

Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w20)

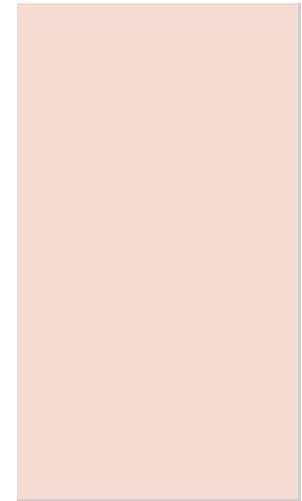
Sample course plan C Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))
Specialisation Mechanical Engineering, Focus Product Development and Production

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 hrs/Week	Semester 2	Form hrs/Week	Semester 3	Form hrs/Week	Semester 4	Form hrs/Week	Semester 5	Form hrs/Week	Semester 6	Form hrs/Week	Semester 7	Form hrs/Week
1	Chemistry Chemistry I+II Chemistry I+II	VL 4	Electrical Engineering II: Alternating Current Networks and Basic Devices Electrical Engineering II: Alternating Current Networks and Basic Devices Electrical Engineering II: Alternating Current Networks and Basic Devices	VL 3	Technical Thermodynamics II Technical Thermodynamics II Technical Thermodynamics II Technical Thermodynamics II	VL 2	Signals and Systems Signals and Systems Signals and Systems	VL 3	Introduction to Control Systems Introduction to Control Systems Introduction to Control Systems	VL 2	Foundations of Management Introduction to Management Management Tutorial	VL 3	Advanced Internship AIW/GES	
2		HÜ 2		UE 2		HÜ 1		UE 2		UE 2		UE 2		
3														
4														
5														
6														
7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields Electrical Engineering I: Direct Current Networks and Electromagnetic Fields Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	VL 3	Fundamentals of Mechanical Engineering Design Fundamentals of Mechanical Engineering Design Fundamentals of Mechanical Engineering Design	VL 2	Mathematics III Analysis III Analysis III Analysis III Differential Equations 1 Differential Equations 1 Differential Equations 1	VL 2	Fluid Dynamics Fluid Mechanics Fluid Mechanics	VL 3	Measurement Technology for Mechanical Engineers Measurement Technology for Mechanical Engineering Measurement Technology for Mechanical Engineering Practical Course: Measurement and Control Systems	VL 2	Integrated Product Development and Lightweight Design Integrated Product Development I Development of Lightweight Design Products CAE-Team Project	VL 2		
8		UE 2		UE 1		UE 1		UE 1		UE 1		PBL2		
9														
10														
11														
12														
13	Mathematics I Linear Algebra I Linear Algebra I Linear Algebra I Analysis I Analysis I Analysis I	VL 2	Technical Thermodynamics I Technical Thermodynamics I Technical Thermodynamics I Technical Thermodynamics I	VL 2	Mechanics III (Dynamics) Mechanics III Mechanics III Mechanics III	VL 3	Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics) Mechanics IV Mechanics IV Mechanics IV	VL 3	Advanced Mechanical Design Project Advanced Mechanical Design Project	PBL4	Fundamentals of Production and Quality Management Production Process Organization Quality Management	VL 2		
14		UE 1		HÜ 1		UE 1		UE 2		UE 2				
15		HÜ 1		HÜ 1		HÜ 1		HÜ 1		HÜ 1				
16		VL 2		UE 1		UE 1		UE 2		UE 2				
17		VL 2		UE 1		UE 1		HÜ 1		HÜ 1				
18		UE 1		HÜ 1		HÜ 1		HÜ 1		HÜ 1				
19	Mechanics I (Statics) Mechanics I Mechanics I Mechanics I	VL 2	Mechanics II: Mechanics of Materials Mechanics II Mechanics II Mechanics II	VL 2	Advanced Mechanical Engineering Design (part 1) Advanced Mechanical Engineering Design I Advanced Mechanical Engineering Design I	VL 2	Advanced Mechanical Engineering Design (part 2) Advanced Mechanical Engineering Design II Advanced Mechanical Engineering Design II	VL 2	Production Engineering (part 1) Production Engineering I Production Engineering I	VL 2	Production Engineering (part 2) Production Engineering II Production Engineering II	VL 2	Bachelor Thesis	
20		UE 2		UE 2		UE 2		UE 2		HÜ 1		HÜ 1		
21		UE 2		HÜ 2		HÜ 2		HÜ 2		HÜ 2				
22		HÜ 1												

23			Engineering Design I	Mechanical Engineering: Design (part 2)	Production Technology
24			Mechanical Engineering: Design (part 1)	Team Project Design Methodology PBL2	Forming and Cutting Technology VL 2
			Embodiment Design and 3D-CAD VL 2	Mechanical Design Project II PBL3	Forming and Cutting Technology HÜ 1
25			Mechanical Design Project I PBL3	Fundamentals of Materials Science (part 2)	Fundamentals of Machine Tools VL 2
26		Mathematics II		Fundamentals of Materials Science II VL 2	Fundamentals of Machine Tools HÜ 1
		Linear Algebra II VL 2			
		Linear Algebra II UE 1			
		Linear Algebra II HÜ 1			
27	Programming in C	Analysis II VL 2	Fundamentals of Materials Science (part 1)		
28	Programming in C VL 1	Analysis II HÜ 1	Fundamentals of Materials Science I VL 2		Computer Engineering
	Programming in C PR 1	Analysis II UE 1	Physical and Chemical Basics of Materials Science VL 2		Computer Engineering VL 3
29	Physics for Engineers (AIW)				Computer Engineering UE 1
30	Physics for Engineers VL 2				
31	Physics for Engineers UE 1				
32					
33					



Non-technical 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.