Careers in Industry or in Academia

Our four-semester Master’s degree program is equally well suited for students planning an industrial career as for those who wish to embark on an academic career. It offers a multi-disciplinary approach and allows specialization in one out of six fields of study.

Some Key Features

- profound knowledge in an important specialization area with emphasis both on theoretical and experimental methods as well as practical applications
- elective modules out of a broad range of subjects (law, economics, languages etc.)
- strong research focus
- state-of-the-art laboratories and research tools
- training of communication and presentation skills in seminar and project work
- assisted programs for study abroad worldwide, including ERASMUS+ and T.I.M.E. double degree programs
- 18-weeks industrial internships at renowned industry partners
- flexible program start either in the winter or in the summer semester

Admission Requirements and Further Info

Applicants must have a first degree (Bachelor or equivalent) in Electrical Engineering, Information Technology or Computer Engineering. It depends on the individual study profile whether further requirements must be met.

For different groups of applicants, there are slightly different application procedures and conditions. Also several types of language certificates (TOEFL, IELTS, Cambridge Certificate) are acceptable. For all details please consult the website www.elektrotechnik.rwth-aachen.de/master-e-tech.

Contacts and Further Info

The Faculty’s Webpage
www.elektrotechnik.rwth-aachen.de/en

Academic Advising
Faculty of Electrical Engineering and Information Technology
+49 241 80-26952 or 27572
international@fb6.rwth-aachen.de

Student Advice Centre
(general questions concerning your choice of studies)
+49 241 80-94050
www.rwth-aachen.de/studentadvice
studienberatung@rwth-aachen.de

Registrar’s Office
(general questions concerning application, admission, enrolment)
www.rwth-aachen.de/registrarsoffice
studsek@zhv.rwth-aachen.de

General Information for International Prospective Students
www.rwth-aachen.de/international

RWTH Aachen University

With its 260 institutes in nine faculties, RWTH Aachen is among the leading European scientific and research institutions. More than 40,000 students in approx. 150 courses of study are registered here, including over 7,000 international students from more than 120 countries. RWTH graduates are sought-after as specialists, junior executives and leaders in business and industry.

Aachen is Germany’s westernmost major city at whose city boundaries three nations with three languages converge. It is the centre of a dynamic, cross-border knowledge region with a rich cultural heritage. Science has defined the structural change from a mining area to a technology region and today it is the most important economic factor. Because of the academic expertise here, numerous research centers of international corporate groups have been established in and around Aachen.
Communications Engineering

This course of study provides in-depth theoretical and practical knowledge of modern communication technologies with an emphasis on advanced digital multimedia transmission systems.

Teaching subjects: high voltage engineering, electrical drives, power electronics, modelling of complex power systems, electric power distribution, economics of technical change etc.

Areas of research: numerical simulation and rapid prototyping of electrical machines, smart grid energy distribution, real-time simulation of complex power systems, new drive concepts in electric and hybrid vehicles, battery storage systems etc.

Micro- and Nanoelectronics

Micro- and Nanoelectronics is the enabling technology for technical innovation. Progress in all areas of industry is related to it. This course provides profound knowledge in the following key areas: micro- and nanoelectronic materials, design, architectures, fabrication technologies and testing of micro- and nanoelectronic systems and devices, application aspects.

Teaching subjects: solid-state technology, nano-electronic devices, micro-electro-mechanical systems, photonics, novel materials and devices, VLSI-CMOS design, OLED and others.

Areas of research: tunnel field-effect transistors, photovoltaics, graphene, silicon photonics, GaN-devices, organic semiconductors, novel architectures for nanoelectronics, microfluidics, digital and analog circuits design, high frequency electronics etc.