

Course Descriptions None 2020-2021

Course Title Simulation and Networks
Course Code EBC2184
ECTS Credits 6,5
Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
N/A	1-1-1900	1-1-1900					

Level no level
Coordinator For more information:
Language of instruction English

Goals
Description In this course, students learn several basic simulation tools and develop simulation models for practical business problems. Simulations are commonly used in operations management and in network analysis. From the domain of operations management, the following applications are discussed: uncertainty in processing time durations for machine and project scheduling problems; waiting lines; uncertainty in demand distribution for inventory management problems. In the second part of the course, design, analysis and vulnerability of networks are discussed. Basic network parameters, e.g., degree distribution, clustering coefficients, small world property, are studied. Given a set of parameters, students design a simulation tool to mimic or to replicate real-life complex networks, e.g., social and professional networks, crypto-currency networks, supply (chain) networks.

Literature

Prerequisites

Keywords

Teaching methods

Assessment methods

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 Business Analytics

Year 3 Elective Course(s)