# Engineering and Management in Electrical Engineering and Information Technology (EN) Module Overview

SPO Version 6

| Foundation studies | | Main studies | | | | |
|---|---|---|---|---|---|---|
| **1st Semester** | **2nd Semester** | **3rd Semester** | **4th Semester** | **5th Semester** | **6th Semester** | **7th Semester** |
| **5 ECTS** Mathemathics I | **5 ECTS** Mathemathics II | **5 ECTS** Statistics and Operations Research | **30 ECTS** **Industrial Internship Seminar** | **5 ECTS** Lab Project **(DE)** | **5 ECTS** Quality Management and Digital Transformation | **12 ECTS** **Bachelor's Thesis** |
| **5 ECTS** Business Administration | **5 ECTS** Physics – Concepts and Methods | **5 ECTS** Seminar for Engineering and Management Students and Law | | **5 ECTS** Sustainability and Energy Systems | **10 ECTS** Industrial Engineering Project | |
| **5 ECTS** Electrical Engineering | **5 ECTS** Electrical Engineering and Electronics | **5 ECTS** Signals und Systems | | **5 ECTS** Elective Engineering Methods and Systems | | **5 ECTS** Elective HTWG |
| **5 ECTS** Programming | **5 ECTS** Software Engineering and Object Oriented Programming | **5 ECTS** Project Management | | **5 ECTS** Elective Engineering | **5 ECTS** Elective Integration | **8 ECTS** Social Skills and Cross-Curricular Learning |
| **5 ECTS** Engineering and Sustainability | **5 ECTS** Markets | **5 ECTS** General Management | | **5 ECTS** Elective Economics | **5 ECTS** Elective Engineering / Economics / Integration | |
| **5 ECTS** Hands on Experience | **5 ECTS** Accounting | **5 ECTS** Planning & Organization | | **15 ECTS** **Specialization Modules:** – Electrical and Electronic Systems – Information Technologies and AI – Sustainable Energy Systems – Sustainable Global Value Networks | | |

## Legend

- Compulsory subject
- Elective subjects + Specializations
- Internship
- Bachelor Thesis
- ECTS Credit Points / European Credit Transfer System

Language of Instruction: English (**DE**=German)