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

Sample course plan A Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7)) Specialisation Mechanical Engineering, Focus Biomechanics

ecialisation Mechanical Engineering	, Focus Biomechanics				alisation Elective Focus Elective Co	ompulsory Interdisciplinary complement
Semester 1 Forms	/wsilemester 2 Formirs	/Wikemester 3 Forthirs	s/wskemester 4 Form	ndrs/v&leemester 5 Forming	s/wskemester 6 Forthers	/&kmester 7 Forh
Chemistry Chemistry I VL 2 Chemistry II VL 2 Chemistry I HÜ 1 Chemistry II HÜ 1	Electrical Engineering II: Alternating Current Networks and Basic Devices  Electrical Engineering VL 3 II: Alternating Current Networks and Basic Devices  Electrical Engineering UE 2 II: Alternating Current Networks and Basic Devices	Technical Thermodynamics II  Technical Thermodynamics II  Technical Thermodynamics II  Technical Technical Technical UE 1  Thermodynamics II	Mechanical Engineering: Design (part 2) Team Project Design PBL: Methodology Mechanical Design Project II  Fundamentals of Materials Science (part 2 Fundamentals of VL: Materials Science II	Computer Engineering VL 3 Computer Engineering UE 1	Foundations of Management Introduction to VL 3 Management Management Tutorial HÜ 2	Advanced Internship AIV GES
Electrical Engineering I: Direct Current Networks and Electromagnetic Fields  Electrical Engineering VL 3 I: Direct Current Networks and Electromagnetic Fields  Electrical Engineering UE 2 I: Direct Current Networks and Electromagnetic Fields	Fundamentals of Mechanical Engineering Design  Fundamentals of VL 2 Mechanical Engineering Design  Fundamentals of HÜ 2 Mechanical Engineering Design	Mathematics III  Analysis III VL 2  Analysis III HÜ 1  Analysis III HÜ 1  Differential Equations VL 2  Differential Equations UE 1  Differential Equations HÜ 1	Advanced Mechanical Engineering Design (part 2)  Advanced Mechanical VL : Engineering Design II  Advanced Mechanical HÜ : Engineering Design II  Fluid Dynamics Fluid Mechanics VL : Fluid Mechanics HÜ :	Systems  Introduction to VL 2 Control Systems  Introduction to VL 2 Control Systems  UE 2 Control Systems	MED II: Introduction to Physiology Introduction to VL 2 Physiology  BIO I: Experimental Methods in Biomechanics Experimental Methods VL 2 in Biomechanics	
Mathematics I Linear Algebra I VL 2 Linear Algebra I UE 1 Linear Algebra I HÜ 1 Analysis I VL 2 Analysis I UE 1 Analysis I HÜ 1	Technical Thermodynamics I  Technical Thermodynamics I  Technical Thermodynamics I  Technical Thermodynamics I  Technical UE 1  Thermodynamics I	Mechanics III (Hydrostatics, Kinematics, Kinetics I)  Mechanics III  VL 3  Mechanics III  UE 2  Mechanics III  HÜ 1	Mechanics IV (Kinetics II Oscillations, Analytical Mechanics, Multibody Systems) Mechanics IV VL : Mechanics IV UE : Mechanics IV HÜ :	Measurement VL 2 Technology for Mechanical and Process Engineers  Measurement Technology for  Measurement Technology for	Electrical Machines and Actuators  Electrical Machines VL 3 and Actuators  Electrical Machines HÜ 2 and Actuators	
Mechanics I (Statics)	Mechanics II: Mechanics of Materials  Mechanics II VL 2	Mechanical Engineering:	Signals and Systems	Numerical Mathematics I  Numerical VL 2  Mathematics I		Bachelor Thesis

Core qualification

Compulsory

Specialisation Compulsory Focus Compulsory

Thesis Compulsory

22 23 24	Mechanics I Mechanics I Mechanics I	VL 2 UE 2 HÜ 1	Mechanics II Mechanics II	UE 2 HÜ 2	Design (part 1)  Embodiment Design VL 2 and 3D-CAD  Mechanical Design PBL3 Project I  Fundamentals of	Signals and Systems VL 3 Signals and Systems UE 2	Numerical UE 2 Mathematics I
25 26 27	Programming in C Programming in C Programming in C	VL 1 PR 1	Mathematics II Linear Algebra II Linear Algebra II Linear Algebra II Analysis II Analysis II	VL 2 UE 1 HÜ 1 VL 2 HÜ 1	Materials Science (part 1) Fundamentals of VL 2 Materials Science I Physical and Chemical VL 2 Basics of Materials Science	MED I: Introduction to Anatomy Introduction to VL 2 Anatomy	Molecular Biology
29 30 31 32	Physics for Engineers (AIW) Physics for Engineers VL 2 Physics for Engineers UE 1		Analysis II UE 1	Advanced Mechanical Engineering Design (part 1) Advanced Mechanical VL 2 Engineering Design I Advanced Mechanical HÜ 2 Engineering Design I	MED I: Introduction to Radiology and Radiation Therapy Introduction to VL 2 Radiology and Radiation Therapy	BIO I: Implants and Fracture Healing Implants and Fracture VL 2 Healing	

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.