Course of Study Mechatronics (Study Cohort w22)

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

Specialisation Intelligent Systems and Robotics

Sem				
1	**Robotics**	**Practical module 2 (dual study program, Master's degree)**	**Research Project Mechatronics**	**Master thesis (dual study program)**
2	Robotics: Modelling and Control — IV — 4	Practical term 2 — 0		
3	Robotics: Modelling and Control — PBL — 2			
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7	**Vibration Theory**			
8	Vibration Theory — IV — 4			
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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		**Nonlinear Dynamics**		
18		Nonlinear Dynamics — IV — 4		
19	**Control Systems Theory and Design**			
20	Control Systems Theory and Design — VL — 2			
21	Control Systems Theory and Design — GÜ — 2			
22				
23		**Embedded Systems**	**Industrial Process Automation**	
24		Embedded Systems — VL — 3	Industrial Process Automation — VL — 2	
25	**Design and Implementation of Software Systems**	Embedded Systems — GÜ — 1	Industrial Process Automation — GÜ — 2	
26	Design and Implementation of Software Systems — VL — 2	Embedded Systems — PBL — 1		
27	Design and Implementation of Software Systems — PR — 2			
28				
29		**Optimal and Robust Control**	**Mathematical Image Processing**	
30		Optimal and Robust Control — VL — 2	Mathematical Image Processing — VL — 3	
31	**Practical module 1 (dual study program, Master's degree)**	Optimal and Robust Control — GÜ — 2	Mathematical Image Processing — GÜ — 1	
32	Practical term 1 — 0			
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| 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.