

University of Bonn  
Faculty of Law and Economics  
Department of Economics

## Course Catalogue

### Master of Science **Economics**



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## Summer Semester 201

# Table of Contents

	<b>Page</b>
<b>I. Course Plans</b>	<b>3</b>
<b>II. Modules and Study Fields</b>	<b>4</b>
<b>III. Module Descriptions in Alphabetical Order</b>	<b>5</b>


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Master of Science (M.Sc.)


# Economics

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




Banking and Securitization				 universität <b>bonn</b>	
<b>Module Number</b> 332124029	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Hendrik Hakenes				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	2nd
<b>Learning Outcomes</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 Further, students are required to present an unpublished research paper and write a referee report on this paper.				
<b>Key Skills</b>					
<b>Learning 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.				
<b>Prerequisites for attending</b>	Basic Module <i>Finance</i>				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) contact time per term / (s) self study per term

<b>Behavioral Economics</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332123019	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Daniel Krähmer				
<b>Department</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	2nd
<b>Learning Outcomes</b>	The course has three aims: (i) making students familiar with the lively debate in experimental and behavioural economics; (ii) providing them with basic formal models of decision making that account for psychological determinants of individual behaviour, (iii) enabling them to apply those models to applied economic questions.				
<b>Key Skills</b>					
<b>Learning Content</b>	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 assumptions can be captured by formal models. It also discusses the implications of these findings for positive and normative predictions in various institutional settings.				
<b>Prerequisites for attending</b>	Basic Module <i>Microeconomics</i>				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					

(c) contact time per term / (s) self study per term


<b>Econometric Theory</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332125028	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; winter term	
<b>Responsible Faculty Member</b>	Prof. Dr. Jörg Breitung				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	3rd
<b>Learning Outcomes</b>	The students learn the econometric and statistical tools necessary for reading and understanding the current literature in econometrics. In particular, they achieve competence in asymptotic concepts for estimation and inference based on the generalized method of moments and maximum likelihood. As a secondary goal, they will become acquainted with some of the current research topics in econometrics.				
<b>Key Skills</b>					
<b>Learning Content</b>	The purpose of this course is to provide the necessary tools for a thorough understanding of asymptotic theory in classical econometrics, where the econometric models include linear regression, time-series and simultaneous equations. The course focuses on details of specification tests, identification, consistency, asymptotic normality, efficiency and inference.				
<b>Prerequisites for attending</b>	Basic Module <i>Econometrics</i>				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					

(c) contact time per term / (s) self study per term


<b>Econometrics</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332110005	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; winter term	
<b>Responsible Faculty Member</b>	Prof. Dr. Jörg Breitung				
<b>Department</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Basic Module	1st
<b>Learning Outcomes</b>	This course is primarily conceived to give 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 and computational techniques to analyze empirical problems in economics. Furthermore, the students will become acquainted with computer programs that are widely used in empirical practice.				
<b>Key Skills</b>	Information Communication Technology				
<b>Content</b>	The objective of this course is to provide a thorough introduction to various econometric methods for the analysis of time series and cross section data. It provides a rigorous treatment of various classical econometric topics including nonlinear and generalized regression, specification tests and dynamic models. Furthermore, the course provides practical experience with standard econometric techniques using up-to-date computer software				
<b>Prerequisites for attending</b>					
<b>Course Type</b>	<b>Lecture, Tutorial, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					

(c) = contact time per term / (s) self study per term




<b>Econometrics II: Computational Statistics</b>				 universität <b>bonn</b>	
<b>Module Number</b> 331215035	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Alois Kneip				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	2nd
<b>Learning Outcomes</b>	The course aims to provide students with an understanding of fundamental concepts and problems of computational statistics. It establishes the technical competence necessary to understand original research literature, and enables students to solve methodological, numerical or algorithmic problems encountered in empirical work or simulation studies.				
<b>Key Skills</b>					
<b>Learning Content</b>	The course deals with computationally intensive statistical methods. It explains underlying ideas, and methodological issues are discussed in detail. Special emphasis is placed on algorithmic and numerical aspects of practical implementation.				
<b>Prerequisites for attending</b>					
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) contact time per term / (s) self study per term

<b>Economics of Contracts and Information</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332121008	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Deszö Szalay				
<b>Department</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	2nd
<b>Learning Outcomes</b>	Students study the impact of asymmetric information on market outcomes.				
<b>Key Skills</b>	Applying game theoretic tools to understand contracts and institutions as optimal outcomes under asymmetric information.				
<b>Content</b>	Markets with asymmetric information, Signalling, Screening, Contracting under moral hazard and asymmetric information, Non-linear pricing, auctions.				
<b>Prerequisites for attending</b>	Basic Module <i>Microeconomics</i>				
<b>Course Type</b>	<b>lecture, tutorial, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) = contact time per term / (s) self study per term

