

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

Sample course plan - Bachelor General Engineering Science (English program) (GESBS)  
Specialisation Energy and Environmental Engineering

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>Foundations of Management</b>		<b>Introduction to Control Systems</b>		<b>Thermal Separation Processes (part 2)</b>	
	Chemistry I	VL 2	Physics-Lab for ET/ AIW/ GES	PR 1	Technical Thermodynamics II	VL 2	Introduction to Management	VL 4	Introduction to Control Systems	VL 2	Separation Processes	PR 1
2	Chemistry II	VL 2			Technical Thermodynamics II	HÜ 1	Project Entrepreneurship	POL 2	Introduction to Control Systems	UE 2	<b>Environmental Assessment and Environmental Technology (part 2)</b>	
3	Chemistry I	HÜ 1	<b>Fundamentals of Mechanical Engineering Design</b>		Technical Thermodynamics II	UE 1					Environmental Assessment	VL 2
4	Chemistry II	HÜ 1									Environmental Assessment	UE 1
5											Practical Exercise Environmental Technology	PR 1
6											<b>Fundamentals of Materials Science (part 2)</b>	
7	<b>Linear Algebra</b>				<b>Computer Engineering</b>		<b>Mechanical Engineering: Design (part 2)</b>		<b>Heat and Mass Transfer</b>		Fundamentals of Materials Science II	VL 2
8	Linear Algebra	VL 4			Computer Engineering	VL 3	Team Project Design Methodology	POL 2	Heat and Mass Transfer	VL 2	<b>Particle Technology and Solids Process Engineering</b>	
9	Linear Algebra	HÜ 2	<b>Technical Thermodynamics I</b>		Computer Engineering	UE 1	Mechanical Design Project II	TT 3	Heat and Mass Transfer	UE 1	Particle Technology I	VL 2
10	Linear Algebra	UE 2	Technical Thermodynamics I	VL 2							Particle Technology I	UE 1
11			Technical Thermodynamics I	HÜ 1							Particle Technology I	PR 2
12			Technical Thermodynamics I	UE 1								
13					<b>Mathematics III</b>		<b>Fundamentals of Fluid Mechanics</b>				<b>Thermal Separation Processes (part 1)</b>	
14					Analysis III	VL 2	Fundamentals of Fluid Mechanics	VL 2			Thermal Separation Processes	VL 3
15	<b>Electrical Engineering I</b>		<b>Mathematical Analysis</b>		Analysis III	UE 1					Thermal Separation Processes	UE 2
16	Electrical Engineering I	VL 3	Mathematical Analysis	VL 4	Analysis III	HÜ 1	<b>Electrical Machines</b>				Thermal Separation Processes	HÜ 1
17	Electrical Engineering I	UE 2	Mathematical Analysis	HÜ 2	Differential Equations 1	VL 2	Electrical Machines	VL 3				
18			Mathematical Analysis	UE 2	Differential Equations 1	UE 1	Electrical Machines	HÜ 2				
19			Mathematical Analysis	UE 2	Differential Equations 1	HÜ 1					<b>Gas and Steam Power Plants</b>	
20											Gas and Steam Power Plants	VL 3
21	<b>Mechanics I (GES)</b>				<b>Mechanics III (GES)</b>						Gas and Steam Power Plants	HÜ 2
22	Mechanics I	VL 2			Mechanics III	HÜ 1	<b>Renewables and Energy Systems</b>					
23	Mechanics I	HÜ 3	<b>Electrical Engineering II</b>		Mechanics III	UE 2	Renewable Energy	VL 2			<b>Environmental Assessment and Environmental Technology (part 1)</b>	
24			Electrical Engineering II	VL 3	Mechanics III	VL 3	Energy Systems and Energy Industry	VL 2			Environmental Technology	VL 2
25			Electrical Engineering II	UE 2			Power Industry	VL 1				
26							Renewable Energy	UE 1			<b>Fundamentals of Materials Science (part 1)</b>	
27	<b>Physics for Engineers (GES) (part 1)</b>				<b>Mechanical Engineering: Design (part 1)</b>						Fundamentals of Materials Science I	VL 2
28	Physics for Engineers	VL 2			Embodiment Design and 3D-CAD	VL 2					Physical and Chemical Basics of Materials Science	VL 2
29	Physics for Engineers	UE 1	<b>Mechanics II (GES)</b>		Mechanical Design Project I	TT 3						
30			Mechanics II	VL 2							<b>Measurement Technology for Mechanical and Process Engineers</b>	
31			Mechanics II	HÜ 2	<b>Introduction into Energy and Environmental Engineering</b>						Measurement Technology for	VL 2
32					Introduction to Energy and	POL 4					Mechanical and Process Engineers	
					Environmental Engineering							
					Physical Lab for ET/ AIW/ GES	PR 1						

33			Physics-Lab for V1/ B1/ E1	PR 2		measurement technology for	HU 1
34						Mechanical and Process Engineers	
35						Practical Course: Measurement and	PR 2
36						Control Systems	
			<b>Programming in C</b>				
			Programming in C	VL 1			
			Programming in C	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.