

Mechanical Engineering (B. Eng.)

Basic mathematics and science (mathematics I & II, materials science, computer science) and basic engineering (mechanics I & II, construction design and CAD basics, thermodynamics, electrical engineering).

The advanced stage focuses on mechanical engineering applications (physics, manufacturing processes, mechanics III, fluid mechanics, advanced design engineering II, control engineering). The programme is divided into two options:

- the option on Design with the modules: mechanics IV & V, advanced design engineering III, methodological design I & II, methods of construction I & II, mechatronics, and computer-aided engineering in design and plastic technology.
- and the option on Manufacturing with the modules: quality management, manufacturing processes II, robotics, manufacturing organization, functional materials, surface coatings, computer integrated manufacturing, manufacturing machines, and computer-aided engineering in manufacturing.

Two further elective modules can be chosen during the advanced stage.

Most of the modules mentioned are supported by comprehensive laboratory tasks.

Interdisciplinary modules (English I & II, seminars in economics, organization, and technical documentation) are included over the course of study every semester.

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.