<b>Finance</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332110004	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; winter term	
<b>Responsible Faculty Member</b>	Prof. Dr. Klaus Sandmann				
<b>Department</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Basic Module	1st
<b>Learning Outcomes</b>	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.				
<b>Key Skills</b>					
<b>Content</b>	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.				
<b>Prerequisites for attending</b>					
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) ..60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) = contact time per term / (s) self study per term

<b>Game Theory</b>				 universität <b>bonn</b>	
<b>Module Number</b> 33121003	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Tymon Tatur				
<b>Department</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	2nd
<b>Learning Outcome</b>	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.				
<b>Key Skills</b>					
<b>Content</b>	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.				
<b>Prerequisites for attending</b>	Basic Module <i>Microeconomics</i>				
<b>Course Type</b>	<b>Lecture, Tutorial, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) = contact time per term / (s) self study per term

<b>Industrial Organization</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332123016	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; winter term	
<b>Responsible Faculty Member</b>	JProf. Dr. Eugen Kovac				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	3rd
<b>Learning Outcomes</b>	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.				
<b>Key Skills</b>					
<b>Learning Content</b>	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.				
<b>Prerequisites for attending</b>	Basic Module <i>Microeconomics</i>				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) contact time per term / (s) self study per term

<b>Institutional Economics</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332123018	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Urs Schweizer				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	2nd
<b>Learning Outcomes</b>	The Students learn to detect incentives as they arise from legal and other institutions, to describe strategic interaction within institutions (positive analysis) and to evaluate institutions from the economic viewpoint (normative analysis).				
<b>Key Skills</b>					
<b>Learning Content</b>	In this course, the methods of applied game theory are adopted to the economic analysis of institutions. Particular emphasis is put on those institutions that are of utmost importance as far as coordinating, monitoring and governing economic activities are concerned.				
<b>Prerequisites for attending</b>	Basic Module <i>Microeconomics</i>				
<b>Course Type</b>	<b>lecture, seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					

(c) contact time per term / (s) self study per term


International Economics and Finance				 universität <b>bonn</b>	
<b>Module Number</b> 332122010	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Gernot Müller				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	2nd
<b>Learning Outcomes</b>	Students acquire skills to solve dynamic optimization problems as they frequently arise in international economics and finance. In addition, applications of econometric methods to topical issues in international economics and finance are discussed. Students also learn to solve numerical and/or empirical exercises using standard software packages.				
<b>Key Skills</b>					
<b>Learning Content</b>	In order to analyze the determination of exchange rates, we start by discussing flexible price models which serve as a theoretical benchmark. We then turn to sticky price models, both of the traditional Mundell-Fleming and of the New Open Economic Macroeconomics variety. This will allow us to analyze the macroeconomic effects of different policy measures. The course also covers a number of anomalies which have received great attention by macroeconomists, such as deviations from uncovered interest rate parity and purchasing-power parity.				
<b>Prerequisites for attending</b>	Basic Module <i>Macroeconomics</i>				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			3+1 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>	The lecture draws on material covered in M. Obstfeld and K. Rogoff (1996): Foundations of International Macroeconomics and in N. Mark (2001): International Macroeconomics and Finance: Theory and Econometric Methods.				

(c) contact time per term / (s) self study per term


Labour and Population Economics				 universität <b>bonn</b>	
<b>Module Number</b> 332122008	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; winter term	
<b>Responsible Faculty Member</b>	Prof. Dr. Thomas Hintermaier				
<b>Department</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>		<b>Character</b>	<b>Study Term</b>	
	Master of Science Economics		Advanced Module	3rd	
<b>Learning Outcomes</b>	The Students are exposed to current questions and topics in the areas of labor and population economics. They acquire the ability to conduct their own research in this field.				
<b>Key Skills</b>					
<b>Learning Content</b>	This course covers current theories and empirical methods to explain labor market developments and population dynamics in selected industrialized countries. The course focuses in particular on the interaction between these two areas. It also stresses the importance of institutions in explaining differences in labor market and population performance across countries.				
<b>Prerequisites for attending</b>	Basic Module <i>Microeconomics</i>				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>		<b>Contact time</b>	<b>Workload [h]</b>	
	lecture and tutorial		4 hrs per week	(c) 60 (s) 165	
<b>Examination(s)</b>	<b>Type of Examination</b>		<b>Grades</b>		
	written or oral exam		yes		
<b>Special Course Achievements</b>					
<b>Other</b>					

(c) contact time per term / (s) self study per term




<b>Macroeconomics</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332110003	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; winter term	
<b>Responsible Faculty Member</b>	Prof. Dr. Thomas Hintermaier				
<b>Department</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Basic Module	1st
<b>Learning Outcomes</b>	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.				
<b>Key Skills</b>	Model based economic analysis				
<b>Content</b>	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.				
<b>Prerequisites for attending</b>					
<b>Course Type</b>	<b>Lecture, Tutorial, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			3 + 1 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>	The presentation of topics is organized according to the level of textbooks such as M. Wickens, "Macroeconomic Theory", or D. Romer, "Advanced Macroeconomics".				


