

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 Biomechanics

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

23	Mechanics I Mechanics I	VL 2 HÜ 3	Mechanics II Mechanics II	VL 2 HÜ 2	Design (part 1) Embodiment Design and 3D-CAD VL 2 Mechanical Design Project I PBL3	Signals and Systems VL 3 Signals and Systems UE 2	Numerical Mathematics I UE 2
24					Fundamentals of Materials Science (part 1)		MED II: Introduction to Biochemistry and Molecular Biology
25					Fundamentals of Materials Science I VL 2		Introduction to Biochemistry and Molecular Biology VL 2
26					Physical and Chemical Basics of Materials Science VL 2	MED I: Introduction to Anatomy	
27	Programming in C Programming in C Programming in C	VL 1 PR 1	Fundamentals of Mechanical Engineering Design (GES) Fundamentals of Mechanical Engineering Fundamentals of Mechanical Engineering	VL 2 UE 2	Advanced Mechanical Engineering Design (part 1) Advanced Mechanical Engineering Design I VL 2 Advanced Mechanical Engineering Design I HÜ 2	Introduction to Anatomy VL 2	BIO I: Implants and Fracture Healing Implants and Fracture Healing VL 2
28							
29	Physics for Engineers (GES) Physics for Engineers Physics for Engineers	VL 2 UE 1				MED I: Introduction to Radiology and Radiation Therapy	
30						Introduction to Radiology and Radiation Therapy VL 2	
31							
32							

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.