research Module in Econometrics and Statistics				 UNIVERSITÄT <b>BONN</b>	
Content and learning outcome					
Content		The course provides students with a variety of new methods for analyzing large and complex sets of economic data. Practical implementation to read data problems is part of the course as well. Students will become familiar with basics of scientific methods in the field, with literature search, with reading and documenting scientific articles in Econometrics and Statistics as well as defining research topics and formulating specific research questions.			
Learning outcome		Students are acquainted with quantitative research methods. They are able to document, present and defend the results of their research.			
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Seminar	Research Module in Econometrics and Statistics	English	15	4 hours	60
Self-study					390
Prerequisites					
obligatory	Any two advanced modules (except Topics)				
recommended					
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Econometrics and Statistics/332125050/332025050			elective	3 <sup>rd</sup>	
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation		none		15 CP	
Types of Assessment		Presentation (graded, 40%) and term paper or essay (graded, 60%)			
Examination language		English			
Course Cycle		Workload		Duration	
Winter term	<input checked="" type="checkbox"/>	Winter and	450 h	1 Term	
Summer term	<input type="checkbox"/>	Summer term			
Module coordination					
Teaching person		See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>			
Module coordinator		Prof. Dr. Alois Kneip			
Institute/Department		Department of Economics			
Further Information					
Literature		The recommended literature will be announced at the beginning of the course.			

# Research Module in Financial Economics

MA ECON RM FIE



## Content and learning outcome

<b>Content</b>	Financial decision taking in general and in particular the regulation of financial markets, the incentive problems in management payments, the valuation and risk management of financial products and insurance contracts are central questions of many economic situations. The module will focus on theoretical models as well as empirical results of valuation, risk taking and management as well as regulation in different areas (e.g., in corporate finance, banking and insurance regulation, pricing and hedging of derivative contracts, dynamic models of traded and non-traded financial risk).
<b>Learning outcome</b>	After completion of a project module students should: be familiar with the basics of scientific methods relevant for the topic of the project module, be able to do a literature search, read and document scientific articles in Economics, be capable of defining research topics, formulating specific research questions in Economics and developing a research approach to investigate, be acquainted with academic research methods relevant for investigating the project's topic, be able to document, present and defend in class the results of their research.

## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Seminar	Research Module in Financial Economics	English	15	4 hours	60
Self-study					390

## Prerequisites

<b>obligatory</b>	Basic Module <i>Finance</i> and any two advanced modules (except Topics)
<b>recommended</b>	

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/Financial Economics/332124050/332024050	elective	3 <sup>rd</sup>

## Requirements for the awarding of credit points (ECTS)

		Credits
<b>Prerequisites for participation</b>	none	15 CP
<b>Types of Assessment</b>	Presentation (graded, 40%) and term paper or essay (graded, 60%)	
<b>Examination language</b>	English	

## Course Cycle

		Workload	Duration
Winter term <input checked="" type="checkbox"/>	Winter and	450 h	1 Term
Summer term <input type="checkbox"/>	Summer term <input type="checkbox"/>		

## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Hendrik Hakenes
<b>Institute/Department</b>	Department of Economics

## Further Information

<b>Literature</b>	The recommended literature will be announced at the beginning of the course.
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# Research Module in Management and Applied Microeconomics

MA ECON RM MAM



## Content and learning outcome

<b>Content</b>	Cooperation and incentive problems are at the heart of many economic situations: for example, a group's joint outcome is highest if group members cooperate, but individual payoff maximization leads to free-riding and cooperation failures. The module will focus on theoretical models as well as empirical results of cooperation and incentive issues in different areas (e.g., in public economics, personnel economics and industrial organization). For example, light will be shed on the provision of public goods, the interaction of employees at the workplace and the collusion of firms.
<b>Learning outcome</b>	After completion of a project module students should: be familiar with the basics of scientific methods relevant for the topic of the project module, be able to do a literature search, read and document scientific articles in Economics, be capable of defining research topics, formulating specific research questions in Economics and developing a research approach to investigate, be acquainted with academic research methods relevant for investigating the project's topic, be able to document, present and defend in class the results of their research.

## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Seminar	Research Module in Management and Applied Microeconomics	English	15	4 hours	60
Self-study					390

## Prerequisites

<b>obligatory</b>	Basic Module <i>Microeconomics</i> and any two advanced modules (except Topics).
<b>recommended</b>	

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/Management and Applied Microeconomics/332123050/332023050	elective	3 <sup>rd</sup>

## Requirements for the awarding of credit points (ECTS)

		Credits
<b>Prerequisites for participation</b>	none	15 CP
<b>Types of Assessment</b> <b>Examination language</b>	Presentation (graded, 40%) and term paper or essay (graded, 60%) English	

Course Cycle	Workload	Duration
Winter term <input checked="" type="checkbox"/> Summer term <input type="checkbox"/>	450 h	1 Term

## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Matthias Kräkel
<b>Institute/Department</b>	Department of Economics

## Further Information

<b>Literature</b>	The recommended literature will be announced at the beginning of the course.
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# Research Module in Macroeconomics & Public Economics

MA ECON RM MPE



## Content and learning outcome

<b>Content</b>	Modern macroeconomics has moved to explore the quantitative implications of market interactions in the aggregate economy. These quantitative models focus on the structure of the economic decision problems single agents in the economy face, allow for (explicit) aggregation and finally to address a variety of research questions. The module will focus on theoretical models, their solution and their empirical application.
<b>Learning outcome</b>	After completion of a project module students should: be familiar with the basics of scientific methods relevant for the topic of the project module, be able to do a literature search, read and document scientific articles in Economics, be capable of defining research topics, formulating specific research questions in Economics and developing a research approach to investigate, be acquainted with academic research methods relevant for investigating the project's topic, be able to document, present and defend in class the results of their research.

## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Seminar	Research Module in Macroeconomics & Public Economics	English	15	4 hours	60
Self-study					390

## Prerequisites

<b>obligatory</b>	Basic Module <i>Macroeconomics</i> and any two advanced modules (except Topics)
<b>recommended</b>	

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/Macroeconomics & Public Economics/ 332122050/332022050	elective	3 <sup>rd</sup>

## Requirements for the awarding of credit points (ECTS)

		Credits
<b>Prerequisites for participation</b>	none	15 CP
<b>Types of Assessment</b> <b>Examination language</b>	Presentation (graded, 40%) and term paper or essay (graded, 60%) English	

## Course Cycle

Course Cycle	Workload	Duration
Winter term <input checked="" type="checkbox"/> Summer term <input type="checkbox"/>	450 h	1 Term

## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Christian Bayer
<b>Institute/Department</b>	Department of Economics

## Further Information

<b>Literature</b>	The recommended literature will be announced at the beginning of the course.
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# Research Module in Microeconomic Theory

MA ECON RM MIT



## Content and learning outcome

<b>Content</b>	When individuals interact, incentive problems are the rule rather than the exception. Individuals need to have incentives to reveal information that is used to reach desirable outcomes. Incentives are provided through different forms of social interactions, be that contracts or simply procedural rules. We study theoretical models of interactions among strategic agents in various contexts. One such context is communication and decision making, where we advance our understanding of procedural rules - such as the ones governing the interactions between the US congress and its standing committees - as we see them in practice. Other contexts include the optimal organization of and optimal contracting within firms and further applications.
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<b>Learning outcome</b>	After completion of a project module students should: be familiar with the basics of scientific methods relevant for the topic of the project module, be able to do a literature search, read and document scientific articles in Economics, be capable of defining research topics, formulating specific research questions in Economics and developing a research approach to investigate, be acquainted with academic research methods relevant for investigating the project's topic, be able to document, present and defend in class the results of their research.
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## Teaching and learning methods

Type of course/earning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Seminar	Research Module in Microeconomic Theory	English	15	4 hours	60
Self-study					390

## Prerequisites

<b>obligatory</b>	Basic module <i>Microeconomics</i> and any two advanced modules (except Topics)
<b>recommended</b>	

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/Microeconomic Theory/332121050/332021050	elective	3 <sup>rd</sup>

## Requirements for the awarding of credit points (ECTS)

		Credits
<b>Prerequisites for participation</b>	none	15 CP
<b>Types of Assessment</b>	Presentation (graded, 40%) and term paper or essay (graded, 60%)	
<b>Examination language</b>	English	


Course Cycle	Workload	Duration
Winter term <input checked="" type="checkbox"/> Summer term <input type="checkbox"/>	450 h	1 Term

## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Dezső Szalay
<b>Institute/Department</b>	Department of Economics

## Further Information

<b>Literature</b>	The recommended literature will be announced at the beginning of the course.
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Topics in Econometrics and Statistics MA ECON AM ERS TOPECS			 UNIVERSITÄT <b>BONN</b>		
Content and learning outcome					
Content		This course covers current research topics in econometric theory and applications.			
Learning outcome		Participants learn to read technically and conceptually demanding original literature. They acquire skills to do independent research.			
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Seminar	Topics in Econometrics and Statistics	English	15	2 hours	30
Self-study					195
Prerequisites					
obligatory		Basic Modules <i>Mathematics for Economists</i> and <i>Econometrics</i> must be successfully passed (graded 4.0 or better).			
recommended					
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective		Semester
Economics (M.Sc.)/Economic Research/-- / --			elective		2 <sup>nd</sup> /3 <sup>rd</sup>
Requirements for the awarding of credit points (ECTS)					Credits
Prerequisites for participation		none			7,5 CP
Types of Assessment		Presentation (graded, 40%) and term paper or essay (graded, 60%)			
Examination language		English			
Course Cycle		Workload		Duration	
Winter term <input type="checkbox"/>	Winter and	225 h		1 Term	
Summer term <input type="checkbox"/>	Summer term <input checked="" type="checkbox"/>				
Module coordination					
Teaching person		See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>			
Module coordinator		Prof. Dr. Alois Kneip			
Institute/Department		Department of Economics			
Further Information					
Literature		The recommended literature will be announced at the beginning of the course.			