(c) = contact time per term / (s) self study per term

<b>Macroeconomics II: Dynamic Macroeconomics</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332122017	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Christian Bayer				
<b>Department</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	2nd
<b>Learning Outcomes</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: business cycle theory, savings decisions, general equilibrium with imperfect capital markets, heterogeneous agent economies etc.				
<b>Key Skills</b>					
<b>Learning 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 the course studies algorithms to solve recursive general equilibrium models with heterogeneous agents, such as Aiyagari's (1994) or Krussell and Smith's (1998) model.				
<b>Prerequisites for attending</b>	Basic Module <i>Macroeconomics</i>				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>	A basic understanding of numerical programming, and MATLAB as programming language is helpful but not required. Primary readings are: * Burkhard und Alfred Maußner, <i>Dynamic General Equilibrium Modelling, Computational Methods and Applications</i> , 2. Edition, Springer: Berlin 2008 * Jerome Adda and Russell W. Cooper, <i>Dynamic Economics: Quantitative Methods and Applications</i> , MIT Press, Cambridge MA, 2003.				

(c) contact time per term / (s) self study per term

<b>Managerial Accounting</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332123015	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; winter term	
<b>Responsible Faculty Member</b>	Prof. Dr. Jörg Budde				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	3rd
<b>Learning Outcomes</b>	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.				
<b>Key Skills</b>					
<b>Learning Content</b>	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.				
<b>Prerequisites for attending</b>	Basic Module <i>Microeconomics</i>				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) contact time per term / (s) self study per term

Mathematics for Economists				 universität <b>bonn</b>	
<b>Module Number</b> 332110001	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; winter term	
<b>Responsible Faculty Member</b>	Dr. Reinhard John				
<b>Department</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Basic Module	1st
<b>Learning Outcomes</b>	Students become familiar with the use of mathematics at a level of rigour beyond that of mere recipes as is required for undertaking advanced studies of economics. It enables participants to read mathematical proofs appearing in the economic literature and to write mathematical proofs of their own in a rigorous way as needed for advanced economics. Students learn to search for help in the literature, as needs arise along his/her particular choice of activities within the Master Program.				
<b>Key Skills</b>					
<b>Content</b>	While it is not conceivable to cover all fields that are potentially of importance for economists, this course deals with topics that are of general interest, including basic topological concepts, fundamental existence theorems, convex sets and generalized convex (concave) functions.				
<b>Prerequisites for attending</b>					
<b>Course Type</b>	<b>Lecture, Tutorial, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>	In addition to the standard version, a special module is offered for students interested in the study area "Economic Research"				


(c) = contact time per term / (s) self study per term

<b>Mechanism Design and Contract Theory</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332121004	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Benny Moldovanu				
<b>Department</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>		<b>Character</b>	<b>Study Term</b>	
	Master of Science Economics		Advanced Module	2nd	
<b>Learning Outcomes</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.				
<b>Key Skills</b>					
<b>Learning 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>Entry Requirements</b>	Basic Module <i>Microeconomics</i>				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>		<b>Contact time</b>	<b>Workload [h]</b>	
	lecture and tutorial		4 hrs per week	(c) 60 (s) 165	
<b>Examination(s)</b>	<b>Type of Examination</b>		<b>Grades</b>		
	written or oral exam		yes		
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) contact time per term / (s) self study per term

<b>Microeconometrics</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332125027	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Jörg Breitung				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	2nd
<b>Learning Outcomes</b>	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.				
<b>Key Skills</b>					
<b>Learning Content</b>	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.				
<b>Prerequisites for attending</b>	Basic Module <i>Econometrics</i>				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					

(c) contact time per term / (s) self study per term


<b>Microeconomics</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332110002	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; winter term	
<b>Responsible Faculty Member</b>	Prof. Dr. Deszö Szalay				
<b>Department</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Basic Module	1st
<b>Learning Outcomes</b>	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.				
<b>Key Skills</b>					
<b>Content</b>	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.				
<b>Prerequisites for attending</b>					
<b>Course Type</b>	<b>lecture, tutorial, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	Written Exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					

