

Course of Study Mechanical Engineering and Management (Study Cohort w16)

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	Specialisation Elective	Focus Elective Compulsory	Interdisciplinary complement
Compulsory	Compulsory		

LP	Semester 1	Form	Hrs/wk	Semester 2	Form	Hrs/wk	Semester 3	Form	Hrs/wk	Semester 4	Form	Hrs/wk
1	Robotics			Selected Topics of Management and Law (part 2)			Research Project MEM			Master Thesis		
2	Robotics: Modelling and Control	VL	3	Selection from a catalog								
3	Robotics: Modelling and Control	UE	2									
4				Selected Topics of Materials, Mechatronics, and Product Development and Production (part 2)								
5				Selection from a catalog								
6												
7	Computer Aided Design and Computation			Nonlinear Dynamics								
8	Computer Aided Design and Computation	VL	2	Nonlinear Dynamics	VL	4						
9	Computer Aided Design and Computation	UE	2									
10												
11												
12												
13	Multiphase Materials			Manufacturing with Polymers and Composites - From Molecule to Part			Digital Signal Processing and Digital Filters					
14	Structure and Properties of Composites	VL	2	Manufacturing with Polymers and Composites	VL	2	Digital Signal Processing and Digital Filters	VL	3			
15	Applied Computational Methods for Material Science	POL	3	From Molecule to Composites Part	POL	2	Digital Signal Processing and Digital Filters	HÜ	1			
16												
17												
18												
19	Selected Topics of Management and Law (part 1)			Mechanical Properties			Control Systems Theory and Design					
20	Selection from a catalog			Mechanical Behaviour of Brittle Materials	VL	2	Control Systems Theory and Design	VL	2			
21				Dislocation Theory of Plasticity	VL	2	Control Systems Theory and Design	UE	2			
22	Selected Topics of Materials, Mechatronics, and Product Development and Production (part 1)											
23	Selection from a catalog											
24												
25	Marketing and Communication						Advanced Functional Materials					
26	Business-to-Business Marketing	VL	2				Advanced Functional Materials	VL	2			
27	Intercultural Management and Communication	VL	2									
28	Case Studies of Marketing and Communication	UE	1									
29												
30												
Nontechnical Elective Complementary 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.