## Topics in Financial Economics

MA ECON AM ERS TOPFIE



### Content and learning outcome

<b>Content</b>	This course covers current research topics in financial economics, including original results obtained within the joint research activities of the Economics Department of Bonn University as well as related topics from the recent literature.
<b>Learning outcome</b>	Participants learn to read technically and conceptually demanding original literature and to present the results to other participants. If participants encounter difficulties in understanding details of the literature, they must learn to narrow down the problem and to formulate exact questions. The course prepares students to do independent research and to participate in the joint research activities of the Economics Department.

### Teaching and learning methods

Type of course /learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Seminar	Topics in Financial Economics	English	15	2 hours	30
Self-study					195

### Prerequisites

<b>obligatory</b>	The basic modules <i>Microeconomics</i> and <i>Mathematics for Economists</i> must be successfully passed (graded 4.0 or better).
<b>recommended</b>	

### Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/Economic Research/ -- / --	elective	2 <sup>nd</sup> /3 <sup>rd</sup>

### Requirements for the awarding of credit points (ECTS)

Prerequisites for participation	Types of Assessment	Examination language	Credits
none	Presentation (graded, 40%) and term paper or essay (graded, 60%)	English	7,5 CP

Course Cycle	Workload	Duration
Winter term <input type="checkbox"/> Winter and Summer term <input type="checkbox"/>	225 h	1 Term

### Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Hendrik Hakenes
<b>Institute/Department</b>	Department of Economics

### Further Information

<b>Literature</b>	The recommended literature will be announced at the beginning of the course.
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# Topics in Management and Applied Microeconomics

MA ECON AM ERS TOPMAM



## Content and learning outcome

<b>Content</b>	This course covers current research topics in management and applied microeconomics, including original results obtained within the joint research activities of the Economics Department of Bonn University as well as related topics from the recent literature.
<b>Learning outcome</b>	Participants learn to read technically and conceptually demanding original literature and to present the results to other participants. If participants encounter difficulties in understanding details of the literature, they must learn to narrow down the problem and to formulate exact questions. The course prepares students to do independent research and to participate in the joint research activities of the Economics Department.

## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Seminar	Topics in Management and Applied Microeconomics	English	15	2 hours	30
Self-study					195

## Prerequisites

<b>obligatory</b>	Basic modules <i>Microeconomics</i> and <i>Mathematics for Economists</i> must be successfully passed (graded 4.0 or better).
<b>recommended</b>	

## Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/Economic Research/ -- / --	elective	2 <sup>nd</sup> /3 <sup>rd</sup>

## Requirements for the awarding of credit points (ECTS)

Prerequisites for participation	Types of Assessment	Examination language	Credits
none	Presentation (graded, 40%) and term paper or essay (graded, 60%)	English	7,5 CP

## Course Cycle


Course Cycle	Workload	Duration
Winter term <input type="checkbox"/> Summer term <input type="checkbox"/>	225 h	1 Term

## Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Matthias Kräkel
<b>Institute/Department</b>	Department of Economics

## Further Information

<b>Literature</b>	The recommended literature will be announced at the beginning of the course
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Topics in Macroeconomics & Public Economics MA ECON AM ERS TOPMPE				 UNIVERSITÄT <b>BONN</b>	
Content and learning outcome					
Content	This course covers current research topics in Macroeconomics and Public Economics, including original results obtained within the joint research activities of the Economics Department of Bonn University as well as related topics from the recent literature.				
Learning outcome	Participants learn to read technically and conceptually demanding original literature and to present the results to other participants. If participants encounter difficulties in understanding details of the literature, they must learn to narrow down the problem and to formulate exact questions. The course prepares students to do independent research and to participate in the joint research activities of the Economics Department.				
Teaching and learning methods					
Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Seminar	Topics in Macroeconomics & Public Economics	English	15	2 hours	30
Self-study					195
Prerequisites					
obligatory	Basic modules <i>Macroeconomics</i> and <i>Mathematics for Economists</i> must be successfully passed (graded 4.0 or better).				
recommended					
Degree program allocation					
Study Program/Study Field/Module Number/Lecture Number			obligatory/ elective	Semester	
Economics (M.Sc.)/Economic Research/ -- / --			elective	2 <sup>nd</sup> /3 <sup>rd</sup>	
Requirements for the awarding of credit points (ECTS)				Credits	
Prerequisites for participation	none			7,5 CP	
Types of Assessment	Presentation (graded, 40%) and term paper or essay (graded, 60%)				
Examination language	English				
Course Cycle		Workload	Duration		
Winter term <input type="checkbox"/>	Winter and	225 h	1 Term		
Summer term <input type="checkbox"/>	Summer term <input checked="" type="checkbox"/>				
Module coordination					
Teaching person	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>				
Module coordinator	Prof. Dr. Christian Bayer				
Institute/Department	Department of Economics				
Further Information					
Literature	The recommended literature will be announced at the beginning of the course.				

