UNIVERSITÄT BONN

University of Bonn
Faculty of Law and Economics
Department of Economics

Course Catalogue

Master of Science
Economics

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Summer Semester 2010

Table of Contents

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universitätbonn

Master of Science (M.Sc.)

Economics

Study Course Economics				
Optional German Class / Orientation Session				
1st Sem Winter	Basic Module Mathematics	Basic Module (Study Area 1)	Basic Module (Study Area 2)	Basic Module (Study Area 3)
30 CP	7,5 CP	7,5 CP	7,5 CP	7,5 CP
2nd Sem Summer	Advanced Module (optional)	Advanced Module (Study Area 1)	Advanced Module (Study Area 2)	Advanced Module (optional)
30 CP	7,5 CP	7,5 CP	7,5 CP	7,5 CP
3rd Sem Winter	Project Module (Study Area 1)		Advanced Module (optional)	Advanced Module (optional) or Basic Module (optional)
			or additional Project 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	Project Module		

Stand: ab WiSe 2011/12

Modules and Study Fields

BM: Basic Module, ECS: Econometrics and Statistics FIE: Financial Economics, MPE: Macroeconomics and Public Economics, MAM: Management and Applied Microeconomics, MT: Microeconomic Theory, RS: Research Module

Module Titel	Study Fields							Page
	BM	ECS	FIE	MPE	MAM	MT	ERS	
Banking and Securitization			x					5
Behavioral Economics					x			6
Econometric Theory		x						7
Econometrics	x							8
Econometrics II: Computational Statistics		x						9
Economics of Contract and Information						x		10
Finance	x							11
Game Theory						x		12
Industrial Organization					x			13
Institutional Economics					x			14
International Economics and Finance				x				15
Labor and Population Economics				x				16
Macroeconomics	x							17
Macroeconomics II: Dynamic Macroeconomics				x				18
Managerial Accounting					x			19
Mathematics for Economists	x							20
Mechanism Design and Social Choice						x		21
Microeconometrics		x						22
Microeconomics	x							23
Microeconomics II						x		24
Monetary Economics				x				25
Option Pricing			x					26
Organization and Incentives					x			27
Personnel Economics					x			28
Probability Theory		x						29
Project Module in Econometrics and Statistics		x						30
Project Module in Financial Economics			x					31
Project Module in Macroeconomic Theory				x				32
Project Module in Management and Applied Microeconomics					x			33
Project Module in Microeconomic Theory						x		34
Statistical Inference		x						35
Stochastic Financial Markets			x					36
Stochastic Processes		x						37
Time Series Econometrics		x						38
Topics in Econometrics and Statistics							x	39
Topics in Financial Economics							x	40
Topics in Macroeconomics and Public Economics							x	41
Topics in Management and Applied Microeconomics							x	42
Topics in Microeconomic Theory							x	43
Master Thesis								44

Banking and Securitization				universitätbonn
Module Number 332124029	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	Prof. Dr. Hendrik Hakenes			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

Learning Outcomes	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.
Key Skills	
Learning Content	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.
Prerequisites for attending	Basic Module *Finance*

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Behavioral Economics				universitätbonn
Module Number 332123019	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	Prof. Dr. Daniel Krähmer			
Department	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

Learning Outcomes	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.
Key Skills	
Learning 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 assumptions can be captured by formal models. It also discusses the implications of these findings for positive and normative predictions in various institutional settings.
Prerequisites for attending	Basic Module *Microeconomics*

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Econometric Theory				universitätbonn
Module Number 332125028	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; winter term
Responsible Faculty Member	Prof. Dr. Jörg Breitung			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	3rd

Learning Outcomes	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.
Key Skills	
Learning Content	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.
Prerequisites for attending	Basic Module *Econometrics*

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Econometrics				
Module Number 332110005	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; winter term
Responsible Faculty Member	Prof. Dr. Jörg Breitung			
Department	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Basic Module	1st

Learning Outcomes	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.
Key Skills	Information Communication Technology
Content	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
Prerequisites for attending	

Course Type	**Lecture, Tutorial, etc.**	**Contact time**	**Workload [h]**
	lecture	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written exam	yes

Special Course Achievements	
Other	

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

Econometrics II: Computational Statistics				universitätbonn
Module Number 331215035	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	Prof. Dr. Alois Kneip			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

Learning Outcomes	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.
Key Skills	
Learning Content	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.
Prerequisites for attending	

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Economics of Contracts and Information				
Module Number 332121008	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	Prof. Dr. Deszö Szalay			
Department	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

