Industrial Engineering and Management

General Information

The aim of this programme is to provide students with both profound knowledge and skills in the business, engineering and science disciplines as well as interdisciplinary competences. Various modules with practical relevance, such as practical placements, project work, guest lectures and field trips, complement the taught lectures and seminars. Thus, the programme opens up opportunities for entry-level positions in almost any business sector or company division – especially in areas where technology and business overlap.

Course of Study

The course of study is seven semesters in duration and consists of three stages. The first stage (semester 1 and 2) provides fundamentals in mathematics, engineering, technology and business administration as well as additional integrative modules. The second stage is designed to deepen the material taught in stage one. The third stage allows sufficient flexibility for specialisation in areas of individual interest. Students can choose between the following subject-specific elective modules:

- Automotive Engineering
- Process Engineering and Environmental Technologies
- Information and Communication Technology
- Integrated Logistic Systems
- Technology and Innovation Management

Students gain hands-on practical experience in a pre-study internship of twelve weeks, which has to be completed by the end of the first semester, and a practical semester of at least 22 weeks in semester 5. The programme is concluded with the dissertation project (Bachelor’s Thesis) in semester 7.

Stage one (semester 1 and 2) comprises the following lectures:

- Mathematics
- Physics
- Technical Mechanics
- Basics in Electrical Engineering
- Materials
- Basics of Design
- Business Studies
- Accounting and Balancing
- Data Processing and Programming
- English.

Stages two and three (semester 3 to 7) build on the fundamentals of engineering and business taught during stage one. This includes the following lectures:

- Statistics and Operations Research
- Applied Electronics
- Fluid Mechanics and Thermodynamics
- Process and Environmental Engineering
- Power Engineering
- Development and Design
- Production Engineering
- Finance and Investment
- Cost Accounting and Controlling
- Marketing and Sales Management
- Economics
- Human Resource Management
- Corporate Planning and Organisation
- Economic Private Law
- Information Systems
- Project and Quality Management
- Company Organisation, Ergonomics
- Factory Planning, Material Flow Systems
- Logistic Processes
- Elective Subjects

After successful completion of the programme, students will earn a Bachelor’s Degree in Engineering (B. Eng.).