

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

Sample course plan A 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 VL 2 Chemistry II VL 2 Chemistry I HÜ 1 Chemistry II HÜ 1	Technical Thermodynamics I	Technical Thermodynamics I VL 2 HÜ 1 UE 1	Technical Thermodynamics II	Technical Thermodynamics II VL 2 HÜ 1 UE 1	Mechanical Engineering: Design (part 2)	Team Project Design Methodology 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	MED II: Introduction to Physiology	Introduction to Physiology VL 2	BIO I: Experimental Methods in Biomechanics	Experimental Methods in Biomechanics VL 2
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	Fluid Dynamics	Fluid Mechanics VL 3 Fluid Mechanics HÜ 2	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	Electrical Machines and Actuators	Electrical Machines and Actuators VL 3 Electrical Machines and Actuators HÜ 2	Numerical Mathematics I	Numerical Mathematics VL 2
14														
15														
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19	Mechanics I (GES)		Mechanics II (GES)		Mechanical Engineering:		Signals and Systems						Bachelor Thesis	
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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 Mechanical Design Project I	VL 2 PBL3	Signals and Systems Signals and Systems	VL 3 UE 2	Numerical Mathematics I	UE 2
24					Fundamentals of Materials Science (part 1)					
25					Fundamentals of Materials Science I	VL 2			MED II: Introduction to Biochemistry and Molecular Biology	
26					Physical and Chemical Basics of Materials Science	VL 2			Introduction to Biochemistry and Molecular Biology	VL 2
27	Programming in C Programming in C Programming in C	VL 1 PR 1	Fundamentals of Mechanical Engineering Design (GES) Fundamentals of Mechanical Engineering	VL 2 UE 2			MED I: Introduction to Anatomy Introduction to Anatomy	VL 2		
28			Fundamentals of Mechanical Engineering	UE 2	Advanced Mechanical Engineering Design (part 1)				BIO I: Implants and Fracture Healing	
29	Physics for Engineers (GES)				Advanced Mechanical Engineering Design I	VL 2	MED I: Introduction to Radiology and Radiation Therapy		Implants and Fracture Healing	VL 2
30	Physics for Engineers Physics for Engineers	VL 2 UE 1			Advanced Mechanical Engineering Design I	HÜ 2	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.