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

Sample course plan A Bachelor General Engineering Science (English program, 7 semester) (GESBS(7)) Specialisation Mechanical Engineering, Focus Energy Systems

Legend:			
Core qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
Core qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

LP	Semester 1 Form	s/wskemester 2 Forthr	s/wskemester 3 Forhhr	s/wskmester 4 Formir	s/wskmester 5 Formirs	/www.mester 6 Formirs	/w/kemester 7 Formirs
1 2	Chemistry (GES) Chemistry I VL 2	Technical Thermodynamics I	Technical Thermodynamics II	Mechanical Engineering: Design (part 2)	Introduction to Control Systems	Foundations of Management	Advanced Internship AIW/ GES
3	Chemistry II VL 2	Technical VL 2 Thermodynamics I	Technical VL 2 Thermodynamics II	Team Project Design PBL2 Methodology	Introduction to VL 2 Control Systems	Introduction to VL 3 Management	
	Chemistry I HÜ 1 Chemistry II HÜ 1	Technical HÜ 1 Thermodynamics I	Technical HÜ 1 Thermodynamics II	Mechanical Design PBL3 Project II	Introduction to UE 2 Control Systems	Management Tutorial HÜ 2	
4 5		Technical UE 1 Thermodynamics I	Technical UE 1 Thermodynamics II	Fundamentals of Materials Science (part 2)			
				Fundamentals of VL 2 Materials Science II			
6				Fluid Dynamics			
7 8 9	Linear Algebra Linear Algebra VL 4	Mathematical Analysis Mathematical Analysis VL 4	Mathematics III Analysis III VL 2	Fluid Mechanics VL 3 Fluid Mechanics HÜ 2	Measurement Technology for Mechanical and	Advanced Mechanical Engineering Design (part	
9	Linear Algebra HÜ 2 Linear Algebra UE 2	Mathematical Analysis HÜ 2 Mathematical Analysis UE 2	Analysis III UE 1 Analysis III HÜ 1		Process Engineers Measurement VL 2	Advanced Mechanical VL 2	
	Elliedi Algebra GE 2	Matternatical Analysis OE 2	Differential Equations VL 2		Technology for Mechanical and Process Engineers	Engineering Design II Advanced Mechanical HÜ 2 Engineering Design II	
10 11			Differential Equations UE 1		Measurement HÜ 1 Technology for Mechanical and	Reciprocating Machinery	
12			Differential Equations HÜ 1	Mechanics IV (Kinetics II, Oscillations, Analytical	Process Engineers Practical Course: PR 2	(part 2) Internal Combustion VL 2 Engines I	
				Mechanics, Multibody Systems)	Measurement and Control Systems	Internal Combustion HÜ 1 Engines I	
13 14				Mechanics IV VL 3 Mechanics IV UE 2	Advanced Mechanical Engineering Design (part	Electrical Machines and	
15	Electrical Engineering I	Electrical Engineering II	Mechanics III (GES) Mechanics III HÜ 1	Mechanics IV HÜ 1	1) Advanced Mechanical VL 2	Actuators Electrical Machines VL 3	
	Electrical Engineering VL 3 I Electrical Engineering UE 2	Electrical Engineering VL 3 II Electrical Engineering UE 2	Mechanics III UE 2		Engineering Design I Advanced Mechanical HÜ 2	and Actuators Electrical Machines HÜ 2	
16	I	II	Mechanics III VL 3		Engineering Design I	and Actuators	
17					Heat Transfer Heat Transfer VL 3		
18 19				Signals and Systems Signals and Systems VL 3	Heat Transfer HÜ 2		Bachelor Thesis
20 21	Mechanics I (GES)	Mechanics II (GES)	Computer Engineering	Signals and Systems UE 2		Renewables and Energy Systems	- 1.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3
22			Computer Engineering VL 3		Reciprocating Machinery	Renewable Energy VL 2	

Mechanics I HÜ 3	Mechanics II HÜ 2	Computer Engineering UE 1	(part 1) Fundamentals of VL 1 Reciprocating Engines and Turbomachinery - Part Reciprocating Engines Fundamentals of HÜ 1 Reciprocating Engines and Turbomachinery - Part Reciprocating Engines	Energy Systems and VL 2 Energy Industry Power Industry VL 1 Renewable Energy UE 1			
24 25 26			Computational Fluid Dynamics I Computational Fluid VL 2				
Programming in C Programming in C Programming in C Programming in C PR 1	Fundamentals of Mechanical Engineering (GES) Fundamentals of VL 2	Mechanical Engineering: Design (part 1) Embodiment Design VL 2 and 3D-CAD	Dynamics I Computational Fluid HÜ 2 Dynamics I				
Physics for Engineers (GES)	Mechanical Engineering	Mechanical Design PBL3 Project I					
30 Physics for Engineers VL 2 31 Physics for Engineers UE 1 32	Fundamentals of UE 2 Mechanical Engineering	Fundamentals of Materials Science (part 1)		_			
33		Fundamentals of VL 2 Materials Science I Physical and Chemical VL 2 Basics of Materials Science					
Nontechnical Complementary	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.