(c) = contact time per term / (s) self study per term


<b>Microeconomics II</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332121010	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Benny Moldovanu				
<b>Department</b>	Department of Economics				
<b>Study Program</b>	<b>Study Program</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	2 <sup>nd</sup>
<b>Learning Outcomes</b>	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.				
<b>Key Skills</b>					
<b>Learning Content</b>	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 .				
<b>Prerequisites for attending</b>					
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					

(c) = contact time per term / (s) self study per term




Monetary Economics				 universität <b>bonn</b>	
<b>Module Number</b> 332122011	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	JProf. Dr. Alexander Kriwoluzky				
<b>Department</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>		<b>Character</b>	<b>Study Term</b>	
	Master of Science Economics		Advanced Module	2nd	
<b>Learning Outcomes</b>	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				
<b>Key Skills</b>					
<b>Learning Content</b>	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.				
<b>Prerequisites for attending</b>	Basic Module <i>Macroeconomics</i>				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>		<b>Contact time</b>	<b>Workload [h]</b>	
	lecture and tutorial		2+2 hrs per week	(c) 60 (s) 165	
<b>Examination(s)</b>	<b>Type of Examination</b>		<b>Grades</b>		
	written or oral exam		yes		
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) contact time per term / (s) self study per term

<b>Option Pricing</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332124023	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Klaus Sandmann				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	2nd
<b>Learning Outcomes</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.				
<b>Key Skills</b>					
<b>Learning 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.				
<b>Prerequisites for attending</b>	Basic Module <i>Finance</i>				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) contact time per term / (s) self study per term

Organizations and Incentives				 universität <b>bonn</b>	
<b>Module Number</b> 332123017	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Matthias Kräkel				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>		<b>Character</b>	<b>Study Term</b>	
	Master of Science Economics		Advanced Module	2nd	
<b>Learning Outcomes</b>	The course enables students to apply game theory and microeconomic results from incentive theory to organizational problems which arise from the division of labour within and between different hierarchical layers. The students will learn that the foundation of organizations can be both a solution to incentive problems and, at the same time, a source for new ones.				
<b>Key Skills</b>					
<b>Learning Content</b>	Starting from the fundamental trade-off between incentives and risk sharing, the course presents theoretical models on static and dynamic incentives in organizations. Incentive problems are analyzed which arise from asymmetric information or the impossibility of writing complete contracts. According to the nature of the incentive problem at hand, solutions and their practical implementation in organizations are discussed.				
<b>Prerequisites for attending</b>	Basic Module <i>Microeconomics</i>				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>		<b>Contact time</b>	<b>Workload [h]</b>	
	lecture and tutorial		4 hrs per week	(c) 60 (s) 165	
<b>Examination(s)</b>	<b>Type of Examination</b>		<b>Grades</b>		
	written or oral exam		yes		
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) contact time per term / (s) self study per term


<b>Personnel Economics</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332123014	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; winter term	
<b>Responsible Faculty Member</b>	Prof. Dr. Matthias Kräkel				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	3rd
<b>Learning Outcomes</b>	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.				
<b>Key Skills</b>					
<b>Learning Content</b>	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.				
<b>Prerequisites for attending</b>	Basic Module <i>Microeconomics</i>				
<b>Course Type</b>	<b>Lecture, seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) contact time per term / (s) self study per term

<b>Probability Theory</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332125032	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Lorens Imhof				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	2nd
<b>Learning Outcomes</b>	The aim of the course is to acquaint students with modern concepts and tools of probability. Students obtain a rigorous basis for understanding and applying current research in statistics and applied probability theory.				
<b>Key Skills</b>					
<b>Learning Content</b>	This course provides an introduction to the mathematical theory of probability. The course covers integration, probability measures, random variables, expectations, various concepts of convergence and limit theorems.				
<b>Prerequisites for attending</b>					
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) contact time per term / (s) self study per term

