

Electrical Engineering (B. Eng.)

This programme aims to provide the student with the necessary knowledge and ability to act as a professional electrical engineer either in the field of "automatic control", "communications" or "information technology" as well as to be able to pursue a Master's programme in electrical engineering or a related field.

To this end, the students have to pass modules on mathematics, science and electrical engineering as well as special modules in the special fields of "automatic control", "communications" or "information technology". As the programme strongly emphasises laboratory use to strengthen the students' ability to design and conduct experiments, as well as to analyse and interpret data, most of the modules include laboratory work as an integral part.

Computer skills, a knowledge of programming and computer-aided design tools are acquired in special modules, accompanied by practical work in the computer lab. Each module is completed with a final examination, which can be repeated twice if failed.

Furthermore, students are prepared for engineering practice by gaining design experience based on the knowledge and skills acquired in earlier modules and incorporating engineering standards and realistic constraints to meet desired needs. Two design projects are incorporated into the curriculum, and which have to be carried out in teams. Supported by additional modules on economics, law and project management, this gives students the skills needed to plan and conduct a project systematically.

A significant part of the curriculum trains the students' ability to communicate within a technical context: a project assignment has to be completed with a final presentation, while in the seminar modules a lecture has to be prepared and presented individually.

A practical training period in industry under the supervision of a faculty member is part of the final semester where students enhance the knowledge and skills acquired in the classroom and laboratory. This period must be completed with a written report. The Bachelor's programme is completed with an experimental thesis on a meaningful engineering problem and its presentation in a written report and a viva voce.