

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

Sample course plan B 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	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	<b>Robotics</b>			<b>Selected Topics of Business Administration (IPM) (part 2)</b>			<b>Research Project MEM</b>			<b>Master Thesis</b>		
2	Robotics: Modelling and Control	VL	3	Human Resource Management and Organization Design	VL	2						
3	Robotics: Modelling and Control	UE	2	Project Management Methods	VL	1						
4												
5				<b>Selected Topics of Materials, Mechatronics, and Product Development and Production (part 2)</b>								
6				Selection from a catalog								
7	<b>Computer Aided Design and Computation</b>			<b>Boundary Element Methods</b>								
8	Computer Aided Design and Computation	VL	2	Boundary Element Methods	VL	2						
9	Computer Aided Design and Computation	UE	2	Boundary Element Methods	HÜ	2						
10												
11												
12												
13	<b>Multiphase Materials</b>			<b>Rapid Production</b>			<b>3D Printing Laboratory</b>					
14	Structure and Properties of Composites	VL	2	Rapid Production	VL	2	3D Printing Laboratory	PR	3			
15	Applied Computational Methods for Material Science	POL	3	Rapid Production	SE	2						
16												
17												
18												
19	<b>Selected Topics of Business Administration (IPM) (part 1)</b>			<b>Manufacturing with Polymers and Composites - From Molecule to Part</b>			<b>Laser Systems and Metallic Materials</b>					
20	Corporate Finance	VL	2	Manufacturing with Polymers and Composites	VL	2	Laser Systems and Process Technologies	VL	2			
21	<b>Selected Topics of Materials, Mechatronics, and Product Development and Production (part 1)</b>			From Molecule to Composites Part	POL	2	Structural Metallic Materials	VL	2			
22	Selection from a catalog											
23												
24	<b>Marketing and Communication</b>			<b>Mechanical Properties</b>			<b>Advanced Functional Materials</b>					
25	Business-to-Business Marketing	VL	2	Mechanical Behaviour of Brittle Materials	VL	2	Advanced Functional Materials	VL	2			
26	Intercultural Management and Communication	VL	2	Dislocation Theory of Plasticity	VL	2						
27	Case Studies of Marketing and Communication	UE	1									
28												
29												
30												
31												

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.