Learning Outcomes	Students study the impact of asymmetric information on market outcomes.
Key Skills	Applying game theoretic tools to understand contracts and institutions as optimal outcomes under asymmetric information.
Content	Markets with asymmetric information, Signalling, Screening, Contracting under moral hazard and asymmetric information, Non-linear pricing, auctions.
Prerequisites for attending	Basic Module *Microeconomics*

Course Type	**lecture, tutorial, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Finance				
Module Number 332110004	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; winter term
Responsible Faculty Member	Prof. Dr. Klaus Sandmann			
Department	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Basic Module	1st

Learning Outcomes	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.
Key Skills	
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.
Prerequisites for attending	

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) ..60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written exam	yes

Special Course Achievements	
Other	

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

Game Theory				universitätbonn
Module Number 33121003	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	Prof. Dr. Tymon Tatur			
Department	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

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.
Key Skills	
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.
Prerequisites for attending	Basic Module *Microeconomics*

Course Type	**Lecture, Tutorial, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Industrial Organization				universitätbonn
Module Number 332123016	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; winter term
Responsible Faculty Member	JProf. Dr. Eugen Kovac			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	3rd

Learning Outcomes	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.
Key Skills	
Learning 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.
Prerequisites for attending	Basic Module *Microeconomics*

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Institutional Economics				universitätbonn
Module Number 332123018	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	Prof. Dr. Urs Schweizer			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

Learning Outcomes	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).
Key Skills	
Learning Content	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.
Prerequisites for attending	Basic Module *Microeconomics*

Course Type	**lecture, seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

International Economics and Finance				
Module Number 332122010	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	Prof. Dr. Gernot Müller			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

Learning Outcomes	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.
Key Skills	
Learning Content	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.
Prerequisites for attending	Basic Module *Macroeconomics*

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	3+1 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	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				
Module Number 332122008	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; winter term
Responsible Faculty Member	Prof. Dr. Thomas Hintermaier			
Department	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	3rd

Learning Outcomes	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.
Key Skills	
Learning Content	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.
Prerequisites for attending	Basic Module *Microeconomics*

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Macroeconomics				
Module Number 332110003	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; winter term
Responsible Faculty Member	Prof. Dr. Thomas Hintermaier			
Department	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Basic Module	1st

Learning Outcomes	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.
Key Skills	Model based economic analysis
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.
Prerequisites for attending	

Course Type	**Lecture, Tutorial, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	3 + 1 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written exam	yes

Special Course Achievements	
Other	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

Macroeconomics II: Dynamic Macroeconomics				universitätbonn
Module Number 332122017	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	Prof. Dr. Christian Bayer			
Department	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

Learning Outcomes	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.
Key Skills	
Learning Content	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 equlibrium models with heterogeneous agents, such as Aiyagari's (1994) or Krussell and Smith's (1998) model.
Prerequisites for attending	Basic Module *Macroeconomics*

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	A basic understanding of numerical programming, and MATLAB as programming language is helpful but not required. Primary readings are: * Burkhard und Alfred Maußner, Dynamic General Equilibrium Modelling, Computational Methods and Applications, 2. Edition, Springer: Berlin 2008 * Jerome Adda and Russell W. Cooper, Dynamic Economics: Quantitative Methods and Applications, MIT Press, Cambridge MA, 2003.

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

Managerial Accounting				universitätbonn
Module Number 332123015	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; winter term
Responsible Faculty Member	Prof. Dr. Jörg Budde			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	3rd

Learning Outcomes	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.
Key Skills	
Learning 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.
Prerequisites for attending	Basic Module *Microeconomics*

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Mathematics for Economists				universitätbonn
Module Number 332110001	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; winter term
Responsible Faculty Member	Dr. Reinhard John			
Department	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Basic Module	1st

Learning Outcomes	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.
Key Skills	
Content	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.
Prerequisites for attending	

Course Type	**Lecture, Tutorial, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written exam	yes

Special Course Achievements	
Other	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

Mechanism Design and Contract Theory				universitätbonn
Module Number 332121004	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	Prof. Dr. Benny Moldovanu			
Department	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

Learning Outcomes	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.
Key Skills	
Learning Content	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.
Entry Requirements	Basic Module *Microeconomics*

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Microeconometrics				universitätbonn
Module Number 332125027	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	Prof. Dr. Jörg Breitung			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

Learning Outcomes	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.
Key Skills	
Learning 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 microeconometric models rather than a rigorous treatment of the asymptotic properties of estimators.
Prerequisites for attending	Basic Module *Econometrics*

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Microeconomics				universitätbonn
Module Number 332110002	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; winter term
Responsible Faculty Member	Prof. Dr. Deszö Szalay			
Department	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Basic Module	1st

