Course of Study General Engineering Science (German program) (Study Cohort w14)

Sample course plan - Bachelor General Engineering Science (German program) (AIWBS)
Specialisation Computer Science and Engineering

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	FormHrs/wk	Semester 2	FormHrs/wk	Semester 3	FormHrs/wk	Semester 4	FormHrs/wk	Semester 5	FormHrs/wk	Semester 6	FormHrs/wk
1	**Physics for Engineers (part 1)**		**Electrical Engineering II: Alternating Current Networks and Basic Devices**		**Technical Thermodynamics II**		**Foundations of Management**		**Introduction to Control Systems**		**Stochastics**	
2	Physics for Engineers	VL 2	Electrical Engineering II: Alternating Current Networks and Basic Devices	VL 3	Technical Thermodynamics II	VL 2	Introduction to Management	VL 4	Introduction to Control Systems	VL 2	Stochastics	VL 2
3	Physics for Engineers	UE 1	Electrical Engineering II: Alternating Current Networks and Basic Devices	UE 2	Technical Thermodynamics II	HÜ 1	Project Entrepreneurship	POL 2	Introduction to Control Systems	UE 2	Stochastics	UE 2
4					Technical Thermodynamics II	UE 1						
5	**Chemistry**		**Fundamentals of Mechanical Engineering Design**		**Computer Engineering**		**Objectoriented Programming, Algorithms and Data Structures**		**Conceptual Modeling, Databases and Data Management**		**Operating Systems**	
6	Chemistry I	VL 2	Fundamentals of Mechanical Engineering Design	VL 2	Computer Engineering	VL 3	Objectoriented Programming, Algorithms and Data Structures	VL 4	Conceptual Modeling, Databases, and Data Management	VL 4	Operating Systems	VL 2
7	Chemistry II	VL 2	Fundamentals of Mechanical Engineering Design	HÜ 2	Computer Engineering	UE 1	Objectoriented Programming, Algorithms and Data Structures	UE 1	Conceptual Modeling, Databases, and Data Management	POL 1	Operating Systems	UE 2
8	Chemistry I	HÜ 1										
9	Chemistry II	HÜ 1										
10												
11	**Electrical Engineering I: Direct Current Networks and Electromagnetic Fields**		**Technical Thermodynamics I**		**Mathematics III**		**Logic, Automata and Formal Languages**		**Numerical Mathematics I**		**Bachelor Thesis**	
12	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	VL 3	Technical Thermodynamics I	VL 2	Analysis III	VL 2	Logic, Automata Theory and Formal Languages	VL 2	Numerical Mathematics I	VL 2		
13	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	UE 2	Technical Thermodynamics I	HÜ 1	Analysis III	UE 1	Logic, Automata Theory and Formal Languages	UE 2	Numerical Mathematics I	UE 2		
14			Technical Thermodynamics I	UE 1	Analysis III	HÜ 1						
15					Differential Equations 1	VL 2						
16					Differential Equations 1	UE 1						
17	**Mathematics I**				Differential Equations 1	HÜ 1						
18	Linear Algebra I	VL 2	**Mechanics II: Mechanics of Materials**				**Signals and Systems**		**Computer Architecture**			
19	Linear Algebra I	UE 1	Mechanics II	VL 2	**Mechanics III (Hydrostatics, Kinematics, Kinetics I)**		Signals and Systems	VL 3	Computer Architekture	VL 2		
20	Linear Algebra I	HÜ 1	Mechanics II	UE 2	Mechanics III	VL 3	Signals and Systems	HÜ 1	Computer Architekture	UE 2		
21	Analysis I	VL 2			Mechanics III	UE 2						
22	Analysis I	UE 1			Mechanics III	HÜ 1						
23	Analysis I	HÜ 1										
24												
25	**Mechanics I (Statics)**		**Mathematics II**		**Discrete Algebraic Structures**		**Graph Theory and Optimization**		**Seminars Computer Science and Mathematics**			
26	Mechanics I	VL 2	Linear Algebra II	VL 2	Discrete Algebraic Structures	VL 2	Graph Theory and Optimization	VL 2	Selection from a catalog			
27	Mechanics I	UE 2	Linear Algebra II	UE 1	Discrete Algebraic Structures	UE 2	Graph Theory and Optimization	UE 2				
28	Mechanics I	HÜ 1	Linear Algebra II	HÜ 1								
29			Analysis II	VL 2								
30			Analysis II	HÜ 1								
31			Analysis II	UE 1					**Computernetworks and Internet Security**			
32									Computer Networks and Internet Security	VL 3		
33			**Programming in C**						Computer Networks and Internet Security	UE 1		
34			Programming in C	VL 1								

		Programming in C PR 1	
35		**Physics for Engineers (part 2)**	
36		Physics-Lab for ET/IIW-Engineers PR 1	

Nontechnical Complementary 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.