





Foundation studies		Main studies				
1st Semester	2nd Semester	3rd Semester	4th Semester	5th Semester	6th Semester	7th Semester
5 ECTS Language Basics (DE)	5 ECTS Communication and Intercultural Competences (DE)	5 ECTS Process and Material Technologies (EN)	30 ECTS Integrated Practical Semester	5 ECTS Control Systems (DE)	5 ECTS Project and Quality Management (EN)	12 ECTS Bachelor's Thesis (EN/DE)
5 ECTS Hands-On experience (EN+DE)	5 ECTS Physics (EN)	5 ECTS Machine Dynamics (EN)		5 ECTS Software Engineering + Object Oriented Programming (EN)	5 ECTS Compulsory Elective Module (DE/EN)	
5 ECTS Machine Design and CAD (EN)	5 ECTS Technical Mechanics (EN)	5 ECTS Signals and Systems (DE)		5 ECTS Sensors and Drives (EN)	5 ECTS Compulsory Elective Module (DE/EN)	12 ECTS Project (EN/DE)
5 ECTS Mathematics 1 (EN)	5 ECTS Mathematics 2 (EN)	5 ECTS Mathematics 3 (EN)		5 ECTS Fluid Dynamics and Thermodynamics (DE)		
5 ECTS Electrical Engineering (EN)	5 ECTS Programming (EN+DE)	5 ECTS Microprocessor Systems (EN)		25 ECTS Specialization Modules: – Energy Science and Technology – Sustainable Mobility – Environmental Engineering – Data Based Engineering – Robotics and Cyberphysical Systems (DE/EN)		
5 ECTS Basic Concepts of Sustainability (EN)	5 ECTS Electronics (EN)	5 ECTS Lab Project (DE)				
					2 ECTS Scientific Writing (DE/EN)	
					4 ECTS General Studies (DE)	

Key

 Mandatory Courses	 Electives + Areas of Specialization	 Internship Semester	 Thesis	 ECTS European Credit Transfer System
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