Learning Outcomes	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.
Key Skills	
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.
Prerequisites for attending	

Course Type	**lecture, tutorial, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	Written Exam	yes

Special Course Achievements	
Other	

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

Microeconomics II				universitätbonn
Module Number 332121010	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	Prof. Dr. Benny Moldovanu			
Department	Department of Economics			

Study Program	**Study Program**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

Learning Outcomes	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.
Key Skills	
Learning 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 .
Prerequisites for attending	

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Monetary Economics				universitätbonn
Module Number 332122011	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	JProf. Dr. Alexander Kriwoluzky			
Department	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

Learning Outcomes	Students will be familiar with the methods and concepts necessary to understand monetary economics and policy. Analyzing monetary policy quantitively using value function iteration, Ramsey optimal policy, linearization techniques of DSGE models
Key Skills	
Learning 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.
Prerequisites for attending	Basic Module *Macroeconomics*

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	2+2 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Option Pricing				universitätbonn
Module Number 332124023	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	Prof. Dr. Klaus Sandmann			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

Learning Outcomes	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.
Key Skills	
Learning Content	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.
Prerequisites for attending	Basic Module *Finance*

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Organizations and Incentives				universitätbonn
Module Number 332123017	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	Prof. Dr. Matthias Kräkel			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

Learning Outcomes	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.
Key Skills	
Learning Content	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.
Prerequisites for attending	Basic Module *Microeconomics*

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Personnel Economics				universitätbonn
Module Number 332123014	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; winter term
Responsible Faculty Member	Prof. Dr. Matthias Kräkel			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	3rd

Learning Outcomes	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.
Key Skills	
Learning 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.
Prerequisites for attending	Basic Module *Microeconomics*

Course Type	**Lecture, seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Probability Theory				universitätbonn
Module Number 332125032	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	Prof. Dr. Lorens Imhof			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

Learning Outcomes	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.
Key Skills	
Learning Content	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.
Prerequisites for attending	

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Project Module in Econometrics and Statistics				universitätbonn
Module Number 331215050	**Workload** 450 h	**Credits** 15 CP	**Duration** 1 Semester	**Cycle** yearly, summer term
Responsible Faculty Member	Prof. Dr. Alois Kneip			
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	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.
Prerequisites for attending	At least one advanced module in *Econometrics & Statistics*; basic knowledge of game theory and econometrics (in particular hypotheses testing) is helpful.

Course Type	**Lecture, Seminar, etc.**	**Contact time per week**	**Workload [h]**
	Lectures	2	60
	Presentations	1	30
	Discussion Groups	1	30
	Selfstudy	4	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.

Project Module in Financial Economics				universitätbonn
Module Number 332124050	**Workload** 450 h	**Credits** 15 CP	**Duration** 1 Semester	**Cycle** yearly, winter term
Responsible Faculty Member	Prof. Dr. Klaus Sandmann			
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	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).
Prerequisites for attending	At least one advanced module in *Financial Economics*.

Course Type	**Lecture, Seminar**	**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.

Project Module in Macroeconomics & Public Economics				universitätbonn
Module Number 332023050	**Workload** 450 h	**Credits** 15 CP	**Duration** 1 Semester	**Cycle** yearly , winter term
Responsible Faculty Member	Prof. Dr. Christian Bayer			
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	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.
Prerequisites for attending	Basic module *Macroeconomics* and at least one advanced module in *Macroeconomics & Public Economics*

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.

Project Module in Management and Applied Microeconomics				universitätbonn
Module Number 332123050	**Workload** 450 h	**Credits** 15 CP	**Duration** 1 Semester	**Cycle** 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 *Microeconomics* and at least one advanced module in *Management & Applied Microeconomics*

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

universitätbonn

Module Number	Workload	Credits	Duration	Cycle
332121050	450 h	15 CP	1 Semester	yearly, winter term

Responsible Faculty Member	Prof. Dr. Deszö Szalay
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	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.
Prerequisites for attending	Basic module *Microeconomics* and at least one advanced module in Microeconomic Theory.

Course Type	**Lectures, Tutorials, 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.

