

Course Title	Game Theory and Economics
Course Code	EBC2110
ECTS Credits	6,5
Assessment	Whole/Half Grades

Level	Advanced
Coordinator	Dries Vermeulen For more information: d.vermeulen@maastrichtuniversity.nl
Language of instruction	English
Goals	Knowledge of the main concepts in cooperative and non-cooperative game theory; skills in applying these concepts in economic models.
Description	<p>PLEASE NOTE THAT THE INFORMATION ABOUT THE TEACHING AND ASSESSMENT METHOD(S) USED IN THIS COURSE IS WITH RESERVATION. THE INFORMATION PROVIDED HERE IS BASED ON THE COURSE SETUP PRIOR TO THE CORONAVIRUS CRISIS. AS A CONSEQUENCE OF THE CRISIS, COURSE COORDINATORS MAY BE FORCED TO CHANGE THE TEACHING AND ASSESSMENT METHODS USED. THE MOST UP-TO-DATE INFORMATION ABOUT THE TEACHING/ASSESSMENT METHOD(S) WILL BE AVAILABLE IN THE COURSE SYLLABUS.</p> <p>This course discusses the main concepts from cooperative and non-cooperative game theory:</p> <ul style="list-style-type: none"> - Cooperative game theory: core, Shapley value, nucleolus. - Non-cooperative game theory: Nash equilibrium, subgame perfect equilibrium, Bayesian and perfect Bayesian equilibrium. <p>The emphasis will be on concepts and applications. Applications range from oligopoly theory to job market signalling, investment policies, organisational strategies, and cost allocation.</p>
Literature	Game Theory: A multi-leveled approach, author: Hans Peters/Springer 2015 2nd edition.
Prerequisites	<ol style="list-style-type: none"> 1. The course is open for all students, although Economics students should be aware of the challenging technical level of this course. The course Thinking strategically could be a proper alternative. 2. This course is compulsory for 2nd-year students Econometrics and Operations Research. 3. Exchange students need to follow a Bachelor in economics, not in business and must have a decent level in mathematics, especially calculus. Some prior knowledge about microeconomics would be helpful. An advanced level of English.

This course belongs to the following programme / specialisation	Bachelor Economics and Business Economics - Economics	Year 3 Quantitative Economics Elective(s)
	Bachelor Economics and Business Economics - Emerging Markets	Year 3 Elective Course(s)
	Bachelor Economics and Business Economics - Economics and Management of Information	Year 2+3 Quantitative Economics Elective(s)
	Bachelor Economics and Business Economics - International Business Economics	Year 3 QE Elec(s) - Maj Accounting
	Bachelor Economics and Business Economics - International Business Economics	Year 3 QE Elec(s) - Maj Finance
	Bachelor Economics and Business Economics - International Business Economics	Year 3 QE Elec(s) - Maj Inf Mgmt
	Bachelor Economics and Business Economics - International Business Economics	Year 3 QE Elec(s) - Maj Marketing
	Bachelor Economics and Business Economics - International Business Economics	Year 3 QE Elec(s) - Maj Org
	Bachelor Economics and Business Economics - International Business Economics	Year 3 QE Elec(s) - Maj SCM
	Bachelor Economics and Business Economics - International Business Economics	Year 3 QE Elec(s) - Maj Strategy
	Bachelor Econometrics and Operations Research	Year 2 Compulsory Course(s)
	Bachelor International Business - Emerging Markets	Year 3 Elective Course(s)
	Bachelor International Business	Year 3 QE Elec(s) - Maj Accounting
	Bachelor International Business	Year 3 QE Elec(s) - Maj Finance
	Bachelor International Business	Year 3 QE Elec(s) - Maj Inf Mgmt
	Bachelor International Business	Year 3 QE Elec(s) - Maj Marketing
	Bachelor International Business	Year 3 QE Elec(s) - Maj Org
	Bachelor International Business	Year 3 QE Elec(s) - Maj SCM
	Bachelor International Business	Year 3 QE Elec(s) - Maj Strategy
	SBE Exchange Bachelor	Bachelor Exchange Courses
	SBE Exchange Master	Bachelor Exchange Courses
	SBE Non Degree Courses	Bachelor Courses