

Course of Study General Engineering Science (German program) (Study Cohort w15)

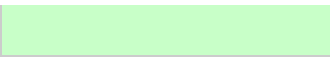
Sample course plan A Bachelor General Engineering Science (German program) (AIWBS)
Specialisation Mechanical Engineering, Focus Biomechanics

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

	Programming in C	PR	1
35	Physics for Engineers (part 2)		
36	Physics-Lab for ET/ AIW/ GES	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.