Statistical Inference				universitätbonn
Module Number 332125030	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; winter term
Responsible Faculty Member	Prof. Dr. Alois Kneip			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	3rd

Learning Outcomes	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.
Key Skills	
Learning Content	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.
Prerequisites for attending	

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Stochastic Financial Markets				universitätbonn
Module Number 332122010	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; winter term
Responsible Faculty Member	Prof. Dr. Klaus Sandmann			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	3rd

Learning Outcomes	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.
Key Skills	
Learning Content	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.
Prerequisites for attending	Basic Module *Finance*

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Stochastic Processes				universitätbonn
Module Number 332125029	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; winter term
Responsible Faculty Member	Prof. Dr. Lorens Imhof			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	3rd

Learning Outcomes	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.
Key Skills	
Learning Content	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.
Prerequisites for attending	

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Time Series Econometrics				universitätbonn
Module Number 332125031	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	Prof. Dr. Jörg Breitung			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

Learning Outcomes	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.
Key Skills	
Learning Content	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.
Prerequisites for attending	Basic Module *Econometrics*

Course Type	**Lecture, Seminar, etc.**	**Contact time**	**Workload [h]**
	lecture and tutorial	4 hrs per week	(c) 60 (s) 165

Examination(s)	**Type of Examination**	**Grades**
	written or oral exam	yes

Special Course Achievements	
Other	

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

Topics in Econometrics and Statistics				universitätbonn
Module Number 332134008	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle**: summer/winter
Responsible Faculty Member	Prof. Dr. Jörg Breitung. Prof. Dr. Matei Demetrescu, Prof. Dr. Lorens Imhof, Prof. Dr. Alois Kneip			
Institute	Department of Economics			

Study Program	**Study Program**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd/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 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.
Key Skills	
Learning Content	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.
Prerequisites for attending	Basic Module *Mathematic for Economists* 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 maximum number of participants: 15	2 hrs per week	(c) 30 (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 Financial Economics				universitätbonn
Module Number 332133003	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** 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 *Mathematic for Economists* 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 Maximum number of participant: 15	2 hrs per week	(c) 30 (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				universitätbonn
Module Number 332121008	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; winter term
Responsible Faculty Member	Prof. Dr. Jürgen von Hagen			
Institute	Department of Economics			

Study Program	**Title**	**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 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.
Prerequisites for attending	Basic Module *Mathematic for Economists* 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 Maximum number of participants: 15	2 hrs per week	(c) 30 (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 Management and Applied Microeconomics				universitätbonn
Module Number 332122004	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; winter term
Responsible Faculty Member	Prof. Dr. Jörg Budde, Prof. Dr. Urs Schweizer, Prof. Dr. Matthias Kräkel			
Institute	Department of Economics			

Study Program	**Title**	**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 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.
Prerequisites for attending	Basic Module *Mathematic for Economists* 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 Maximum number of participants: 15	2 hrs per week	(c) 30 (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 Microeconomic Theory				universitätbonn
Module Number 332125034	**Workload** 225 h	**Credits** 7,5 CP	**Duration** 1 Term	**Cycle** yearly; summer term
Responsible Faculty Member	Prof. Dr. Benny Moldovanu			
Institute	Department of Economics			

Study Program	**Title**	**Character**	**Study Term**
	Master of Science Economics	Advanced Module	2nd

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 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.
Prerequisites for attending	Basic Module *Mathematic for Economists* 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 Maximum number of participants: 15	2 hrs per week	(c) 30 (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

<table>
<tr><td colspan="4">Master Thesis</td><td>universitätbonn</td></tr>
<tr><td>Modulnummer
8000</td><td>Workload
900 h</td><td>Umfang
30 CP</td><td>Dauer Modul
1 Term</td><td>Turnus
summer / winter term</td></tr>
<tr><td>Responsible Faculty Member</td><td colspan="4">Head of Examinations Committee</td></tr>
<tr><td>Institute</td><td colspan="4">Department of Economics</td></tr>
<tr><td rowspan="2">Study Program</td><td colspan="2">Title</td><td>Character</td><td>Study Term</td></tr>
<tr><td colspan="2">Master of Science Economics</td><td>Compulso</td><td>4th term</td></tr>
<tr><td>Learning Outcomes</td><td colspan="4">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.</td></tr>
<tr><td>Key Skills</td><td colspan="4"></td></tr>
<tr><td>Learning Content</td><td colspan="4">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.</td></tr>
<tr><td>Prerequisites for attending</td><td colspan="4"></td></tr>
<tr><td rowspan="2">Course Type</td><td colspan="2">Lecture, Seminar, etc.</td><td>Contact Time</td><td>Workload [h]</td></tr>
<tr><td colspan="2"></td><td></td><td>s (900)</td></tr>
<tr><td rowspan="2">Examination(s)</td><td colspan="2">Prüfungsform(en)</td><td colspan="2">Grades</td></tr>
<tr><td colspan="2">Written academic paper; max. 40 pages within 4 months</td><td colspan="2" rowspan="2">yes</td></tr>
<tr><td>Special Course Achievements</td><td colspan="2"></td></tr>
<tr><td>Other</td><td colspan="4"></td></tr>
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(c) contact time per term / (s) self study per term