Course of Study General Engineering Science (English program, 7 semester) (Study Cohort w17)

Sample course plan - Bachelor General Engineering Science (English program, 7 semester) (GESBS(7)) Specialisation Biomedical 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	ForMrs	/wSwemester 2 FormHr	s/wikemester 3 For	rmilrs/	Welemester 4 Formilis	/wSwemester 5 Forming	s/w&kemester6 Formirs	√wSwemester7 FormHrs/w
1 2 3 4 5 6		VL 2 VL 2 HÜ 1 HÜ 1	Technical Thermodynamics I Technical VL 2 Thermodynamics I Technical HÜ 1 Thermodynamics I Technical UE 1 Thermodynamics I	Technical Thermodynamic II Technical VL Thermodynamics II Technical HÜ Thermodynamics II Technical UE Thermodynamics II	. 2 Ú 1	Fundamentals of Materials Science (part 2) Fundamentals of VL 2 Materials Science II Signals and Systems Signals and Systems VL 3 Signals and Systems UE 2	Introduction to Control Systems Introduction to Control 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 12 13 14	9	VL 4 HÜ 2 UE 2	Mathematical Analysis Mathematical Analysis Mathematical Analysis HÜ 2 Mathematical Analysis UE 2	Mathematics III Analysis III VL Analysis III UE Analysis III HÜ Differential Equations 1 VL Differential Equations 1 UE Differential Equations 1 HÜ	1 1 2 1 1	Fluid Dynamics Fluid Mechanics VL 3 Fluid Mechanics HÜ 2	Mechanical Engineering: Design (part 1) Embodiment Design and VL 2 3D-CAD Mechanical Design PBL3 Project I Numerical Mathematics I Numerical Mathematics VL 2 I Numerical Mathematics UE 2	Mechanical Engineering: Design (part 2) Team Project Design PBL2 Methodology Mechanical Design PBL3 Project II Introduction into Medical Technology and Systems Introduction into Medical VL 2 Technology and Systems	
15 16 17 18 19 20		VL 3 UE 2	Electrical Engineering II VL 3 Electrical Engineering II UE 2	Mechanics III (GES) Mechanics III HÜ Mechanics III UE Mechanics III VL	2	Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems) Mechanics IV VL 3 Mechanics IV UE 2 Mechanics IV HÜ 1	Heat Transfer Heat Transfer VL 3 Heat Transfer HÜ 2	Introduction into Medical PS 2 Technology and Systems Introduction into Medical HÜ 1 Technology and Systems MED II: Introduction to Physiology Introduction to VL 2 Physiology BIO I: Experimental Methods in Biomechanics	Bachelor Thesis
21 22 23 24 25 26	Mechanics I (GES) Mechanics I Mechanics I	VL 2 HÜ 3	Mechanics II (GES) Mechanics II VL 2 Mechanics II HÜ 2	Computer Engineering Computer Engineering VL Computer Engineering UE		MED I: Introduction to Anatomy Introduction to Anatomy VL 2 MED I: Introduction to Radiology and Radiation Therapy	Measurement Technology for Mechanical and Process Engineers Measurement VL 2 Technology for	Experimental Methods VL 2 in Biomechanics	

				Introduction to VL 2 Radiology and Radiation Therapy	Engineers Measurement HÜ 1		
27	Programming in C Programming in C VL 1	Fundamentals of Mechanical Engineering (GES)	Fundamentals of Materials Science (part 1)		Technology for Mechanical and Process Engineers		
	Programming in C PR 1	Fundamentals of VL 2 Mechanical Engineering	Fundamentals of VL 2 Materials Science I		Practical Course: PR 2 Measurement and Control Systems		
28 29		Fundamentals of UE 2 Mechanical Engineering	Physical and Chemical VL 2 Basics of Materials Science		MED II: Introduction to		
30	Physics for Engineers (GES) Physics for Engineers VL 2				Biochemistry and Molecular Biology Introduction to VL 2		
	Physics for Engineers UE 1				Biochemistry and Molecular Biology		
31 32					BIO I: Implants and Fracture Healing	·	
3					Implants and Fracture VL 2 Healing		

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.