

## Course Descriptions None 2024-2025

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	2-9-2024	20-10-2024	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 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 (EBC4149):  
 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:  
 Good working knowledge of algorithms and optimisation techniques.

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	Transitional Regulation
	Master Business Research - Operations Research	Transitional Regulation