

Green Building – Sustainable Construction and Building Services Engineering (B.Eng.)

Faculty of Management, Construction, Real Estate
Examination Regulations 2026

Module Overview

- Climate Protection and Buildings / Scientific Research
- Hands-On: Building Physics, Building Services Engineering, and Digital Technology
- Fundamentals of Electrical Engineering
- Mathematics
- Fundamentals of Construction Management
- Fundamentals of Building Physics/Fire Protection
- Thermodynamics and Heat Transfer
- Fundamentals of Heating Technology and Applied Fluid Mechanics
- Presentation in Construction Planning, 3D Modeling, Introduction to BIM
- Energy-Optimized Construction
- Project: Energy-Optimized Construction
- Renewable Energy and Energy Supply
- Project: Building Services Engineering (TGA)
- Building Physics / Structural Engineering
- Fundamentals of Project Management and Cost Estimation
- Heat Pumps and Refrigeration Systems
- HVAC Systems
- Introduction to Building and Systems Simulation
- Energy Balancing
- Best Practices: Long-Distance Study Tour (Field Trip)
- Design and Construction Using Renewable Raw Materials
- Solar Energy Technology
- Lighting and Lighting Technology
- Building Simulation Project
- Fundamentals of Construction Cost Accounting and Estimation
- Designing and Constructing with Existing Structures

- Heat Sources, Energy Concepts, and Neighborhood Solutions
- Interdisciplinary Project—Digital and Sustainable Construction Simulation Game
- Construction Contract Law
- BIM/Digital Planning and Construction Process
- Life Cycle Assessment and Sustainability Evaluation
- Study Profile Modules I-IV (WPM)
- IPS Winter Semester
- IPS Summer Semester
- Practical Module
- Bachelor's Thesis

Modules in the Structural Engineering and Construction Technology Track

- Application-Oriented Structural Engineering
- Design and Construction Using Renewable Raw Materials
- Green Roofs and Building-Integrated Solar Components
- Selected Topics in Civil Engineering

Modules in the Energy and Building Technology Track – Digital Planning

- Building Automation and Applied Control Engineering
- Design of Building Services Engineering Systems Using Building Information Modeling
- Geothermal Systems
- Simulation Across the Building Life Cycle: Validation and Digital Twins