Course Descriptions None 2025-2026

Course Title	Planning and Scheduling
Course Code	EBC4149
ECTS Credits	6,5
Assessment	Whole/Half Grades

Period

Period	Start	End	Mon	Tue	Wed	Thu	Fri
1	1-9-2025	17-10-2025	C				

Level	Advanced
Coordinator	Tjark Vredeveld For more information:t.vredeveld@maastrichtuniversity.nl
Language of instruction	English
Goals	In this course students will learn the state-of-the-art techniques for a broad variety of scheduling problems. In particular, it is expected that after this course students will be able to construct mathematical models for the basic problems, classify them, address the questions on computational complexity of the problems, and apply standard algorithmic techniques to solve the problems.
Description	This is a course track for students interested in Operations Research (OR) of the Business Research Master. The course addresses the issues of * Modelling production and planning problems as combinatorial optimisation problems; * Classification of scheduling environments and objectives; * Tractability of scheduling problems; * Solution methods for scheduling problems, e.g., combinatorial, LP-, and DP-based techniques, including exact algorithms, approximations and fast heuristics.
Literature	Scientific articles. Michael Pinedo, "Scheduling: Theory, Algorithms, and System" (recommended not obligatory).
Prerequisites	Good working knowledge of algorithms and optimisation techniques.
Transitional Regulations	TRANSITIONAL REGULATIONS <ul class="trcohorts"> - Master Business Research - 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. <table><col style="width: 200px;"><col style="width: 120px;"><col style="width: 120px;"><col><thead><tr><th>Academic Year</th><th>Education</th><th>Exam/Resit</th><th>Replacement(s)</th></tr></thead><tbody><tr><td>2024-2025 - 2025-2026</td><td>X</td><td>X</td><td> </td></tr><tr><td>2026-2027</td><td> </td><td>X</td><td> </td></tr><tr><td>2027-2028 onwards</td><td> </td><td> </td><td> </td></tr></tbody></table>
Teaching methods	PBL / Presentation / Lecture / Assignment
Assessment methods	Final Paper / Participation / Written Exam / Oral Exam / Assignment / 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	In transition - Y2 Free Electives
Master Business Research - Operations Research	In transition - Year 1+2 Elective Courses
Master Business Research - Operations Research	Transitional Regulation
Master Economic and Financial Research - Econometrics	Elective Courses