

# Course of Study General Engineering Science (English program) (Study Cohort w14)

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

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	<b>Chemistry (GES)</b>		<b>Physics for Engineers (GES) (part 2)</b>		<b>Technical Thermodynamics II</b>		<b>Mechanical Engineering: Design (part 2)</b>		<b>Introduction to Control Systems</b>		<b>Foundations of Management</b>				
2	Chemistry I	VL 2	Physics-Lab for ET/IIW-Engineers	PR 1	Technical Thermodynamics II	VL 2	Team Project Design Methodology	POL 2	Introduction to Control Systems	VL 2	Introduction to Management	VL 4			
3	Chemistry II	VL 2	<b>Fundamentals of Mechanical Engineering Design</b>	Fundamentals of Mechanical Engineering Design	Technical Thermodynamics II	HÜ 1	Mechanical Design Project II	TT 3	Introduction to Control Systems	UE 2	Project Entrepreneurship	POL 2			
4	Chemistry I	HÜ 1			Technical Thermodynamics II	UE 1	<b>Fundamentals of Materials Science (part 2)</b>	Fundamentals of Materials Science II	VL 2	<b>Measurement Technology for Mechanical and Process Engineers</b>	Measurement Technology for Mechanical and Process Engineers	Measurement Technology for Mechanical and Process Engineers	HÜ 1		
5	Chemistry II	HÜ 1			Fundamentals of Mechanical Engineering Design	HÜ 2			<b>Advanced Mechanical Engineering Design (part 2)</b>					Advanced Mechanical Engineering Design II	VL 2
6	<b>Linear Algebra</b>	VL 4			Fundamentals of Mechanical Engineering Design	HÜ 2									Computer Engineering
7							Linear Algebra	HÜ 2	Computer Engineering					UE 1	
8	Linear Algebra	UE 2			<b>Technical Thermodynamics I</b>	Technical Thermodynamics I	VL 2	Signals and Systems							HÜ 1
9	Linear Algebra	UE 2							Technical Thermodynamics I					HÜ 1	
10			Technical Thermodynamics I	VL 2	<b>Mathematics III</b>	Analysis III	VL 2	Fluid Dynamics							Fluid Mechanics
11	Technical Thermodynamics I	HÜ 1	Analysis III	UE 1					HÜ 1	Fluid Mechanics	HÜ 1				
12	Technical Thermodynamics I	UE 1			Analysis III	HÜ 1	Differential Equations 1	VL 2				Computational Fluid Dynamics I	VL 2		
13	<b>Electrical Engineering I</b>	VL 3	Mathematical Analysis	VL 4					Differential Equations 1	UE 1	Computational Fluid Dynamics I			HÜ 2	
14					Electrical Engineering I	UE 2	Mathematical Analysis	HÜ 2				Differential Equations 1	HÜ 1		
15	Electrical Engineering I	UE 2	Mathematical Analysis	UE 2	Differential Equations 1	HÜ 1			<b>Computational Fluid Dynamics I</b>	Computational Fluid Dynamics I	VL 2				
16	<b>Mechanics I (GES)</b>	VL 2					Mathematical Analysis	UE 2				Differential Equations 1	HÜ 1	Computational Fluid Dynamics I	HÜ 2
17			Mechanics I	HÜ 3	<b>Electrical Engineering II</b>	Electrical Engineering II			VL 3	Mechanics III	HÜ 1				
18	Mechanics I	HÜ 3	Electrical Engineering II	UE 2			Mechanics III	UE 2				Mechanics III	VL 3		
19	<b>Physics for Engineers (GES) (part 1)</b>	VL 2			Electrical Engineering II	UE 2			Mechanics III	VL 3	<b>Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)</b>			Mechanics IV	VL 3
20			Physics for Engineers	UE 1			Mechanics II (GES)	Mechanics II				VL 2	Fundamentals of Materials Science (part 1)		
21	Physics for Engineers	UE 1	Mechanics II	HÜ 2	Fundamentals of Materials Science I	VL 2			Production Process Organization	VL 2					
22	<b>Mechanics I (GES)</b>	VL 2					Mechanics II	HÜ 2			Fundamentals of Materials Science I	VL 2	Quality Management	VL 2	
23			Mechanics I	HÜ 3	Fundamentals of Materials Science I	VL 2			Physical and Chemical Basics of	VL 2					Heat Transfer
24	Mechanics I	HÜ 3	Materials Science	HÜ 2			Heat Transfer	HÜ 1							
25	<b>Mechanics I (GES)</b>	VL 2			Materials Science	HÜ 2			Heat Transfer	HÜ 1	<b>Heat Transfer</b>	Heat Transfer	VL 3		
26			Mechanics I	HÜ 3			Materials Science	HÜ 2						Heat Transfer	HÜ 1
27	<b>Physics for Engineers (GES) (part 1)</b>	VL 2	Materials Science	HÜ 2	Heat Transfer	HÜ 1			<b>Fundamentals of Production and Quality Management</b>	Production Process Organization	VL 2				
28							Physics for Engineers	UE 1				Materials Science	HÜ 2	Heat Transfer	HÜ 1
29	Physics for Engineers	UE 1	Materials Science	HÜ 2	Heat Transfer	HÜ 1	Reciprocating Machinery (part 1)	Fundamentals of Reciprocating	VL 1						
30	<b>Mechanics I (GES)</b>	VL 2								Materials Science	HÜ 2	Heat Transfer	HÜ 1	Reciprocating Machinery (part 1)	Fundamentals of Reciprocating
31			Mechanics I	HÜ 3	Materials Science	HÜ 2	Heat Transfer	HÜ 1	Engines and Turbomachinery - Part						
32	Mechanics I	HÜ 3	Materials Science	HÜ 2						Heat Transfer	HÜ 1	Engines and Turbomachinery - Part	Reciprocating Engines		

				reciprocating engines Fundamentals of Reciprocating Engines and Turbomachinery - Part Reciprocating Engines HÜ 1
33				
34				
35	<b>Programming in C</b>		<b>Advanced Mechanical Engineering Design (part 1)</b>	
36	Programming in C VL 1		Advanced Mechanical Engineering Design I VL 2	
	Programming in C PR 1		Advanced Mechanical Engineering Design I HÜ 2	

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.