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

Core Qualification Compulsory

	_				Core Qualification Compulsory Specialis	sation Compulsory Focus Compulsory	Thesis Compulsory
Sample	e course plan A Bachelor Gener	al Engineering Science (Germa	n program, 7 semester) (AIWBS	Core Qualification Elective Compulsory Specialis	sation Elective Compulsory Focus Elective Compuls	ory Interdisciplinary complement	
	lisation Mechanical Engineering						
, McClai	isacion ricenamear Engineering	, rocus / in cruit Systems Engine	ering				
1	Chemistry	Electrical Engineering II: Alternating Current	Technical Thermodynamics II	Signals and Systems	Introduction to Control Systems	Foundations of Management	Advanced Internship AIW/ ES
2	Chemistry I+II VL 4	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
	Chemistry I+II HÜ 2	Electrical Engineering II: Alternating VL 3	Technical Thermodynamics II HÜ 1	Signals and Systems GÜ 2	Introduction to Control Systems GÜ 2	Management Tutorial GÜ 2	Preparation
3		Current Networks and Basic Devices	Technical Thermodynamics II GÜ 1				Advanced Intenship AIW/ ES: Internship- SE 1
4		Electrical Engineering II: Alternating GÜ 2					accompanying Seminar
5		Current Networks and Basic Devices					
6							
7	Electrical Engineering I: Direct Current	Fundamentals of Mechanical Engineering	Mathematics III	Fluid Dynamics	Measurement Technology for Mechanical	Digital Product Development and Lightweight	
8	Networks and Electromagnetic Fields	Design	Analysis III VL 2	Fluid Mechanics VL 3	Engineers	Design	
-	Electrical Engineering I: Direct Current VL 3	Fundamentals of Mechanical Engineering VL 2	Analysis III GÜ 1	Fluid Mechanics HÜ 2	Measurement Technology for Mechanical VL 2	Digital Product Development VL 2	
9	Networks and Electromagnetic Fields	Design	Analysis III HÜ 1		Engineering	Development of Lightweight Design VL 2	
10	Electrical Engineering I: Direct Current GÜ 2	Fundamentals of Mechanical Engineering HÜ 2	Differential Equations 1 VL 2		Measurement Technology for Mechanical PR 2	Products	
11	Networks and Electromagnetic Fields	Design	Differential Equations 1 GÜ 1		Engineering Practical Course: Measurement and PR 2	CAE-Team Project PBL 2	
			Differential Equations 1 HÜ 1		Control Systems		
12					Control Systems		
13	Mathematics I	Technical Thermodynamics I		Computational Mechanics	Advanced Mechanical Design Project	Aeronautical Systems	
14	Linear Algebra I VL 2	Technical Thermodynamics I VL 2		Computational Multibody Dynamics IV 2	Advanced Mechanical Design Project PBL 4	Air Transportation Systems VL 2	
	Linear Algebra I GÜ 1	Technical Thermodynamics I HÜ 1		Computational Mechanics GÜ 2		Fundamentals of Aircraft Systems VL 2	
15	Linear Algebra I HÜ 1	Technical Thermodynamics I GÜ 1	Engineering Mechanics III (Dynamics)	Computational Stuctural Mechanics IV 2		Fundamentals of Aircraft Systems GÜ 1	
16	Analysis I VL 2		Engineering Mechanics III VL 3			Air Transportation Systems HÜ 1	
17	Analysis I GÜ 1		Engineering Mechanics III GÜ 2				
	Analysis I HÜ 1		Engineering Mechanics III HÜ 1				
18							
19		Mechanics II: Mechanics of Materials		Advanced Mechanical Engineering Design	Computational Fluid Dynamics I	Fundamentals of Production and Quality	Bachelor Thesis
20		Mechanics II VL 2		(part 2)	Computational Fluid Dynamics I VL 2	Management	
		Mechanics II GÜ 2		Advanced Mechanical Engineering VL 2	Computational Fluid Dynamics I HÜ 2	Production Process Organization VL 2	
21	Mechanics I (Statics)	Mechanics II HÜ 2	Advanced Mechanical Engineering Design	Design II		Quality Management VL 2	
	Mechanics I VL 2		(part 1) Advanced Mechanical Engineering VL 2	Advanced Mechanical Engineering HÜ 2 Design II			
	Mechanics I GÜ 2 Mechanics I HÜ 1		Design I	-			
22	Mechanics I HÜ 1		Advanced Mechanical Engineering HÜ 2	Mechanical Engineering: Design (part 2)			
23			Design I	Team Project Design Methodology PBL 2			
24			Mechanical Engineering: Design (part 1)	Mechanical Design Project II PBL 3			
25			Embodiment Design and 3D-CAD VL 2				
