

Course Descriptions None 2025-2026

Course Title Operations Research Applications
 Course Code EBC4187
 ECTS Credits 6,5
 Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
5	13-4-2026	5-6-2026	C				

Level Advanced
 Coordinator Andre Berger For more information:a.berger@maastrichtuniversity.nl

Language of instruction English
 Goals

- * Students learn how to understand and present state-of-the-art research articles.
- * Students learn how to review academic work of other researchers.
- * Students learn how to model real-life problems within various optimization frameworks.
- * Students learn how to adapt, develop, implement and analyse algorithms to real-life problems.
- * Students learn how to work on a practical project in a team.

Description In this course students will learn how to use previously learned advanced techniques from mathematical programming, combinatorial optimisation, and heuristics and search methodologies to specific classes of real-life applications in areas such as logistics, telecommunication, and supply chains. This will be achieved by studying state-of-the-art research articles and current research presentations. Students will understand, adapt, implement and analyse algorithms from these sources in order to test the validity of the approach to specific problems. Students will also work on a larger practical project in a team to learn about the software development life cycle.

Literature Various recent research articles.

Prerequisites

- Algorithms and Optimisation (EBC4049)
- Advanced Operations Research (EBC4051)
- problems and techniques from combinatorial optimisation and complexity theory
- programming skills
- heuristics
- search methodologies

Transitional Regulations

TRANSITIONAL REGULATIONS

- Master Business Research - Operations Research

In 2024-2025 and 2025-2026 education and exam/resit opportunities are offered. In 2026-2027 exam/resit opportunities are offered. From 2027-2028 onwards, the course is cancelled.

Academic Year	Education	Exam/Resit	Replacement(s)
2024-2025 - 2025-2026	X	X	
2026-2027	X	X	
2027-2028 onwards			

Teaching methods PBL / Presentation / Assignment / Papers / Groupwork / Research / Skills / Coaching

Assessment methods Final Paper / Assignment / Computer test / 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	Master Business Research - Operations Research	Transitional Regulation
	Master Econometrics and Operations Research	Elective Courses
	Master Economic and Financial Research - Econometrics	Elective Courses
	Master Economic and Financial Research - Econometrics	Year 1 Core Courses