

Course Descriptions Master 2018-2019

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|---|---|----------|------------|-----|----------------|-----|-----|-----|
| Course Title | Planning and Scheduling | | | | | | | |
| Course Code | EBC4149 | | | | | | | |
| ECTS Credits | 6,5 | | | | | | | |
| Assessment | None | | | | | | | |
| Period | Period | Start | End | Mon | Tue | Wed | Thu | Fri |
| | 1 | 3-9-2018 | 26-10-2018 | 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 | <p>This is a course track for students interested in Operations Research (OR) of the Business Research Master.</p> <p>The course addresses the issues of</p> <ul style="list-style-type: none">* 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 | <p>Scientific articles.</p> <p>Michael Pinedo, "Scheduling: Theory, Algorithms, and System" (recommended not obligatory).</p> | | | | | | | |
| Prerequisites | Good working knowledge of algorithms and optimisation techniques. | | | | | | | |
| Teaching methods | PBL / Presentation / Lecture / Assignment | | | | | | | |
| Assessment methods | Final Paper / Participation / Written Exam / Oral Exam | | | | | | | |
| 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 | | | | Free Electives | | | |
| | Master Business Research - Operations Research | | | | Free Electives | | | |