Mechanical Engineering (B. Eng.)

Basic mathematics and science (mathematics I & II, physics, chemistry and materials science I, computing) and basic engineering (mechanics I & II, design and CAD basics, materials science II, thermodynamics I, fluid mechanics, electrical engineering, automation engineering I). The advanced stage focuses on mechanical engineering applications (manufacturing processes I & II, power propulsion technology, advanced design engineering, automation engineering II).

The programme is divided into two options:

- the option on Design with the modules: mechanics III, fluid machines, advanced design engineering II, methodological design I & II, mechanics IV/finite-element-methods and computer aided engineering in design

- and the option on Manufacturing with the modules: quality management, robotics, manufacturing organisation, computer integrated manufacturing, manufacturing machines and computer aided engineering in manufacturing.

Most of the modules mentioned are supported by comprehensive laboratory tasks. Interdisciplinary modules (English I & II, introduction to business administration and to business organisation and business contracts, seminar in economics) are included.

An industrial placement (12 weeks), a project assignment (180 h) and an application-oriented thesis (3 months) are designed to develop skills and problem-solving skills in mechanical engineering.