

Curriculum Sustainable Energy and Hydrogen Systems (B.ENG.)
effective from study beginning in winter semester 2024/25

1. Semester		2. Semester		3. Semester	4. Semester	5. Semester		6. Semester	7. Semester
Mathematics for Engineers 1 (MA1) (4/5)	Mathematics for Engineers 2 (MA2) (4/5)	Mathematics for Engineers 3 (MA3) (4/5)	Thermal Process Engineering (TVT) (4/5)	Industrial Placement (BP) (0/22)	Control Loops and Systems with Laboratory Exercises (RSP) (4/5)	Sustainability, Life Cycle Assessment, Business Administration(NOB) (4/4)			
Engineering Mechanics 1 (TM1) (4/5)	Engineering Mechanics 2 (TM2) (4/5)	Fluid Mechanics (SM) (4/5)	Dynamics (DYN) (4/5)			Mandatory Elective Module H2-2 (H2-2) (4/5)			
Seminar Energy and Sustainability (eSES) (4/5)	Thermodynamics 1 (eTD1) (4/5)	Thermodynamics 2 (eTD2) (4/5)	Fluid Energy Machines (KAM) (4/5)			Mandatory Elective Module Energy-2 (E-2) (4/5)			
Chemistry (CHE) (4/5)	Materials for Energy Systems (WKE) (4/5)	Hydrogen Systems and Security (WSS) (4/5)	Plant and Duct Engineering with Laboratory Exercises (ARP) (4/5)			Mandatory Elective Module Energy-1 (E-1) (4/5)			
Engineering Design (KO) (4/5)	Design of Machine Elements 1 (ME1) (4/5)	Metrology with Laboratory Exercises (MTA) (4/5)	Renewable Energies (REN) (4/5)			Student Research Project (PA) (4/6)			
Manufacturing Methods (FEV) (4/5)	Fundamentals of Electrical Engineering and Electronics (GEE) (4/5)	Fundamentals of Programming (GPR) (4/5)	Computer Science for Engineers (II) (4/5)					Bachelor's Thesis (BA) (0/12)	
						Presentation and Moderation (PMO) (2/2)	Energy and Hydrogysystem: Laboratory Exersises (PEW) (4/3)		
				General Scientific Elective Module (AW) (2/2)					
				Project Management and Quality Assurance (PQS) (4/4)					
24 SWS 30 Credits		24 SWS 30 Credits		8 SWS 30 Credits		24 SWS 29 Credits		16 SWS 31 Credits	

Explanation: (4/5) means 4 SWS and 5 ECTS-Credits

Sum Study Programme: 210 Credits / 144 SWS

Mandatory Elective Modules H2-1-2: freely selectable from the Elective Module Catalogue Sustainable Energy and Hydrogen Systems (B.ENG.) of the Faculty of Mechanical Engineering.
Mandatory Elective Modules Energy 1-3: freely selectable from the Elective Module Catalogue Sustainable Energy and Hydrogen Systems (B.ENG.) of the Faculty of Mechanical Engineering.
General Scientific Elective Module: freely selectable from the catalogue of compulsory elective modules in the Faculty of Natural and Cultural Sciences.