Course Descriptions None 2026-2027

Course Title	Introduction to Software in Operations Research
Course Code	EBS2073
ECTS Credits	4,0
Assessment	Whole/Half Grades

Period

Period	Start	End	Mon	Tue	Wed	Thu	Fri
3	4-1-2027	22-1-2027	C				

Level	Advanced
Coordinator	Andre Berger For more information:a.berger@maastrichtuniversity.nl
Language of instruction	English
Goals	1. The student will learn to model optimization problems as (integer) linear programs. These problems can come from various domains, such as business, mathematics, or logic puzzles. 2. The student will learn how to implement and solve (integer) linear programming models using state-of-the-art software. 3. The student will learn how to summarize and interpret the results of their implementation in a report.
Description	Students will develop practical skills in modeling and solving optimization problems using (integer) linear programming (ILP). The course focuses on translating real-world problems from business, economics, and operations into mathematical models, and implementing these models in Python using the Gurobi optimization solver. By the end of the course, students will be able to formulate optimization problems as linear or integer programs, implement them in Python using Gurobi, and interpret and communicate the results effectively. These skills are widely applicable in data science, operations management, finance, and academic research.
Literature	
Prerequisites	* Optimisation (EBC2105) * Operations Research (EBC2106)
Keywords	
Transitional Regulations	
Teaching methods	PBL / Lecture / Assignment / Skills
Assessment methods	Final Paper / Assignment
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 Econometrics and Operations Research	Year 3 Disciplinary Skills