## Topics in Microeconomic Theory

MA ECON AM ERS TOPMIT



### Content and learning outcome

<b>Content</b>	This course covers current research topics in microeconomic theory, including original results obtained within the joint research activities of the Economics Department of Bonn University as well as related topics from the recent literature.
<b>Learning outcome</b>	Participants learn to read technically and conceptually demanding original literature and to present the results to other participants. If participants encounter difficulties in understanding details of the literature, they must learn to narrow down the problem and to formulate exact questions. The course prepares students to do independent research and to participate in the joint research activities of the Economics Department.

### Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
Seminar	Topics in Microeconomic Theory	English	15	2 hours	30
Self-study					195

### Prerequisites

<b>obligatory</b>	Basic modules <i>Microeconomics</i> and <i>Mathematics for Economists</i> must be successfully passed (graded 4.0 or better).
<b>recommended</b>	

### Degree program allocation

Study Program/Study Field/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/Economic Research/ -- / --	elective	2 <sup>nd</sup> /3 <sup>rd</sup>

### Requirements for the awarding of credit points (ECTS)

Prerequisites for participation	Types of Assessment	Examination language	Credits
none	Presentation (graded, 40%) and term paper or essay (graded, 60%)	English	7,5 CP

### Course Cycle

Course Cycle	Workload	Duration
Winter term <input type="checkbox"/> Winter and Summer term <input type="checkbox"/> Summer term <input checked="" type="checkbox"/>	225 h	1 Term

### Module coordination

<b>Teaching person</b>	See <a href="https://basis.uni-bonn.de">https://basis.uni-bonn.de</a>
<b>Module coordinator</b>	Prof. Dr. Dezső Szalay
<b>Institute/Department</b>	Department of Economics

### Further Information

<b>Literature</b>	The recommended literature will be announced at the beginning of the course.
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# Masterarbeit (Master Thesis)

MA ECON MAARBEIT



## Content and learning outcome

<b>Content</b>	The Master Thesis must rest on an intensive and thorough reading of selected papers of the economic literature, including a full understanding of the formal and methodological details.
<b>Learning outcome</b>	Participants must show that they are able to summarize, to compare to synthesize and to extend methodologically demanding economic literature. The text must be written in a concise form. Readers with economic training but no specialization in the field of the Master Thesis must be able to read and to understand the text.

## Teaching and learning methods

Type of course/ learning methods	Topic	Language of instruction	Group size	Contact time	Workload [h]
	Master Thesis	English			900

## Prerequisites

<b>obligatory</b>	The topic of the Master thesis can only be issued if <ul style="list-style-type: none"><li>the basic module "Mathematics for Economics" and three additional basic modules have been successfully passed,</li><li>one advanced module of the study field to which the Master thesis is assigned has been successfully passed</li><li>and a research module in any study field has been passed.</li></ul>
<b>recommended</b>	

## Degree program allocation

Study Program/Study Program/Module Number/Lecture Number	obligatory/ elective	Semester
Economics (M.Sc.)/ -- / --	obligatory	4 <sup>th</sup>

## Requirements for the awarding of credit points (ECTS)

		Credits
<b>Prerequisites for participation</b>	none	30 CP
<b>Types of Assessment</b>	Written academic paper; max. 40 pages (graded, 100%)	
<b>Examination language</b>	English	

Course Cycle		Workload	Duration
Winter term <input type="checkbox"/>	Winter and	900 h	4 months
Summer term <input checked="" type="checkbox"/>	Summer term <input type="checkbox"/>		

## Module coordination

<b>Teaching person</b>	-- / --
<b>Module coordinator</b>	Chairperson of the Examination Committee
<b>Institute/Department</b>	Department of Economics

## Further Information

<b>Support</b>	Support can be requested, e.g., in the form of Stata licenses, funding for datasets, etc. For more information, please visit the following website: <a href="https://www.vwlpamt.uni-bonn.de/pruefungsamt/master/masterarbeit-1">https://www.vwlpamt.uni-bonn.de/pruefungsamt/master/masterarbeit-1</a>
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