$\overline{}$		Mathematics II		Fundamentals of Materials Science (part 2)		Computer Science for Engineers -	
26		Linear Algebra II VL 2	Embodiment Design and 3D-CAD VL 2	Fundamentals of Materials Science (part 2) Fundamentals of Materials Science II VL 2		Programming Concepts, Data Handling &	
	Computer Science for Engineers -	Linear Algebra II VL 2 Linear Algebra II GÜ 1	Embodiment Design and 3D-CAD VL 2 Introduction and Practical Training Mechanical Design Project I PBL 3			Programming Concepts, Data Handling & Communication	
27	Computer Science for Engineers - Introduction and Overview	Linear Algebra II VL 2 Linear Algebra II GÜ 1 Linear Algebra II HÜ 1	Embodiment Design and 3D-CAD VL 2 Introduction and Practical Training			Programming Concepts, Data Handling &	
27		Linear Algebra II VL 2 Linear Algebra II GÜ 1 Linear Algebra II HÜ 1 Analysis II VL 2	Embodiment Design and 3D-CAD VL 2 Introduction and Practical Training Mechanical Design Project I PBL 3 Fundamentals of Materials Science (part 1) Fundamentals of Materials Science I VL 2			Programming Concepts, Data Handling & Communication Computer Science for Engineers - VL 3	
26 27 28 29	Introduction and Overview	Linear Algebra II VL 2 Linear Algebra II GÜ 1 Linear Algebra II HÜ 1 Analysis II VL 2 Analysis II HÜ 1	Embodiment Design and 3D-CAD VL 2 Introduction and Practical Training Mechanical Design Project I PBL 3 Fundamentals of Materials Science (part 1)			Programming Concepts, Data Handling & Communication Computer Science for Engineers - VL 3 Programming Concepts, Data Handling &	
27 28 29	Introduction and Overview Computer Science for Engineers - VL 3	Linear Algebra II VL 2 Linear Algebra II GÜ 1 Linear Algebra II HÜ 1 Analysis II VL 2	Embodiment Design and 3D-CAD VL 2 Introduction and Practical Training Mechanical Design Project I PBL 3 Fundamentals of Materials Science (part 1) Fundamentals of Materials Science I VL 2 Physical and Chemical Basics of Materials VL 2			Programming Concepts, Data Handling & Communication Computer Science for Engineers - VL 3 Programming Concepts, Data Handling & Communication Computer Science for Engineers - GÜ 2 Programming Concepts, Data Handling &	
27 28	Introduction and Overview Computer Science for Engineers - VL 3 Introduction and Overview	Linear Algebra II VL 2 Linear Algebra II GÜ 1 Linear Algebra II HÜ 1 Analysis II VL 2 Analysis II HÜ 1	Embodiment Design and 3D-CAD VL 2 Introduction and Practical Training Mechanical Design Project I PBL 3 Fundamentals of Materials Science (part 1) Fundamentals of Materials Science I VL 2 Physical and Chemical Basics of Materials VL 2			Programming Concepts, Data Handling & Communication Computer Science for Engineers - VL 3 Programming Concepts, Data Handling & Communication Computer Science for Engineers - GÜ 2	
27 28 29	Introduction and Overview	Linear Algebra II VL 2 Linear Algebra II GÜ 1 Linear Algebra II HÜ 1 Analysis II VL 2 Analysis II HÜ 1	Embodiment Design and 3D-CAD VL 2 Introduction and Practical Training Mechanical Design Project I PBL 3 Fundamentals of Materials Science (part 1) Fundamentals of Materials Science I VL 2 Physical and Chemical Basics of Materials VL 2			Programming Concepts, Data Handling & Communication Computer Science for Engineers - VL 3 Programming Concepts, Data Handling & Communication Computer Science for Engineers - GÜ 2 Programming Concepts, Data Handling &	
27 28 29 30	Introduction and Overview	Linear Algebra II VL 2 Linear Algebra II GÜ 1 Linear Algebra II HÜ 1 Analysis II VL 2 Analysis II HÜ 1	Embodiment Design and 3D-CAD VL 2 Introduction and Practical Training Mechanical Design Project I PBL 3 Fundamentals of Materials Science (part 1) Fundamentals of Materials Science I VL 2 Physical and Chemical Basics of Materials VL 2			Programming Concepts, Data Handling & Communication Computer Science for Engineers - VL 3 Programming Concepts, Data Handling & Communication Computer Science for Engineers - GÜ 2 Programming Concepts, Data Handling &	

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.