Course Descriptions None 2024-2025

Course Title	Advanced Operations Research
Course Code	EBC4051
ECTS Credits	6,5
Assessment	Whole/Half Grades

Period

Period	Start	End	Mon	Tue	Wed	Thu	Fri
4	3-2-2025	30-3-2025		X		X	

Level	Advanced
Coordinator	Lissa Melis For more information:lissa.melis@maastrichtuniversity.nl
Language of instruction	English
Goals	Deepen the knowledge on a wide variety of optimization techniques through a detailed study of state-of-the-art academic literature. Students learn to make appropriate design choices in algorithmic development for a broad range of real-life problems. Students can implement their own solution procedure and judge its quality and performance. Students can communicate their results in a professional way and translate numerical results in clear recommendations for the decision makers.
Description	Students learn how to apply state-of-the-art techniques from mathematical programming, combinatorial optimisation, and heuristics and search methodologies to specific classes of problems as well as to real-life applications in these areas. Students will learn how to read state-of-the-art research articles, to understand the technical details, and to give presentations on the subjects.
Literature	Various recent research articles.
Prerequisites	This course is in transition for the master Business Research. See the Master Education and Examination Regulations for more information. The following rule applies to master Business Research students who started the programme prior to academic year 2024-2025. TRANSITIONAL REGULATION (EBC4051): The master Business Research has been discontinued. Courses of the Business Research master's programme will continue to be offered until and including academic year 2025-2026 with exam opportunities running until and including 2026-2027. PREREQUISITES: Algorithms and Optimisation (EBC4049); problems and techniques from combinatorial optimisation and complexity theory, programming skills, heuristics and search methodologies.
Teaching methods	PBL / Presentation / Lecture / Assignment / Papers / Groupwork / Research / Skills / Coaching
Assessment methods	Final Paper / Attendance / 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 - No specialisation	Transitional Regulation
Master Business Research - Operations Research	Transitional Regulation
Master Econometrics and Operations Research	E&OR Electives
Master Economic and Financial Research - Econometrics	Elective Course(s)
Master Economic and Financial Research - Econometrics	Year 1 Core Course(s)
SBE Exchange Master	Master Exchange Courses
SBE Non Degree Courses	Master Courses