Course of Study Mechanical Engineering (Study Cohort w19)

Sample course plan B Bachelor Mechanical Engineering (MBBS) Specialisation Materials in Engineering Sciences

Core qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory		
Core qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement		

LP	Semester 1 F	orn h lrs/	w&semester 2 Fo	orn h lrs/	w&emester 3 FornHrs.	w&semester 4 FormHrs	rs/wi	&semester 5 FormHrs	/w&emester 6	Forn h lrs/w
3	, and a	r t 1) /L 2 HÜ 1	ů ů	2) L 2 Ü 1	Advanced Mechanical Engineering Design (part 1) Advanced Mechanical VL 2 Engineering Design I Advanced Mechanical HÜ 2 Engineering Design I	Advanced Mechanical Engineering Design (part 2) Advanced Mechanical VL 2 Engineering Design II Advanced Mechanical HÜ 2 Engineering Design II	! ! !	Advanced Mechanical Design Project Advanced Mechanical PBL 4 Design Project	Foundations of Management Introduction to Management Management Tutorial	
456	Mechanical Engineers	nical /L 3 JE 2	Fundamentals of Materials Science (part 2) Fundamentals of Materials Science II Fundamentals of Mechanical	L 2	Mechanical Engineering: Design (part 1) Embodiment Design and 3D- VL 2 CAD Mechanical Design Project I PBL 3	Mechanical Engineering: Design (part 2) Team Project Design PBL 2 Methodology Mechanical Design Project II PBL 3				
7 8 9 10 11	Mathematics I	/L 2	Engineering Design Fundamentals of Mechanical VI Engineering Design Fundamentals of Mechanical Hill Engineering Design		Basics of Electrical Engineering Basics of Electrical VL 3 Engineering Basics of Electrical UE 2 Engineering	Fluid Dynamics Fluid Mechanics VL 3 Fluid Mechanics HÜ 2	3 1	Introduction to Control Systems Introduction to Control VL 2 Systems Introduction to Control UE 2 Systems	Structural Materials (part 2) Fundamentals of Mechanical Properties of Materials Enhanced Fundamentals of Materials Science	VL 2
13 14 15 16	Linear Algebra I H Analysis I V Analysis I U	JE 1 HÜ 1 /L 2 JE 1 HÜ 1	Technical Thermodynamics I Technical Thermodynamics I VI Technical Thermodynamics I Hi Technical Thermodynamics I UI	Ü 1	Technical Thermodynamics II Technical Thermodynamics VL 2 II Technical Thermodynamics HÜ 1 II Technical Thermodynamics UE 1	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 VL 2 Mechanical and Process Engineers Measurement Technology for HÜ 1	Metals Enhanced Fundamentals: Ceramics and Polymers	VL 2 VL 2 HÜ 1
18	Mechanics I U	/L 2 JE 2 IÜ 1	Mechanics II: Mechanics of Materials Mechanics II VL 2 Mechanics II UE 2 Mechanics II HÜ 2	E 2		Fundamentals of Duodustics and		Mechanical and Process Engineers Practical Course: PR 2 Measurement and Control Systems		
20 21 22 23 24			The state of the s		Mathematics III VL 2 Analysis III UE 1 Analysis III HÜ 1 Differential Equations 1 VL 2	Fundamentals of Production and Quality Management Production Process VL 2 Organization Quality Management VL 2	2 I	Structural Materials (part 1) Welding Technology VL 3 Material Science Laboratory Companion Lecture for VL 2		
25 26 27	Science I Physical and Chemical	/L 2 /L 2	Linear Algebra II UE Linear Algebra II Hi	L 2 E 1 Ü 1	Differential Equations 1 UE 1 Differential Equations 1 HÜ 1 Mechanics III (Hydrostatics, Kinematics, Kinetics I)			Materials Science Laboratory Material Science Laboratory PR 4		
	Basics of Materials Science		Analysis II VI	L 2	Mechanics III VL 3	l				

28 29 30 31 32	Team Project MB Team Project MB PBL 6	Analysis II Analysis II	HÜ 1 UE 1	Mechanics III Mechanics III	UE 2 HÜ 1
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.