Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w17)

Sample course plan - Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))

Specialisation Mechanical Engineering, Focus Biomechanics

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