

Course of Study General Engineering Science (English program, 7 semester) (Study Cohort w19)

Sample course plan B Bachelor General Engineering Science (English program, 7 semester) (GESBS(7))
Specialisation Mechanical Engineering, Focus Materials in Engineering Sciences

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	Form/Hrs	Semester 2	Form/Hrs	Semester 3	Form/Hrs	Semester 4	Form/Hrs	Semester 5	Form/Hrs	Semester 6	Form/Hrs	Semester 7	Form/Hrs/wk
1	Chemistry (GES)	Chemistry I VL 2 Chemistry II VL 2 Chemistry I HÜ 1 Chemistry II HÜ 1	Technical Thermodynamics I	Technical Thermodynamics I VL 2 Technical Thermodynamics I HÜ 1 Technical Thermodynamics I UE 1	Technical Thermodynamics II	Technical Thermodynamics II VL 2 Technical Thermodynamics II HÜ 1 Technical Thermodynamics II UE 1	Mechanical Engineering: Design (part 2)	Team Project Design PBL2 Mechanical Design Project II PBL3	Computer Engineering	Computer Engineering VL 3 Computer Engineering UE 1	Foundations of Management	Introduction to Management VL 3 Management Tutorial HÜ 2	Advanced Internship GES	
2														
3														
4														
5														
6														
7	Linear Algebra	Linear Algebra VL 4 Linear Algebra HÜ 2 Linear Algebra UE 2	Mathematical Analysis	Mathematical Analysis VL 4 Mathematical Analysis HÜ 2 Mathematical Analysis UE 2	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	Advanced Mechanical Engineering Design (part 2)	Advanced Mechanical Engineering Design II VL 2 Advanced Mechanical Engineering Design II HÜ 2	Introduction to Control Systems	Introduction to Control Systems VL 2 Introduction to Control Systems UE 2	Enhanced Fundamentals of Materials Science	Enhanced Fundamentals: Metals VL 2 Enhanced Fundamentals: Ceramics and Polymers VL 2 Enhanced Fundamentals: Ceramics and Polymers HÜ 1		
8														
9														
10														
11														
12														
13	Electrical Engineering I	Electrical Engineering I VL 3 Electrical Engineering I UE 2	Electrical Engineering II	Electrical Engineering II VL 3 Electrical Engineering II UE 2	Mechanics III (GES)	Mechanics III HÜ 1 Mechanics III UE 2 Mechanics III VL 3	Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)	Mechanics IV VL 3 Mechanics IV UE 2 Mechanics IV HÜ 1	Measurement Technology for Mechanical and Process Engineers	Measurement Technology for Mechanical and Process Engineers VL 2 Measurement Technology for Mechanical and Process Engineers HÜ 1 Practical Course: Measurement and Control Systems PR 2	Structural Materials (part 2)	Fundamentals of Mechanical Properties of Materials VL 2		
14														
15														
16														
17														
18														
19	Mechanics I (GES)	Mechanics I VL 2	Mechanics II (GES)	Mechanics II VL 2	Mechanical Engineering: Design (part 1)	Signals and Systems VL 3	Signals and Systems	Signals and Systems VL 3	Numerical Mathematics I	Numerical Mathematics VL 2 Numerical Mathematics UE 2	Fundamentals of Production and Quality Management	Production Process Organization VL 2 Quality Management VL 2		
20														
21														
22													Bachelor Thesis	

23	Mechanics I HÜ 3	Mechanics II HÜ 2	Embodiment Design and 3D-CAD VL 2 Mechanical Design Project I PBL3	Signals and Systems UE 2	I
24					
25					
26					
27	Programming in C Programming in C VL 1 Programming in C PR 1	Fundamentals of Mechanical Engineering Design (GES) Fundamentals of Mechanical Engineering VL 2 Fundamentals of Mechanical Engineering UE 2	Fundamentals of Materials Science (part 1) Fundamentals of Materials Science I VL 2 Physical and Chemical Basics of Materials Science VL 2		Structural Materials (part 1) Welding Technology VL 3
28					
29	Physics for Engineers (GES)		Advanced Mechanical Engineering Design (part 1) Advanced Mechanical Engineering Design I VL 2 Advanced Mechanical Engineering Design I HÜ 2		Material Science Laboratory Companion Lecture for Materials Science Laboratory VL 2 Material Science Laboratory PR 4
30	Physics for Engineers VL 2 Physics for Engineers UE 1				
31					
32					
33					
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.