Course of Study Mechanical Engineering and Management (Study Cohort w20)

Sample course plan A Master Mechanical Engineering and Management (IMPMEM)
Specialisation Product Development and Production, Specialisation Materials

Legend:

Core qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
Core qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

LP	Semester 1	Form	Hrs/wk	Semester 2	Form	Hrs/wk	Semester 3	Form	Hrs/wk	Semester 4	Form	Hrs/wk
1	**Robotics**			**Fibre-polymer-composites**			**Research Project IMPMEM**			**Master Thesis**		
2	Robotics: Modelling and Control	VL	3	Design with fibre-polymer-composites	VL	2						
3	Robotics: Modelling and Control	UE	2	Structure and properties of fibre-polymer-composites	VL	2						
4												
5												
6												
7	**Computer Aided Design and Computation**			**Selected Topics of Mechanical Engineering and Management (Alternative A: 12 CP) (part 2)**								
8	Computer Aided Design and Computation	VL	2	Selection from a catalog								
9	Computer Aided Design and Computation	UE	2									
10												
11												
12												
13	**Selected Topics of Mechanical Engineering and Management (Alternative A: 12 CP) (part 1)**			**High-Order FEM**			**Laser Systems and Metallic Materials**					
14	Selection from a catalog			High-Order FEM	VL	3	Laser Systems and Process Technologies	VL	2			
15				High-Order FEM	HÜ	1	Structural Metallic Materials	VL	2			
16												
17												
18												
19	**Advanced Functional Materials**			**Applied Design Methodology in Mechatronics**			**Interfaces and interface-dominated Materials (part 2)**					
20	Advanced Functional Materials	SE	2	Applied Design Methodology in Mechatronics	VL	2	Nature's Hierarchical Materials	SE	2			
21				Applied Design Methodology in Mechatronics	PBL	3						
22												
23												
24												
25				**Interfaces and interface-dominated Materials (part 1)**								
26				Interfaces	VL	2						
27												
28				**Processing of fibre-polymer-composites**								
29				From Molecule to Composites Part	PBL	2						
30				Processing of fibre-polymer-composites	VL	2						
31												
32												
33												

Business & Management (from catalogue) - 6LP
Non-technical Courses for Master (from catalogue) - 6LP

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.