Project Module in Econometrics and Statistics				 universität <b>bonn</b>	
<b>Module Number</b> 331215050	<b>Workload</b> 450 h	<b>Credits</b> 15 CP	<b>Duration</b> 1 Semester	<b>Cycle</b> yearly, summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Alois Kneip				
<b>Department</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>		<b>Character</b>	<b>Study Term</b>	
	Master of Science Economics		Advanced Module	3rd	
<b>Learning Outcomes</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.				
<b>Key Skills</b>	academic research, academic writing, rhetorical skills, presentation skills				
<b>Content</b>	Empirical results based on the statistical/econometric analysis of data provide a very good basis for economic reasoning. Statistical and econometrical research has led to a variety of new methods for analyzing large and complex sets of economic data. The module will focus on the methodological understanding of new statistical techniques, their practical implementations as well as their applications to real data problems.				
<b>Prerequisites for attending</b>	At least one advanced module in <i>Econometrics &amp; Statistics</i> ; basic knowledge of game theory and econometrics (in particular hypotheses testing) is helpful.				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>		<b>Contact time per week</b>	<b>Workload [h]</b>	
	Lectures		2	60	
	Presentations		1	30	
	Discussion Groups		1	30	
	Selfstudy		4	330	
<b>Examination(s)</b>	<b>Type of Examination</b>		<b>Grades</b>		
	presentation (oral & slides), research paper, report of other presentations, participation in discussions The final grade will be a weighted average of (the quality of) i) the presentation, ii) the research paper, iii) reports and iv) participation in discussions. Depending on the actual number of participants, the project work has to be carried out as a group task rather than as an individual task.		yes		
<b>Special Course Achievements</b>	none				
<b>Other</b>	The first six weeks consist of introductory lectures (4h per week). Students can then choose a project from a list of specific cooperation problems in which they wish to increase their knowledge. Students have to work on this project on their own (week 7-12). During that time, students and supervisors will have regular feedback meetings. In weeks 13 and 14, students have to hand in a short research paper and give a presentation of their project in class. Finally, students have to hand in short reports of others' presentations.				


Project Module in Financial Economics				 universität <b>bonn</b>
<b>Module Number</b> 332124050	<b>Workload</b> 450 h	<b>Credits</b> 15 CP	<b>Duration</b> 1 Semester	<b>Cycle</b> yearly, winter term
<b>Responsible Faculty Member</b>	Prof. Dr. Klaus Sandmann			
<b>Department</b>	Department of Economics			
<b>Study Program</b>	<b>Title</b>		<b>Character</b>	<b>Study Term</b>
	Master of Science Economics		Advanced Module	3rd
<b>Learning Outcomes</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.			
<b>Key Skills</b>	academic research, academic writing, rhetorical skills, presentation skills			
<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>Prerequisites for attending</b>	At least one advanced module in <i>Financial Economics</i> .			
<b>Course Type</b>	<b>Lecture, Seminar</b>		<b>Contact time per week</b>	<b>Workload [h]</b>
	Lectures		2 hrs	60
	Presentations		1 hrs	30
	Discussion Groups		1 hrs	30
	Selfstudy		4 hrs	330
<b>Examination(s)</b>	<b>Type of Examination</b>		<b>Grades</b>	
	presentation (oral & slides), research paper, report of other presentations, participation in discussions The final grade will be a weighted average of (the quality of) i) the presentation, ii) the research paper, iii) reports and iv) participation in discussions. Depending on the actual number of participants, the project work has to be carried out as a group task rather than as an individual task.		yes	
<b>Special Course Achievements</b>	None			
<b>Other</b>	The first six weeks consist of introductory lectures (4h per week). Students can then choose a project from a list of specific cooperation problems in which they wish to increase their knowledge. Students have to work on this project on their own (week 7-12). During that time, students and supervisors will have regular feedback meetings. In weeks 13 and 14, students have to hand in a short research paper and give a presentation of their project in class. Finally, students have to hand in short reports of others' presentations.			


Project Module in Macroeconomics & Public Economics				 universität <b>bonn</b>	
<b>Module Number</b> 332023050	<b>Workload</b> 450 h	<b>Credits</b> 15 CP	<b>Duration</b> 1 Semester	<b>Cycle</b> yearly , winter term	
<b>Responsible Faculty Member</b>	Prof. Dr. Christian Bayer				
<b>Department</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>		<b>Character</b>	<b>Study Term</b>	
	Master of Science Economics		Advanced Module	3rd	
<b>Learning Outcomes</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				
<b>Key Skills</b>	academic research, academic writing, rhetorical skills, presentation skills				
<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>Prerequisites for attending</b>	Basic module <i>Macroeconomics</i> and at least one advanced module in <i>Macroeconomics &amp; Public Economics</i>				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>		<b>Contact time per week</b>	<b>Workload [h]</b>	
	Lectures		2 hrs	60	
	Presentations		1 hrs	30	
	Discussion Groups		1 hrs	30	
	Selfstudy		4 hrs	330	
<b>Examination(s)</b>	<b>Type of Examination</b>		<b>Grades</b>		
	presentation (oral & slides), research paper, report of other presentations, participation in discussions The final grade will be a weighted average of (the quality of) i) the presentation, ii) the research paper, iii) reports and iv) participation in discussions. Depending on the actual number of participants, the project work has to be carried out as a group task rather than as an individual task.		yes		
<b>Special Course Achievements</b>	none				
<b>Other</b>	The first six weeks consist of introductory lectures (4h per week). Students can then choose a project from a list of specific cooperation problems in which they wish to increase their knowledge. Students have to work on this project on their own (week 7-12). During that time, students and supervisors will have regular feedback meetings. In weeks 13 and 14, students have to hand in a short research paper and give a presentation of their project in class. Finally, students have to hand in short reports of others' presentations.				




