## Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w16)

Sample course plan T Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7)) Specialisation Computer Science

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

LP	Semester 1	Formers	/wSwemester 2 Formilis	s/wSkemester 3 Formers	/v&lemester 4	Formers	Welemester 5 Formers	/wSwemester 6 Formers	√wSkemester7 FormHrs/w
1 2 3 4 5 6	Chemistry II	VL 2 VL 2 HÜ 1 HÜ 1	Electrical Engineering II: Alternating Current Networks and Basic Devices Electrical Engineering II: VL 3 Alternating Current Networks and Basic Devices Electrical Engineering II: UE 2 Alternating Current Networks and Basic Devices	Technical Thermodynamics II  Technical VL 2 Thermodynamics II  Technical HÜ 1 Thermodynamics II  Technical UE 1 Thermodynamics II	Objectoriented Programming, Algorith and Data Structures Objectoriented Programming, Algorithms and Data Structures Objectoriented Programming, Algorithms and Data Structures		Introduction to Control Systems Introduction to Control VL 2 Systems Introduction to Control UE 2 Systems	Foundations of Management Introduction to VL 3 Management Management Tutorial HÜ 2	Advanced Internship GES
7 8 9 10 11	Electrical Engineering I: Direct Current Networks Electromagnetic Fields Electrical Engineering I: Direct Current Networks and Electromagnetic Fields Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	s and VL 3	Fundamentals of Mechanical Engineering Design  Fundamentals of VL 2  Mechanical Engineering Design  Fundamentals of HÜ 2  Mechanical Engineering Design	Mathematics III  Analysis III VL 2  Analysis III UE 1  Analysis III HÜ 1  Differential Equations 1 VL 2  Differential Equations 1 UE 1  Differential Equations 1 HÜ 1	Signals and Systems Signals and Systems Signals and Systems	VL 3 HÜ 1	Numerical Mathematics I  Numerical Mathematics VL 2 I  Numerical Mathematics UE 2 I	Operating Systems Operating Systems VL 2 Operating Systems UE 2	
13 14 15 16 17 18	Linear Algebra I Linear Algebra I I Analysis I Analysis I	VL 2 UE 1 HÜ 1 VL 2 UE 1 HÜ 1	Technical Thermodynamics I  Technical VL 2  Thermodynamics I  Technical HÜ 1  Thermodynamics I  Technical UE 1  Thermodynamics I	Mechanics III (Hydrostatics, Kinematics, Kinetics I)  Mechanics III VL 3  Mechanics III UE 2  Mechanics III HÜ 1	Stochastics Stochastics Stochastics	VL 2 UE 2	Seminars Computer Science and Mathematics  Seminar Computational Engineering Science  Seminar Computational Mathematics/Computer Science  Seminar Engineering Mathematics/Computer Science	Lab Cyber-Physical Systems Lab Cyber-Physical PBL4 Systems	
19 20 21 22 23 24	Mechanics I (Statics)  Mechanics I VL 2  Mechanics I UE 2  Mechanics I HÜ 1		Mechanics II: Mechanics of Materials  Mechanics II VL 2  Mechanics II UE 2  Mechanics II HÜ 2	Computer Engineering Computer Engineering VL 3 Computer Engineering UE 1	Graph Theory and Optimization Graph Theory and Optimization Graph Theory and Optimization	VL 2 UE 2	Computer Architecture Computer Architecture Computer Architecture VL 2 Computer Architecture UE 1		Bachelor Thesis
25 26 27 28	Programming in C	VL 1	Mathematics II Linear Algebra II VL 2 Linear Algebra II UE 1 Linear Algebra II HÜ 1	Discrete Algebraic Structures	Embedded Systems Embedded Systems Embedded Systems	VL 3 UE 1	Computernetworks and Internet Security Computer Networks and VL 3 Internet Security		

	Programming in C PR 1	Analysis II	VL 2	Discrete Algebraic	VL 2	Computer Networks and UE 1	
29 30	Physics for Engineers (AIW)	Analysis II	HÜ 1 UE 1	Structures Discrete Algebraic	UE 2	Internet Security	
31 32	Physics for Engineers VL 2 Physics for Engineers UE 1			Structures		·	
32	Nontechnical Complementary C	ourses for Bach	elors (from catalogu	ie) - 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.