**Mechatronics (B. Eng.)**

Basic mathematics and science (mathematics I – III, physics, chemistry and materials science I, computing) and engineering basics (mechanics I & II, design and CAD basics, materials science II, electrical engineering, automation engineering I). The advanced stage focuses on particular fundamentals from the fields of mechanical and electrical engineering (mechanics III, microelectronics, microprocessor technology) and particular engineering applications (energy technology and power electronics, automation engineering II, robotics plus an elective subject).

Students can choose 3 elective modules from the fields of electrical engineering (plant automation, process control, data communications) and 3 elective modules from the fields of mechanical engineering (power propulsion technology, manufacturing processes and design engineering).

Students can then choose 2 modules from one field and 1 module from the other to specialise either in electrical or in mechanical engineering. Most of the modules mentioned are supported by comprehensive laboratory tasks. Interdisciplinary modules (English, introduction to business administration and to business organisation and business contracts) are included.

An industrial placement (12 weeks), a project assignment (180 h) plus an application-oriented thesis (3 months with an additional oral examination) are designed to develop skills and problem-solving abilities in mechatronics.