Project Module in Management and Applied Microeconomics				 universität <b>bonn</b>
Module Number	Workload	Credits	Duration	Cycle
332123050	450 h	15 CP	1 Semester	yearly, winter term
Responsible Faculty Member	Prof. Dr. Matthias Kräkel			
Department	Department of Economics			
Study Program	Title		Character	Study Term
	Master of Science Economics		Advanced Module	3rd
Learning Outcomes	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			
Key Skills	academic research, academic writing, rhetorical skills, presentation skills			
Content	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.			
Prerequisites for attending	Basic module <i>Microeconomics</i> and at least one advanced module in <i>Management &amp; Applied Microeconomics</i>			
Course Type	Lecture, Seminar, etc.		Contact time per week	Workload [h]
	Lectures		2 hrs	60
	Presentations		1 hrs	30
	Discussion Groups		1 hrs	30
	Selfstudy		4 hrs	330
Examination(s)	Type of Examination		Grades	
	presentation (oral & slides), research paper, report of other presentations, participation in discussions The final grade will be a weighted average of (the quality of) i) the presentation, ii) the research paper, iii) reports and iv) participation in discussions. Depending on the actual number of participants, the project work has to be carried out as a group task rather than as an individual task.		yes	
Special Course Achievements	none			
Other	The first six weeks consist of introductory lectures (4h per week). Students can then choose a project from a list of specific cooperation problems in which they wish to increase their knowledge. Students have to work on this project on their own (week 7-12). During that time, students and supervisors will have regular feedback meetings. In weeks 13 and 14, students have to hand in a short research paper and give a presentation of their project in class. Finally, students have to hand in short reports of others' presentations.			

January 2012


Project Module in Microeconomic Theory				 universität <b>bonn</b>	
<b>Module Number</b> 332121050	<b>Workload</b> 450 h	<b>Credits</b> 15 CP	<b>Duration</b> 1 Semester	<b>Cycle</b> yearly, winter term	
<b>Responsible Faculty Member</b>	Prof. Dr. Deszö Szalay				
<b>Department</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>		<b>Character</b>	<b>Study Term</b>	
	Master of Science Economics		Advanced Module	3rd	
<b>Learning Outcomes</b>	<p>After completion of a project module students should:</p> <p>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</p>				
<b>Key Skills</b>	academic research, academic writing, rhetorical skills, presentation skills				
<b>Content</b>	<p>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.</p>				
<b>Prerequisites for attending</b>	Basic module <i>Microeconomics</i> and at least one advanced module in Microeconomic Theory.				
<b>Course Type</b>	<b>Lectures, Tutorials, etc.</b>		<b>Contact time per week</b>	<b>Workload [h]</b>	
	Lectures		2 hrs	60	
	Presentations		1 hrs	30	
	Discussion Groups		1 hrs	30	
	Selfstudy		4 hrs	330	
<b>Examination(s)</b>	<b>Type of Examination</b>		<b>Grades</b>		
	<p>presentation (oral &amp; slides), research paper, report of other presentations, participation in discussions</p> <p>The final grade will be a weighted average of (the quality of) i) the presentation, ii) the research paper, iii) reports and iv) participation in discussions.</p> <p>Depending on the actual number of participants, the project work has to be carried out as a group task rather than as an individual task.</p>		yes		
<b>Special Course Achievements</b>	none				
<b>Other</b>	<p>The first six weeks consist of introductory lectures (4h per week). Students can then choose a project from a list of specific cooperation problems in which they wish to increase their knowledge. Students have to work on this project on their own (week 7-12). During that time, students and supervisors will have regular feedback meetings. In weeks 13 and 14, students have to hand in a short research paper and give a presentation of their project in class. Finally, students have to hand in short reports of others' presentations.</p>				

Statistical Inference				 universität <b>bonn</b>	
<b>Module Number</b> 332125030	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; winter term	
<b>Responsible Faculty Member</b>	Prof. Dr. Alois Kneip				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	3rd
<b>Learning Outcomes</b>	The course aims to provide students with an understanding of fundamental concepts of modern statistical inference. It enables them to follow methodological discussions of statistical procedures proposed in original research papers. Participants are prepared for a sensible use of statistics in their own empirical work.				
<b>Key Skills</b>					
<b>Learning Content</b>	The course deals with statistical methods for the analysis of complex data. It concentrates on concepts and theoretical foundations of contemporary statistical inference. Finite sample and asymptotic properties of parametric and nonparametric procedures are derived and discussed.				
<b>Prerequisites for attending</b>					
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) contact time per term / (s) self study per term

