

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

Sample course plan A Master Mechanical Engineering and Management (IMPMEM)  
Specialisation Mechatronics, 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	<b>Robotics</b>		<b>Fibre-polymer-composites</b>		<b>Research Project IMPMEM</b>		<b>Master Thesis</b>	
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	<b>Computer Aided Design and Computation</b>		<b>Selected Topics of Mechanical Engineering and Management (Alternative A: 12 CP) (part 2)</b>					
8	Computer Aided Design and Computation	VL 2	Selection from a catalog					
9	Computer Aided Design and Computation	UE 2						
10								
11								
12								
13	<b>Selected Topics of Mechanical Engineering and Management (Alternative A: 12 CP) (part 1)</b>		<b>Nonlinear Dynamics</b>		<b>Digital Signal Processing and Digital Filters</b>			
14	Selection from a catalog		Nonlinear Dynamics	IV 4	Digital Signal Processing and Digital Filters	VL 3		
15					Digital Signal Processing and Digital Filters	HÜ 2		
16								
17								
18								
19	<b>Advanced Functional Materials</b>		<b>Interfaces and interface-dominated Materials (part 1)</b>		<b>Control Systems Theory and Design</b>			
20	Advanced Functional Materials	SE 2	Interfaces	VL 2	Control Systems Theory and Design	VL 2		
21					Control Systems Theory and Design	UE 2		
22								
23			<b>Processing of fibre-polymer-composites</b>					
24			From Molecule to Composites Part	PBL 2				
25			Processing of fibre-polymer-composites	VL 2				
26					<b>Interfaces and interface-dominated Materials (part 2)</b>			
27					Nature's Hierarchical Materials	SE 2		
28								
29								
30								
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.

