


<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, 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.				