Course Descriptions None 2021-2022

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	31-1-2022	25-3-2022		X		X	

Level	Advanced
Coordinator	Christof Defryn For more information:c.defryn@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	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	Year 2 Methodology Elective(s)
Master Business Research - Operations Research	Year 1 Compulsory Course(s)
Master Business Research - Operations Research	Year 1 Elective Course(s)
Master Business Research - Operations Research	Year 2 Elective Course(s)
Master Econometrics and Operations Research	E&OR Electives
SBE Exchange Master	Master Exchange Courses
SBE Non Degree Courses	Master Courses