Exchange programme Vrije Universiteit Amsterdam

Vrije Universiteit Amsterdam - Exchange programme Vrije Universiteit Amsterdam - 2024-2025

Exchange

Vrije Universiteit Amsterdam offers many English-taught courses in a variety of subjects, ranging from arts & culture and social sciences, neurosciences and computer science, to economics and business administration.

The International Office is responsible for course approval and course registration for exchange students. For details about course registration, requirements, credits, semesters and so on, please [visit the exchange programmes webpages](#).

Business Simulation

Course Code	X_401006
Credits	6
Period	P3
Course Level	200
Language Of Tuition	English
Faculty	Faculty of Science
Course Coordinator	dr. J. Berkhout
Examiner	dr. J. Berkhout
Teaching Staff	dr. J. Berkhout
Teaching method(s)	Seminar, Lecture

Course Objective

A practical introduction to the different aspects of simulation.
After this course the student:

- knows in which situations simulation can be used
- can implement simple (Monte Carlo) simulations in an appropriate language (Java/Excel)
- is familiar with the tools to run discrete-event simulations
- can program discrete-event simulations in an appropriate language (Java)
- knows how to interpret (statistically) the results
- understands how simulation can be used in an optimization framework

Course Content

During this course we study the different aspects of Monte Carlo simulation and discrete-event simulation in a coherent way. Subjects treated are: Modeling of business problems, statistical outcome analysis, simulation optimization, software tooling, programming of simulations in Java.

Additional Information Teaching Methods

Lectures and Practical sessions

Method of Assessment

Graded assignments. Details can be found in the course manual.

Literature

The course slides contain the most important information.
For more background reading, I recommend the book Simulation and the Monte Carlo Method by Rubinstein and Kroese (2016) of which an online copy can be obtained via the VU library.

Additional Information Target Audience

2BA