

Course of Study General Engineering Science (German program) (Study Cohort w14)

Sample course plan - Bachelor General Engineering Science (German program) (AIWBS)
Specialisation Biomedical Engineering

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	FormHrs/wk	Semester 2	FormHrs/wk	Semester 3	FormHrs/wk	Semester 4	FormHrs/wk	Semester 5	FormHrs/wk	Semester 6	FormHrs/wk		
1	Physics for Engineers (part 1)		Electrical Engineering II: Alternating Current Networks and Basic Devices		Technical Thermodynamics II		Fundamentals of Materials Science (part 2)		Introduction to Control Systems		Foundations of Management			
2	Physics for Engineers	VL 2	Electrical Engineering II: Alternating Current Networks and Basic Devices		Technical Thermodynamics II	VL 2	Fundamentals of Materials Science II	VL 2	Introduction to Control Systems	VL 2	Introduction to Management	VL 4		
3	Physics for Engineers	UE 1			Technical Thermodynamics II	HÜ 1	Introduction into Medical Technology and Systems		Introduction to Control Systems	UE 2	Project Entrepreneurship	POL 2		
4					Technical Thermodynamics II	UE 1		Introduction into Medical Technology and Systems	VL 2					
5	Chemistry							Introduction into Medical Technology and Systems	POL 4					
6	Chemistry I	VL 2												
7	Chemistry II	VL 2	Fundamentals of Mechanical Engineering Design		Computer Engineering		MED I: Medical Basics I		Mechanical Engineering: Design (part 1)		Mechanical Engineering: Design (part 2)			
8	Chemistry I	HÜ 1			Computer Engineering	VL 3		Embodiment Design and 3D-CAD	VL 2	Team Project Design Methodology	POL 2	Mechanical Design Project II	TT 3	
9	Chemistry II	HÜ 1			Computer Engineering	UE 1		Mechanical Design Project I	TT 3					
10														
11	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Fundamentals of Mechanical Engineering Design		Mathematics III		Signals and Systems		BIO I: Implants and Testing (part 1)		BIO I: Implants and Testing (part 2)			
12	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	VL 3							Introduction to Radiology and Radiation Therapy	VL 2	Implants and Fracture Healing	VL 2	Experimental Methods in Biomechanics	2
13	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	UE 2							Introduction to Anatomy	VL 2				
14	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	UE 2												
15			Technical Thermodynamics I		Analysis III		MED II: Medical Basics II (part 1)		MED II: Medical Basics II (part 1)		MED II: Medical Basics II (part 2)			
16									Introduction to Biochemistry and Molecular Biology	VL 2	Introduction to Physiology	VL 2		
17	Mathematics I													
18	Linear Algebra I	VL 2												
19	Linear Algebra I	UE 1	Mechanics II: Mechanics of Materials		Differential Equations 1		Numerical Mathematics I		Bachelor Thesis					
20	Linear Algebra I	HÜ 1								Numerical Mathematics I	VL 2			
21	Analysis I	VL 2								Numerical Mathematics I	UE 2			
22	Analysis I	UE 1												
23	Analysis I	HÜ 1	Mechanics II		Differential Equations 1		Fluid Dynamics		Heat Transfer					
24										Fluid Mechanics	VL 3	Heat Transfer	VL 3	
25										Fluid Mechanics	HÜ 1	Heat Transfer	HÜ 1	
26														
27	Mechanics I (Statics)		Mathematics II		Mechanics III		Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)		Measurement Technology for Mechanical and Process Engineers					
28	Mechanics I	VL 2								Mechanics III	VL 3	Measurement Technology for Mechanical and Process Engineers	VL 2	
29	Mechanics I	UE 2								Mechanics III	UE 2	Measurement Technology for Mechanical and Process Engineers	HÜ 1	
30	Mechanics I	HÜ 1								Mechanics III	HÜ 1	Measurement Technology for Mechanical and Process Engineers	PR 2	
31			Linear Algebra II		Fundamentals of Materials Science I		Programming in C		Control Systems					
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35			Analysis II		Physical and Chemical Basics of Materials Science									
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39			Analysis II		Fundamentals of Materials Science II									
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	Programming in C	PR	1
35	Physics for Engineers (part 2)		
36	Physics-Lab for ET/IIW-Engineers	PR	1

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.