

## Course Descriptions Bachelor 2023-2024

Course Title Economics of Uncertainty and Information  
 Course Code EBC2108  
 ECTS Credits 6,5  
 Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
5	15-4-2024	7-6-2024	L	X		X	

Level Advanced

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Language of instruction English

Goals (1) Get familiar with the microeconomic theory of uncertainty and information, its conclusions, limitations, and main applications;  
 (2) Acquire a working knowledge of techniques to analyze problems of choice under uncertainty and of asymmetric information.

Description This course, which falls under the area of mathematical economics and belongs to the Bachelor program Econometrics and Operations Research, gives an introduction to the microeconomic theory of uncertainty and information. In the course, we study basic elements of the role that information plays in the decisions of individuals and firms, as well as in the working of markets. This is done by combining elementary methods of microeconomics with those from elementary probability theory. First, we introduce expected utility maximization, the standard model of choice under uncertainty. We then use this model to study numerous important issues arising from incomplete information, such as attitudes toward risk, demand for insurance, portfolio selection, value of information, (in)efficiency of markets, moral hazard, and adverse selection.

Literature Bikhchandani, S., J. Hirshleifer, and J.G. Riley (2013), The Analytics of Uncertainty and Information, 2nd edition, Cambridge University Press, Cambridge.

Prerequisites TRANSITIONAL REGULATIONS:  
 This course is in transition within the:  
 \* pre-master Economics  
 \* pre-master Human Decision Science

The following rule applies to students who started one of the following programmes prior to academic year 2023-2024:

\* pre-master Economics  
 \* pre-master Human Decision Science

TRANSITIONAL REGULATION (EBC2108):

Repeat the course (note that its title has changed to "Economics of Uncertainty and Information") or replace with Intermediate Microeconomics for Pre-master (EBC2197).

See the Transitional Regulations section in the Bachelor Education and Examination Regulations for more information.

PREREQUISITES:

Prior knowledge in microeconomics equivalent to the course Microeconomics (EBC1012) is essential. Recommended are also the courses Probability Theory (EBC1024), Analysis II (EBC1032), Optimisation (EBC2105), and Game Theory and Economics (EBC2110). Exchange and elective students should be aware of the advanced mathematical level of this course.

Teaching methods PBL / Lecture / Assignment

Assessment methods Written Exam / Presentation

Evaluation in previous academic year For the complete evaluation of this course please click <http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM>

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 Fiscal Economics	Year 3 Elective 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
Transitional Regulations	See prerequisites
SBE Exchange Bachelor	Bachelor Exchange Courses
SBE Exchange Master	Bachelor Exchange Courses
SBE Non Degree Courses	Bachelor Courses