Course of Study Mechatronics (Study Cohort w23)

Legend

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

Sample course plan K Master Mechatronics (IMPMEC) Dual study program

1	**Robotics**	**Practical module 2 (dual study program, Master's degree)**	**Research Project Mechatronics**
2	Robotics: Modelling and Control IV 4	Practical term 2 0	
3	Robotics: Modelling and Control PBL 2		
4			
5			
6			
7	**Vibration Theory**		
8	Vibration Theory IV 4		
9			
10			
11		**Machine Learning and Data Mining**	
12		Machine Learning and Data Mining VL 2	
13	**Finite Elements Methods**	Machine Learning and Data Mining GÜ 2	**Practical module 3 (dual study program, Master's degree)**
14	Finite Element Methods VL 2		Practical term 3 0
15	Finite Element Methods HÜ 2		
16			
17		**Smart Sensors**	
18		Smart Sensors VL 2	
19	**Control Systems Theory and Design**	Smart Sensors Lab PBL 3	
20	Control Systems Theory and Design VL 2		
21	Control Systems Theory and Design GÜ 2		
22			
23			**Intelligent Autonomous Agents and Cognitive Robotics**
24			Intelligent Autonomous Agents and Cognitive Robotics VL 2
25	**Design and Implementation of Software Systems**		Intelligent Autonomous Agents and Cognitive Robotics GÜ 2
26	Design and Implementation of Software Systems VL 2		
27	Design and Implementation of Software Systems PBL 2		
28			
29			**Advanced Machine Learning**
30			Advanced Machine Learning VL 2
31	**Practical module 1 (dual study program, Master's degree)**		Advanced Machine Learning GÜ 2
32	Practical term 1 0		
33			
34			
35			**Image Processing**
36			Image Processing VL 2
37			Image Processing GÜ 2
38			
39			
40			

Business & Management (from catalogue) - 6LP

Linking theory and practice (dual study program, Master's degree) (from catalogue) - 6LP

Master thesis (dual study program)

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