

MW68: Game Theory				Study programme:	M
Module type:	ECTS points:	Workload:	Semester of study:	Duration of the module:	
Compulsory Elective	8	240	2 nd or 4 th	one semester	
Courses:			Contact hours:	Independent study:	Planned group size:
Course 1: Game Theory (2 semester hours per week)			30h	90h	25
Course 2: Game Theory – Tutorial (2 semester hours per week)			30h	90h	25
Learning objectives and competences:					
<p>After completing the module, students are able to</p> <ul style="list-style-type: none"> - reproduce and explain the basic and advanced concepts of the game theory that will be used in the further course of the Master’s study programme; - describe and explain the strategic behaviour of players and their interactions based on game theory; - apply the acquired knowledge, for example to selected areas of economics; - present complex economic issues in a simplified way using the method of game theory; - based on exercise tasks, use, and apply the expertise acquired in course 1. 					
Key competences:					
<ul style="list-style-type: none"> - critical thinking - analytical skills - willingness to learn and perform - written communication skills - problem-solving skills 					
Course content:					
<p>Course 1: Game Theory</p> <ol style="list-style-type: none"> 1. Static games with complete information 2. Dynamic games with complete information 3. Evolutionary game theory 4. Static games with incomplete information 5. Dynamic games with incomplete information <p>Course 2: Game Theory – Tutorial Cf. Content of course 1</p>					
Language:					
Language of the course is German or English.					
Teaching forms:					
Lecture, group work, independent study					

Applicability of the module:
MSc Business Administration (BWL), MSc VWL, MSc Economics, MSc Mathematics, MSc Business Chemistry
Requirements for participation:
Admission to the Master's study programmes in Business Administration, VWL, Economics, Mathematics or Business Chemistry. A good understanding of microeconomics and previous knowledge of mathematics from the Bachelor's study programme are required.
Forms of examination:
The final module examination takes place at the end of the summer semester in the form of a written test (60 minutes).
Requirements for the award of ECTS points:
Passing the final module examination. A final module examination is successfully passed if the grade is at least "sufficient" (4.0).
Frequency:
The courses take place usually every academic year in the summer semester.
Significance of the grade for the final grade:
This module is graded and taken into account when calculating the overall grade of your Master's degree. For more detailed information on the calculation of the overall grade, please refer to the applicable examination regulations of your respective study programme.
Module supervisors and full-time lecturers:
Prof Dr Hans-Theo Normann and research assistants at DICE.
Other information:
Up-to-date information can be found on the DICE website. A project work may be written in this compulsory elective module (MQ04, MQ05 or MQV01).

Version: 24 September 2020