

Course of Study Mechatronics (Study Cohort w19)

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

Sample course plan B Bachelor Mechatronics (MECBS)

1	Procedural Programming		Electrical Engineering II: Alternating Current Networks and Basic Devices	Mechanical Engineering: Design (part 1)	Mechanical Engineering: Design (part 2)	Technical Thermodynamics II	Electrical Machines and Actuators
2	Procedural Programming VL 1			Embodiment Design and 3D-CAD VL 2	Team Project Design Methodology PBL 2	Technical Thermodynamics II VL 2	Electrical Machines and Actuators VL 3
3	Procedural Programming HÜ 1		Electrical Engineering II: Alternating Current Networks and Basic Devices VL 3	Mechanical Design Project I PBL 3	Mechanical Design Project II PBL 3	Technical Thermodynamics II HÜ 1	Electrical Machines and Actuators HÜ 2
4	Procedural Programming PR 2		Electrical Engineering II: Alternating Current Networks and Basic Devices GÜ 2			Technical Thermodynamics II GÜ 1	
5				Electrical Engineering III: Circuit Theory and Transients	Production Engineering (part 2)		
6				Circuit Theory VL 3	Production Engineering II VL 2		
7				Circuit Theory GÜ 2	Production Engineering II HÜ 1		
7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Fundamentals of Mechanical Engineering Design		Technical Thermodynamics I	Foundations of Management	Semiconductor Circuit Design
8	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields VL 3		Fundamentals of Mechanical Engineering Design VL 2		Technical Thermodynamics I VL 2	Introduction to Management VL 3	Semiconductor Circuit Design VL 3
9	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields HÜ 1		Fundamentals of Mechanical Engineering Design HÜ 2		Technical Thermodynamics I HÜ 1	Management Tutorial GÜ 2	Semiconductor Circuit Design GÜ 1
10	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields GÜ 2				Technical Thermodynamics I GÜ 1		
11				Production Engineering (part 1)			
12				Production Engineering I VL 2			
13				Production Engineering I HÜ 1			
13	Mathematics I		Mechanics II: Mechanics of Materials	Computer Engineering	Signals and Systems	Introduction to Control Systems	Embedded Systems
14	Linear Algebra I VL 2		Mechanics II VL 2	Computer Engineering VL 3	Signals and Systems VL 3	Introduction to Control Systems VL 2	Embedded Systems VL 3
15	Linear Algebra I GÜ 1		Mechanics II GÜ 2	Computer Engineering GÜ 1	Signals and Systems GÜ 2	Introduction to Control Systems GÜ 2	Embedded Systems GÜ 1
16	Linear Algebra I HÜ 1		Mechanics II HÜ 2				
17	Analysis I VL 2						
18	Analysis I GÜ 1						
19	Analysis I HÜ 1						
20			Mathematics II	Mathematics III	Mathematics IV	Measurement Technology for Mechanical Engineers	Bachelor Thesis
21		Linear Algebra II VL 2	Analysis III VL 2	Complex Functions VL 2	Measurement Technology for Mechanical Engineers VL 2		
22	Mechanics I (Statics)	Linear Algebra II GÜ 1	Analysis III GÜ 1	Complex Functions GÜ 1	Engineering HÜ 1		
23	Mechanics I VL 2	Linear Algebra II HÜ 1	Analysis III HÜ 1	Complex Functions HÜ 1	Measurement Technology for Mechanical Engineers HÜ 1		
24	Mechanics I GÜ 2	Analysis II VL 2	Differential Equations 1 VL 2	Differential Equations 2 VL 2	Engineering PR 2		
25	Mechanics I HÜ 1	Analysis II HÜ 1	Differential Equations 1 GÜ 1	Differential Equations 2 GÜ 1	Practical Course: Measurement and Control Systems		
26		Analysis II GÜ 1	Differential Equations 1 HÜ 1	Differential Equations 2 HÜ 1			
27	Fundamentals of Materials Science (part 1)		Mechanics III (Dynamics)	Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics)			
28	Fundamentals of Materials Science I VL 2		Mechanics III VL 3	Mechanics IV VL 3			
29	Physical and Chemical Basics of Materials Science VL 2	Fundamentals of Materials Science (part 2)	Mechanics III GÜ 2	Mechanics IV GÜ 2			
30		Fundamentals of Materials Science II VL 2	Mechanics III HÜ 1	Mechanics IV HÜ 1			
31							
32							

Non-technical Courses for Bachelors (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.