Stochastic Financial Markets				 universität <b>bonn</b>	
<b>Module Number</b> 332122010	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; winter term	
<b>Responsible Faculty Member</b>	Prof. Dr. Klaus Sandmann				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	3rd
<b>Learning Outcomes</b>	On the basis of profound knowledge of the main theoretical results the participants should get familiar with recent contributions. The course aims to provide students with an understanding of the arbitrage pricing theory and its application for the risk management of derivative contracts. It enables them to critical review different modelling approaches and to decompose complex financial products into their basic financial structures.				
<b>Key Skills</b>					
<b>Learning Content</b>	The course derives a general continuous time model of a financial market under uncertainty. Starting with different models of the term structure of interest rate the modelling framework will be extended to cover equity as well as exchange rate risks. The application of different pricing measures like the martingale and the forward risk adjusted measure for the pricing of financial derivatives will be discussed. Special emphasis will be given to the pricing and hedging of interest rate and exchange rate depending financial contracts like caps, floors, swaptions, currency options and structured products.				
<b>Prerequisites for attending</b>	Basic Module <i>Finance</i>				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) contact time per term / (s) self study per term

<b>Stochastic Processes</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332125029	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; winter term	
<b>Responsible Faculty Member</b>	Prof. Dr. Lorens Imhof				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	3rd
<b>Learning Outcomes</b>	Students obtain an understanding of fundamental concepts of stochastic processes and they achieve the technical competence needed for understanding the current research literature and for developing stochastic models on their own.				
<b>Key Skills</b>					
<b>Learning Content</b>	The course gives an introduction to the theory and applications of stochastic processes. The students are provided with tools for building and analysing models of time-dependent phenomena under random influences. A thorough treatment of structural and asymptotic properties will be given.				
<b>Prerequisites for attending</b>					
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	lecture and tutorial			4 hrs per week	(c) 60 (s) 165
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	written or oral exam			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) contact time per term / (s) self study per term

<b>Time Series Econometrics</b>				 universität <b>bonn</b>	
<b>Module Number</b> 332125031	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Jörg Breitung				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>		<b>Character</b>	<b>Study Term</b>	
	Master of Science Economics		Advanced Module	2nd	
<b>Learning Outcomes</b>	The goals of the course are threefold: (1) develop a comprehensive set of tools and techniques for analysing various forms of univariate and multivariate time series, and for understanding the current literature in applied time series econometrics; (2) survey some of the current research topics in time series econometrics; (3) show how to use up-to-date econometric software to estimate time series models.				
<b>Key Skills</b>					
<b>Learning Content</b>	This course gives an overview of the theory and application of modern time series methods. The topics will focus on time series methods commonly used in economic and financial applications. These include ARIMA models, unit root processes, cointegration and vector autoregressions.				
<b>Prerequisites for attending</b>	Basic Module <i>Econometrics</i>				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>		<b>Contact time</b>	<b>Workload [h]</b>	
	lecture and tutorial		4 hrs per week	(c) 60 (s) 165	
<b>Examination(s)</b>	<b>Type of Examination</b>		<b>Grades</b>		
	written or oral exam		yes		
<b>Special Course Achievements</b>					
<b>Other</b>					

(c) contact time per term / (s) self study per term


Topics in Econometrics and Statistics				 universität <b>bonn</b>	
<b>Module Number</b> 332134008	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle:</b> summer/winter	
<b>Responsible Faculty Member</b>	Prof. Dr. Jörg Breitung, Prof. Dr. Matei Demetrescu, Prof. Dr. Lorens Imhof, Prof. Dr. Alois Kneip				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Study Program</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	2nd/3rd
<b>Learning Outcomes</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 are guided to focus on the essential problems. The course prepares students to do independent research and to participate in the joint research activities of the Economics Department.				
<b>Key Skills</b>					
<b>Learning Content</b>	This course covers current research topics in econometric theory and applications, 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>Prerequisites for attending</b>	Basic Module <i>Mathematic for Economists</i> with a grade of 2,3 and above; corresponding Basic Module with a grade of 2,3 or above.				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	seminar maximum number of participants: 15			2 hrs per week	(c) 30 (s) 195
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	Term paper and an oral presentation on a selected research paper			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					

