

# Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w21)

Sample course plan A Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))

Specialisation Mechanical Engineering, Focus Product Development and Production

1	Chemistry													
2	Chemistry I+II	VL 4	Electrical Engineering II: Alternating Current Networks and Basic Devices		Technical Thermodynamics II	VL 2	Signals and Systems	VL 3	Introduction to Control Systems	VL 2	Introduction to Management	VL 3	Advanced Internship AIW/ ES:	SE 1
3	Chemistry I+II	HÜ 2	Electrical Engineering II: Alternating Current Networks and Basic Devices	VL 3	Technical Thermodynamics II	HÜ 1	Signals and Systems	GÜ 2	Introduction to Control Systems	GÜ 2	Management Tutorial	GÜ 2	Preparation	
4			Electrical Engineering II: Alternating Current Networks and Basic Devices	GÜ 2									Advanced Intenship AIW/ ES: Internship-accompanying Seminar	SE 1
5														
6														
7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Fundamentals of Mechanical Engineering Design		Mathematics III		Fluid Dynamics		Measurement Technology for Mechanical Engineers		Digital Product Development and Lightweight Design			
8	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	VL 3	Fundamentals of Mechanical Engineering Design	VL 2	Analysis III	VL 2	Fluid Mechanics	VL 3	Measurement Technology for Mechanical Engineering	VL 2	Digital Product Development	VL 2		
9	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields				Analysis III	GÜ 1	Fluid Mechanics	HÜ 2	Measurement Technology for Mechanical Engineering		Development of Lightweight Design	VL 2		
10	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	GÜ 2	Fundamentals of Mechanical Engineering Design	HÜ 2	Differential Equations 1	VL 2			Measurement Technology for Mechanical Engineering	PR 2	Products			
11					Differential Equations 1	GÜ 1			Engineering		CAE-Team Project	PBL 2		
12					Differential Equations 1	HÜ 1			Practical Course: Measurement and Control Systems	PR 2				
13	Mathematics I		Technical Thermodynamics I				Computational Mechanics		Advanced Mechanical Design Project		Production Engineering			
14	Linear Algebra I	VL 2	Technical Thermodynamics I	VL 2			Computational Multibody Dynamics	IV 2	Advanced Mechanical Design Project	PBL 4	Production Engineering I	VL 2		
15	Linear Algebra I	GÜ 1	Technical Thermodynamics I	HÜ 1			Computational Mechanics	GÜ 2			Production Engineering II	VL 2		
16	Linear Algebra I	HÜ 1	Technical Thermodynamics I	GÜ 1	Engineering Mechanics III (Dynamics)		Computational Stuctural Mechanics	IV 2			Production Engineering II	HÜ 1		
17	Analysis I	VL 2			Engineering Mechanics III	VL 3					Production Engineering I	HÜ 1		
18	Analysis I	GÜ 1			Engineering Mechanics III	GÜ 2								
19	Analysis I	HÜ 1			Engineering Mechanics III	HÜ 1								
20			Mechanics II: Mechanics of Materials				Advanced Mechanical Engineering Design (part 2)		Production Technology		Fundamentals of Production and Quality Management		Bachelor Thesis	
21	Mechanics I (Statics)		Mechanics II	VL 2			Advanced Mechanical Engineering	VL 2	Forming and Cutting Technology	VL 2	Production Process Organization	VL 2		
22	Mechanics I	VL 2	Mechanics II	GÜ 2	Advanced Mechanical Engineering Design (part 1)		Design II		Forming and Cutting Technology	HÜ 1	Quality Management	VL 2		
23	Mechanics I	GÜ 2	Mechanics II	HÜ 2	Advanced Mechanical Engineering Design I	VL 2	Advanced Mechanical Engineering	HÜ 2	Fundamentals of Machine Tools	VL 2				
24					Advanced Mechanical Engineering Design I	HÜ 2	Design II		Fundamentals of Machine Tools	HÜ 1				
25					Mechanical Engineering: Design (part 1)		Team Project Design Methodology	PBL 2						
26			Mathematics II		Embodiment Design and 3D-CAD	VL 2	Mechanical Design Project II	PBL 3			Computer Science for Engineers - Programming Concepts, Data Handling & Communication			
27	Computer Science for Engineers - Introduction and Overview		Linear Algebra II	VL 2	Introduction and Practical Training						Computer Science for Engineers - Programming Concepts, Data Handling & Communication	VL 3		
28	Computer Science for Engineers - Introduction and Overview	VL 3	Linear Algebra II	GÜ 1	Mechanical Design Project I	PBL 3	Fundamentals of Materials Science (part 2)				Computer Science for Engineers - Programming Concepts, Data Handling & Communication			
29	Computer Science for Engineers - Introduction and Overview		Analysis II	HÜ 1			Fundamentals of Materials Science I	VL 2			Computer Science for Engineers - Programming Concepts, Data Handling & Communication	GÜ 2		
30	Computer Science for Engineers - Introduction and Overview	GÜ 2	Analysis II	GÜ 1	Physical and Chemical Basics of Materials Science	VL 2								
31														
32														
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.

