

# Course of Study General Engineering Science (English program) (Study Cohort w15)

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

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/ AIW/ GES	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	Semiconductor Circuit Design	Semiconductor Circuit Design	VL 3					
6	<b>Linear Algebra</b>	VL 4			Computer Engineering	VL 3									Advanced Mechanical Engineering Design II				HÜ 2	Semiconductor Circuit Design	UE 1		
7							Linear Algebra	HÜ 2	<b>Signals and Systems</b>					Signals and Systems		VL 3	Practical Course: Measurement and Control Systems	PR 2					
8	Linear Algebra	UE 2			<b>Technical Thermodynamics I</b>	Technical Thermodynamics I	VL 2	Signals and Systems							HÜ 1								
9	<b>Electrical Engineering I</b>	VL 3							Mathematical Analysis					VL 4		Analysis III	VL 2	Fluid Dynamics	Fluid Mechanics	VL 3	Simulation of Dynamic Systems and Reliability	Simulation of Dynamic Systems	VL 2
10			Mathematical Analysis	HÜ 2	<b>Mathematics III</b>	Analysis III	UE 1	Fluid Mechanics							HÜ 1								
11			Mathematical Analysis	UE 2						Differential Equations 1	VL 2	UE 1	Fluid Mechanics										
12	Mathematical Analysis	UE 2	Differential Equations 1	HÜ 1	Differential Equations 1	UE 1	Reliability of Dynamic Systems	UE 1	Differential Equations 2					VL 2									
13	<b>Electrical Engineering I</b>	UE 2								Mathematical Analysis	UE 2	Differential Equations 1	HÜ 1		Reliability of Dynamic Systems	UE 1	Differential Equations 2	UE 1					
14			<b>Mechanics I (GES)</b>	VL 2	Mathematical Analysis	UE 2	Differential Equations 1	HÜ 1	Reliability of Dynamic Systems					UE 1					Differential Equations 2	HÜ 1			
15	Mechanics I	HÜ 3								<b>Electrical Engineering II</b>	Electrical Engineering II	VL 3	Mechanics III (GES)		Mechanics III	HÜ 1	Electrical Engineering III: Circuit Theory and Transients	Circuit Theory			VL 3		
16	Mechanics I	HÜ 3	Electrical Engineering II	UE 2	Mechanics III	UE 2	Mechanics III	VL 3	Circuit Theory					UE 2									
17	<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	Bachelor Thesis					
18			Physics for Engineers	UE 1	<b>Mechanics II (GES)</b>	Mechanics II	VL 2	Fundamentals of Production and Quality Management	Production Process Organization					VL 2									
19	Physics for Engineers	UE 1	Mechanics II	HÜ 2						Fundamentals of Materials Science (part 1)	Fundamentals of Materials Science I	VL 2	Quality Management		VL 2								
20	<b>Mechanics I (GES)</b>	VL 2			Mechanics II	HÜ 2	Fundamentals of Materials Science (part 1)	Physical and Chemical Basics of	VL 2					Materials Science									
21			Mechanics I	HÜ 3						Mechanics II	HÜ 2	Fundamentals of Materials Science (part 1)	Physical and Chemical Basics of		VL 2	Materials Science							
22	Mechanics I	HÜ 3	Mechanics II	HÜ 2	Fundamentals of Materials Science (part 1)	Physical and Chemical Basics of	VL 2	Materials Science															
23	<b>Physics for Engineers (GES) (part 1)</b>	VL 2							Mechanics II	HÜ 2	Fundamentals of Materials Science (part 1)	Physical and Chemical Basics of	VL 2	Materials Science									
24			Physics for Engineers	UE 1	Mechanics II	HÜ 2	Fundamentals of Materials Science (part 1)	Physical and Chemical Basics of							VL 2	Materials Science							
25	Physics for Engineers	UE 1	Mechanics II	HÜ 2					Fundamentals of Materials Science (part 1)	Physical and Chemical Basics of	VL 2	Materials Science											
26	<b>Physics for Engineers (GES) (part 1)</b>	VL 2			Mechanics II	HÜ 2	Fundamentals of Materials Science (part 1)	Physical and Chemical Basics of					VL 2	Materials Science									
27			Physics for Engineers	UE 1					Mechanics II	HÜ 2	Fundamentals of Materials Science (part 1)	Physical and Chemical Basics of			VL 2	Materials Science							
28	Physics for Engineers	UE 1	Mechanics II	HÜ 2	Fundamentals of Materials Science (part 1)	Physical and Chemical Basics of	VL 2	Materials Science															
29	<b>Physics for Engineers (GES) (part 1)</b>	VL 2							Mechanics II	HÜ 2	Fundamentals of Materials Science (part 1)	Physical and Chemical Basics of	VL 2	Materials Science									
30			Physics for Engineers	UE 1	Mechanics II	HÜ 2	Fundamentals of Materials Science (part 1)	Physical and Chemical Basics of							VL 2	Materials Science							
31	Physics for Engineers	UE 1	Mechanics II	HÜ 2					Fundamentals of Materials Science (part 1)	Physical and Chemical Basics of	VL 2	Materials Science											
32	<b>Physics for Engineers (GES) (part 1)</b>	VL 2			Mechanics II	HÜ 2	Fundamentals of Materials Science (part 1)	Physical and Chemical Basics of					VL 2	Materials Science									
33			Physics for Engineers	UE 1					Mechanics II	HÜ 2	Fundamentals of Materials Science (part 1)	Physical and Chemical Basics of			VL 2	Materials Science							

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
		Programming in C	PR	1	Advanced Mechanical Engineering Design I

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.