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

Sample course plan A Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))
Specialisation Mechanical Engineering, Focus Aircraft Systems Engineering

Legend:

Core Qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
Core Qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

#	Col1	Col2	Col3	Col4	Col5	Col6	Col7
1	**Chemistry**	**Electrical Engineering II: Alternating Current Networks and Basic Devices**	**Technical Thermodynamics II**	**Signals and Systems**	**Introduction to Control Systems**	**Foundations of Management**	**Advanced Internship AIW/ ES**
2	Chemistry I+II VL 4	Electrical Engineering II: Alternating VL 3	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	Current Networks and Basic Devices	Technical Thermodynamics II HÜ 1	Signals and Systems GÜ 2	Introduction to Control Systems GÜ 2	Management Tutorial GÜ 2	Preparation
		Electrical Engineering II: Alternating GÜ 2	Technical Thermodynamics II GÜ 1				Advanced Intenship AIW/ ES: Internship- SE 1
4		Current Networks and Basic Devices					accompanying Seminar
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**	**Integrated Product Development and Lightweight Design**	
8	Electrical Engineering I: Direct Current VL 3	Fundamentals of Mechanical Engineering VL 2	Analysis III VL 2	Fluid Mechanics VL 3	Measurement Technology for Mechanical VL 2	Integrated Product Development I VL 2	
9	Networks and Electromagnetic Fields	Design	Analysis III GÜ 1	Fluid Mechanics HÜ 2	Engineering	Development of Lightweight Design VL 2	
	Electrical Engineering I: Direct Current GÜ 2	Fundamentals of Mechanical Engineering HÜ 2	Analysis III HÜ 1		Measurement Technology for Mechanical HÜ 1	Products	
10	Networks and Electromagnetic Fields	Design	Differential Equations 1 VL 2		Engineering	CAE-Team Project PBL 2	
11			Differential Equations 1 GÜ 1		Practical Course: Measurement and PR 2		
12			Differential Equations 1 HÜ 1		Control Systems		
13	**Mathematics I**	**Technical Thermodynamics I**		**Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics)**	**Advanced Mechanical Design Project**	**Aeronautical Systems**	
14	Linear Algebra I VL 2	Technical Thermodynamics I VL 2			Advanced Mechanical Design Project PBL 4	Air Transportation Systems VL 2	
	Linear Algebra I GÜ 1	Technical Thermodynamics I HÜ 1				Fundamentals of Aircraft Systems VL 2	
15	Linear Algebra I HÜ 1	Technical Thermodynamics I GÜ 1	**Mechanics III (Dynamics)**	Mechanics IV VL 3		Fundamentals of Aircraft Systems GÜ 1	
16	Analysis I VL 2		Mechanics III VL 3	Mechanics IV GÜ 2		Air Transportation Systems HÜ 1	
	Analysis I GÜ 1		Mechanics III GÜ 2	Mechanics IV HÜ 1			
17	Analysis I HÜ 1		Mechanics III HÜ 1				
18							
19		**Mechanics II: Mechanics of Materials**		**Advanced Mechanical Engineering Design (part 2)**	**Computer Engineering**	**Fundamentals of Production and Quality Management**	**Bachelor Thesis**
20		Mechanics II VL 2		Advanced Mechanical Engineering VL 2	Computer Engineering VL 3		
		Mechanics II GÜ 2		Design II	Computer Engineering GÜ 1	Production Process Organization VL 2	
21	**Mechanics I (Statics)**	Mechanics II HÜ 2		Advanced Mechanical Engineering HÜ 2		Quality Management VL 2	
	Mechanics I VL 2			Design II			
	Mechanics I GÜ 2		**Advanced Mechanical Engineering Design (part 1)**				
22	Mechanics I HÜ 1		Advanced Mechanical Engineering VL 2	**Mechanical Engineering: Design (part 2)**			
23			Design I	Team Project Design Methodology PBL 2			
24			Advanced Mechanical Engineering HÜ 2	Mechanical Design Project II PBL 3			
25		**Mathematics II**	Design I				
26		Linear Algebra II VL 2	**Mechanical Engineering: Design (part 1)**	**Fundamentals of Materials Science (part 2)**	**Computational Fluid Dynamics I**		
		Linear Algebra II GÜ 1	Embodiment Design and 3D-CAD VL 2	Fundamentals of Materials Science II VL 2	Computational Fluid Dynamics I VL 2		
27	**Programming in C**	Linear Algebra II HÜ 1	Mechanical Design Project I PBL 3		Computational Fluid Dynamics I HÜ 2		
28	Programming in C VL 1	Analysis II VL 2					
	Programming in C PR 1	Analysis II HÜ 1	**Fundamentals of Materials Science (part 1)**				
29	**Physics for Engineers (AIW)**	Analysis II GÜ 1	Fundamentals of Materials Science I VL 2				
30	Physics for Engineers VL 2		Physical and Chemical Basics of Materials VL 2				
	Physics for Engineers GÜ 1		Science				
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.