

# Course of Study Mechatronics (Study Cohort w18)

		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)	Form Hrs/wk	Semester 3	Form Hrs/wk	Semester 4	Form Hrs/wk	Semester 5	Form Hrs/wk	Semester 6	Form Hrs/wk
1	<b>Procedural Programming</b>	<b>Electrical Engineering II: Alternating Current Networks and Basic Devices</b>	<b>Mechanical Engineering: Design (part 1)</b>	<b>Mechanical Engineering: Design (part 2)</b>	<b>Technical Thermodynamics II</b>	<b>Electrical Machines and Actuators</b>			
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	<b>Electrical Engineering III: Circuit Theory and Transients</b>	<b>Production Engineering (part 2)</b>	Technical Thermodynamics II GÜ 1				
5			Circuit Theory VL 3	Production Engineering II VL 2					
6			Circuit Theory GÜ 2	Production Engineering II HÜ 1					
7	<b>Electrical Engineering I: Direct Current Networks and Electromagnetic Fields</b>	<b>Fundamentals of Mechanical Engineering Design</b>		<b>Technical Thermodynamics I</b>	<b>Foundations of Management</b>	<b>Semiconductor Circuit Design</b>			
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		<b>Production Engineering (part 1)</b>	Technical Thermodynamics I GÜ 1					
11			Production Engineering I VL 2						
12			Production Engineering I HÜ 1						
13	<b>Mathematics I</b>	<b>Mechanics II: Mechanics of Materials</b>	<b>Computer Engineering</b>	<b>Signals and Systems</b>	<b>Introduction to Control Systems</b>	<b>Bachelor Thesis</b>			
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				
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				
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		<b>Mathematics II</b>	<b>Mathematics III</b>	<b>Mathematics IV</b>	<b>Measurement Technology for Mechanical Engineers</b>				
21	<b>Mechanics I (Statics)</b>	Linear Algebra II VL 2	Analysis III VL 2	Complex Functions VL 2	Measurement Technology for Mechanical VL 2				
22	Mechanics I VL 2	Linear Algebra II GÜ 1	Analysis III GÜ 1	Complex Functions GÜ 1	Engineering HÜ 1				
23	Mechanics I GÜ 2	Linear Algebra II HÜ 1	Analysis III HÜ 1	Complex Functions HÜ 1	Measurement Technology for Mechanical HÜ 1				
24	Mechanics I HÜ 1	Analysis II VL 2	Differential Equations 1 VL 2	Differential Equations 2 VL 2	Engineering PR 2				
25		Analysis II HÜ 1	Differential Equations 1 GÜ 1	Differential Equations 2 GÜ 1	Practical Course: Measurement and Control Systems HÜ 1				
26		Analysis II GÜ 1	Differential Equations 1 HÜ 1	Differential Equations 2 HÜ 1					
27	<b>Fundamentals of Materials Science (part 1)</b>	<b>Fundamentals of Materials Science (part 2)</b>	<b>Mechanics III (Hydrostatics, Kinematics, Kinetics I)</b>	<b>Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)</b>	<b>Simulation and Design of Mechatronic Systems</b>				
28	Fundamentals of Materials Science I VL 2	Fundamentals of Materials Science II VL 2	Mechanics III VL 3	Mechanics IV VL 3	Simulation and Design of Mechatronic Systems VL 2				
29	Physical and Chemical Basics of Materials Science VL 2		Mechanics III GÜ 2	Mechanics IV GÜ 2	Simulation and Design of Mechatronic Systems HÜ 1				
30			Mechanics III HÜ 1	Mechanics IV HÜ 1	Simulation and Design of Mechatronic Systems PR 1				
31									
32									

Nontechnical Complementary 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.