(c) contact time per term / (s) self study per term


Topics in Financial Economics				 universität <b>bonn</b>	
Module Number	Workload	Credits	Duration	Cycle	
332133003	225 h	7,5 CP	1 Term	yearly; winter term	
Responsible Faculty Member	Prof. Dr. Klaus Sandmann,				
Institute	Department of Economics				
Study Program	Study Program		Character	Study Term	
	Master of Science Economics		Advanced Module	3rd	
Learning Outcomes	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.				
Key Skills					
Learning Content	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.				
Prerequisites for attending	Basic Module <i>Mathematic for Economists</i> with a grade of 2,3 and above; corresponding Basic Module with a grade of 2,3 or above.				
Course Type	Lecture, Seminar, etc.		Contact time	Workload [h]	
	Seminar		2 hrs per week	(c) 30	
	Maximum number of participant: 15			(s) 195	
Examination(s)	Type of Examination		Grades		
	Term paper and an oral presentation on a selected research paper		yes		
Special Course Achievements					
Other					

(c) contact time per term / (s) self study per term




Topics in Macroeconomics and Public Economics				 universität <b>bonn</b>	
<b>Module Number</b> 332121008	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; winter term	
<b>Responsible Faculty Member</b>	Prof. Dr. Jürgen von Hagen				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	3rd
<b>Learning Outcomes</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.				
<b>Key Skills</b>					
<b>Learning Content</b>	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.				
<b>Prerequisites for attending</b>	Basic Module <i>Mathematic for Economists</i> with a grade of 2,3 and above; corresponding Basic Module with a grade of 2,3 or above.				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	Seminar Maximum number of participants: 15			2 hrs per week	(c) 30 (s) 195
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	Term paper and an oral presentation on a selected research paper.			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					


(c) contact time per term / (s) self study per term

Topics in Management and Applied Microeconomics				 universität <b>bonn</b>	
<b>Module Number</b> 332122004	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; winter term	
<b>Responsible Faculty Member</b>	Prof. Dr. Jörg Budde, Prof. Dr. Urs Schweizer, Prof. Dr. Matthias Kräkel				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	3rd
<b>Learning Outcomes</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.				
<b>Key Skills</b>					
<b>Learning 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>Prerequisites for attending</b>	Basic Module <i>Mathematic for Economists</i> with a grade of 2,3 and above; corresponding Basic Module with a grade of 2,3 or above.				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	Seminar Maximum number of participants: 15			2 hrs per week	(c) 30 (s) 195
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	Term paper and an oral presentation on a selected research paper			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					

(c) contact time per term / (s) self study per term

Topics in Microeconomic Theory				 universität <b>bonn</b>	
<b>Module Number</b> 332125034	<b>Workload</b> 225 h	<b>Credits</b> 7,5 CP	<b>Duration</b> 1 Term	<b>Cycle</b> yearly; summer term	
<b>Responsible Faculty Member</b>	Prof. Dr. Benny Moldovanu				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>			<b>Character</b>	<b>Study Term</b>
	Master of Science Economics			Advanced Module	2nd
<b>Learning Outcomes</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.				
<b>Key Skills</b>					
<b>Learning 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>Prerequisites for attending</b>	Basic Module <i>Mathematic for Economists</i> with a grade of 2,3 and above; corresponding Basic Module with a grade of 2,3 or above.				
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact time</b>	<b>Workload [h]</b>
	Seminar Maximum number of participants: 15			2 hrs per week	(c) 30 (s) 195
<b>Examination(s)</b>	<b>Type of Examination</b>			<b>Grades</b>	
	Term paper and an oral presentation on a selected research paper.			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					

(c) contact time per term / (s) self study per term

<b>Master Thesis</b>				 universität <b>bonn</b>	
<b>Modulnummer</b> 8000	<b>Workload</b> 900 h	<b>Umfang</b> 30 CP	<b>Dauer Modul</b> 1 Term	<b>Turnus</b> summer / winter term	
<b>Responsible Faculty Member</b>	Head of Examinations Committee				
<b>Institute</b>	Department of Economics				
<b>Study Program</b>	<b>Title</b>		<b>Character</b>	<b>Study Term</b>	
	Master of Science Economics		Compulso	4th term	
<b>Learning Outcomes</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.				
<b>Key Skills</b>					
<b>Learning 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>Prerequisites for attending</b>					
<b>Course Type</b>	<b>Lecture, Seminar, etc.</b>			<b>Contact Time</b>	<b>Workload [h]</b>
					s (900)
<b>Examination(s)</b>	<b>Prüfungsform(en)</b>			<b>Grades</b>	
	Written academic paper; max. 40 pages within 4 months			yes	
<b>Special Course Achievements</b>					
<b>Other</b>					

(c) contact time per term / (s) self study per term