

| Bachelor's Thesis | | General Elective + Soft Skills | |
|-------------------|--|--|--|
| Semester 5, 6, 7 | <p>Expert Engineering and Management Skills</p> <p>Software Engineering and Object oriented Programming Control Systems Sensors and Drives Project and Quality Management</p> | <p>Specialization Modules for Future Technologies</p> <ul style="list-style-type: none"> - Energy Science and Technology <ul style="list-style-type: none"> - Sustainable Mobility - Environmental Engineering - Data Based Engineering - Robotics and Cyberphysical Systems | <p>Compulsory Elective Module e.g.</p> <ul style="list-style-type: none"> - Electrical Power Systems / Smart Grids - Energy storage & conversion / Battery Technologies - Distributed Systems / Automation Technology - Power Electronics / Sensors and Drives - Digital Control Systems / Robotics - System Architecture / Deep Learning- AI - Vehicle technology, driver assistance systems - ... <p>Engineering- and Lab- Project</p> |
| 4 | (International) Integrated Practical Semester | | |
| Semester 1, 2, 3 | <p>Scientific Foundations:</p> <p>Math I - II Statistics and Probability Calculus Multivariable Calculus Physics - Concepts and Methods</p> | <p>Advanced Mechanical Engineering and Advanced Electrical Engineering and Information Technology</p> <p>Electrical Engineering and Electronics Signals and Systems Technical Mechanics Process and Material Technology Machine Dynamics</p> <p>Engineering Fundamentals:</p> <p>Electrical Engineering Programming Machine Design and CAD Basics Concepts of Sustainability</p> | <p>International and Language Modules</p> <p>Language Basics Communication and Intercultural Competences</p> <p>Project- Based Learning</p> <p>Hands on Experience/ Interdisciplinary Lab Electrical Engineering & Physics / Microprocessor Systems</p> |