

Course Descriptions None 2025-2026

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

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

Level Advanced
 Coordinator Tjark Vredevelde For more information:t.vredevelde@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 <div class="trreg"><div class="subtitle">TRANSITIONAL REGULATIONS</div><ul class="trcohorts">Master Business ResearchMaster Business Research - Operations ResearchIn 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;"><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></div>

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