

Sustainable Materials Engineering (Bachelor)

Graduation: Bachelor of Science

Module plan | Progress of Program

Semester 7	Bachelor's Thesis ECTS 10		Mandatory elective profiles 3 · Sustainable Materials Development III · Quality Management in Sustainable Materials Development III · Production Technology and Production Management III ECTS 5		Mandatory elective profiles 4 · Sustainable Materials Development IV · Quality Management in Sustainable Materials Development IV · Production Technology and Production Management IV ECTS 5		Micro- and Nanotechnology ECTS 5	Project Management and Basics of Business. ECTS 5
Semester 6	Project ECTS 10		Mandatory elective profiles 1 · Sustainable Materials Development I · Quality Management in Sustainable Materials Development I · Production Technology and Production Management I ECTS 5		Mandatory elective profiles 2 · Sustainable Materials Development II · Quality Management in Sustainable Materials Development II · Production Technology and Production Management II ECTS 5		Mathematical Methods of Measurement Technology ECTS 5	Higher Physics and Electrical Engineering ECTS 5
Semester 5	Internship Semester and Exchange Semester ECTS 30							
Semester 4	Mathematics III ECTS 5	Macromolecular Chemistry and Plastics Technology ECTS 5	Biomechanics ECTS 5	Biomaterials and Biomineralization ECTS 5	Material Utilization and Recycling ECTS 5	Self-management and Communication ECTS 5		
Semester 3	Ecology ECTS 5	Organic Chemistry ECTS 5	Fundamentals of Biomechanics ECTS 5	Functional Materials and Sustainability Concepts ECTS 5	Bionics ECTS 5	German III / Scientific Work ECTS 5		
Semester 2	Mathematics II ECTS 5	Materials Characterization ECTS 5	Chemistry of Renewable Resources ECTS 5	Technical Basics ECTS 5	Biology and Basic Bionics ECTS 5	German II / English for Sustainable Science and Innovation ECTS 5		
Semester 1	Mathematics I ECTS 5	General and Inorganic Chemistry ECTS 5	Fundamentals of Physics and Instrumental Analysis ECTS 5	Materials Science ECTS 5	Sustainability and Circular value creation ECTS 5	German I / English for Engineers ECTS 5		