

# Information Sheet

## Course of Study

# Plastics Engineering

### General Information

Plastics are widely used in the manufacture of products that we use in our daily lives. Engineers who understand how plastics materials can be designed, tested and manufactured are in great demand. This programme is designed to prepare the graduate for a professional career in the plastics industry. The curriculum provides a sound basis in mathematics, physics, chemistry and process engineering, plus a full study of plastics materials, properties, physics, engineering sciences, product design, plastics processing and computer aided engineering. Many lectures are complemented by practical projects and laboratory experience. The University's more than **30 state-of-the-art laboratories** ensure that students gain hands-on experience right from the start of their studies.

### Course of Study

The programme takes seven semesters to complete and is divided into six semesters with lectures, practical projects and laboratory experience and a practical semester which is preferably done during the fifth semester at a company in the plastics industry. A further element of this programme is a pre-study 12-week internship, which has to be completed either prior to the beginning of the programme or within the first four semesters.

The **first part** of the programme (semester 1 and 2) provides a sound basis in **mathematics and engineering sciences** and involves the following modules:

- Mathematics
- Physics and Chemistry
- Computer Science
- Technical Mechanics
- Materials Science
- Strength of Materials
- Machine Parts
- Design
- Fundamentals of Electrical Engineering

The **main part of the programme** (semesters 3 to 7) provides in-depth study in the **general engineering sciences** and **plastics engineering**. Relevant coursework involves

- Thermodynamics and Heat Transfer
- Technical Fluid Mechanics
- Control Engineering
- Design
- Machine Parts
- Measurement Technology
- Electrical Drives, Automation and Robotics

- Polymer Chemistry
- Basics of Plastics Engineering
- Polymer Composites
- Polymer Mechanics
- Plastics Engineering and Processing
- Plastics Recycling
- Tool Making and Quality Assurance

The **last semester** is intended for writing a final research paper (Bachelor's Thesis) on a practical issue at a company in the plastics industry.

The course of study leads to a **Bachelor of Engineering degree (B.Eng.)**.

### International Office

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