

Course of Study Mechanical Engineering and Management (Study Cohort w22)

Sample course plan A Master Mechanical Engineering and Management (IMPMEM) Dual study program

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

Specialisation Product Development and Production, Specialisation Materials

Year	Course Name	Code	Credits	Category	Course Name	Credits	Category	Course Name	Credits	Category
1	Robotics				Structure and properties of fibre-polymer-composites			Research Project IMPMEM		
2	Robotics: Modelling and Control	IV	4		Structure and properties of fibre-polymer-composites	VL	2			Master thesis (dual study program)
3	Robotics: Modelling and Control	PBL	2		Structure and properties of fibre-polymer-composites	HÜ	1			
4					Structure and properties of fibre-polymer-composites	PBL	2			
5										
6										
7	Computer Aided Design and Computation				Practical module 2 (dual study program, Master's degree)					
8	Computer Aided Design and Computation	VL	2		Practical term 2		0			
9	Computer Aided Design and Computation	GÜ	2							
10										
11										
12										
13	Practical module 1 (dual study program, Master's degree)				Practical module 3 (dual study program, Master's degree)					
14	Practical term 1		0		Practical term 3		0			
15										
16										
17					Selected Topics of Mechanical Engineering and Management (Alternative A: 12 CP)					
18					(part 2)					
19					Selection from a catalog					
20										
21										
22										
23	Selected Topics of Mechanical Engineering and Management (Alternative A: 12 CP)				High-Order FEM			Laser Systems and Metallic Materials		
24	Selection from a catalog				High-Order FEM	VL	3	Laser Systems and Process Technologies	VL	2
25					High-Order FEM	HÜ	1	Structural Metallic Materials	VL	2
26										
27										
28										
29	Advanced Functional Materials				Applied Design Methodology in Mechatronics			Interfaces and interface-dominated Materials (part 2)		
30	Advanced Functional Materials	SE	2		Applied Design Methodology in Mechatronics	VL	2	Nature's Hierarchical Materials	SE	2
31					Applied Design Methodology in Mechatronics	PBL	3			
32										
33										
34										
35					Interfaces and interface-dominated Materials (part 1)					
36					Interfaces	VL	2			
37										
38					Processing of fibre-polymer-composites					
39					From Molecule to Composites Part	PBL	2			
40					Processing of fibre-polymer-composites	VL	2			
41										
Business & Management (from catalogue) - 6LP										
Linking theory and practice (dual study program, Master's degree) (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.

