



Universität Stuttgart

MASTER

www.uni-stuttgart.de/eeng

MASTER-PROGRAM
**M.Sc.
Electrical
Engineering**



**A Master's degree in
Electrical Engineering opens
the doors to a limitless
number of future career
opportunities.**

A decision that shapes your future

Interested in studying Electrical Engineering in an international environment, in the heart of one of Europe's leading industrial centers?

Then the Electrical Engineering Master's program at the University of Stuttgart is right for you. This unique two-year program covering the traditional foundations of electrical engineering and information technology is one of very few in Germany that does not require German language proficiency as it can be completed entirely in English.

With the decision to study at the University of Stuttgart you will have made an important step toward your future career. Because of the university's generous research funding and its close connections with the industry it is able to provide students with an outstanding education. In addition, its industry connections help smoothen the transition between studies



and career. Many of our graduates were first introduced to their future employer during work on their master or doctoral theses or through other industry sponsored projects.



Mathematics

Radio Technology **Sensors** Digital Signal Processing

Nano- and Optoelectronics Computer Science

Physics **Software Technology** Electromagnetics

Energy Supply Electromobility **Telecommunications**

Power Electronics Automation

M.Sc. Electrical Engineering

Admission Regulations

The Master's program is suitable for candidates with a Bachelor's Degree in Electrical Engineering, Information Technology or a related field who possess at least a C1 or equivalent level of English. Application for admission is possible for both the winter and summer semesters.

Study Contents

The program provides a broad overview of electrical engineering and information technology, with an emphasis on fields such as automation technology, information and communication technology, nano- and optoelectronics, power electronics, and electrical energy engineering.



Structure of the Program

Program (4 semesters)

The first three semesters are study terms while the fourth is intended for the Master thesis project.

There are six areas of specialization. Students will be required to complete a mix of credits from both their specialization's catalog of core courses and a catalog of elective courses. This provides students a degree of freedom in customizing the master program according to their interests. Additional practical training and the research and master theses allow students to put their theoretical knowledge to practical use.

Tuition Fees

All students are required to pay a regular semester fee. Students who are not citizens of an EU/EEA country are also subject to tuition fees. [Information regarding tuition fees:](#)



**Organisations
such as the DAAD
(German Academic Exchange
Service) offer scholarships and
funding to promising applicants.
Be sure to look into such
opportunities early!**



1

2

3

4

STUDY PROGRAMME

- Mix of core and elective courses
- 6 areas of specialization
- Practical Training
- Research and Master Thesis

Practical
Training

Research
Thesis

Master Thesis

AREAS OF SPECIALIZATION

- Smart Information Processing
- Communication Systems
- Nano- and Optoelectronics
- Power-electronic Systems and Technologies
- Smart Sensors
- Electromagnetics and Applications



Prospects after graduation

Career Prospects

The University's strong connections to many renowned companies in the area provides students with access to excellent research and working environments. Talented and motivated graduates enjoy an abundance of excellent job opportunities in industry as well as academia.

Graduates of the Electrical Engineering Master's Program can expect to find employment in areas such as:

- Research and development in international corporations, medium sized companies and small start-ups
- Research at internationally operating universities and research institutions
- Production planning and quality assurance
- Sales and application support
- Management consulting

Further career prospects are opening up in fields such as Industry 4.0, autonomous driving, digitalization, artificial intelligence and the information society.

PhD – Doctorate

Before launching a career in the industry, qualified graduates often have the opportunity to pursue a PhD either here at the University of Stuttgart, at another university or in cooperation with an industrial partner.

Excellent Study Environment

StudLab

A highlight for students is the student laboratory (StudLab). The lab is fully equipped with first-class, state-of-the-art technology. All of the equipment – from measuring devices, SMD soldering stations to a 3D printer – is available to students for both private and course related projects.

Student Life

The University of Stuttgart has a lot to offer its students besides an excellent education. The university sports program – a broad selection of sporting opportunities from football to paragliding – has something for everyone. Language lovers are sure to be impressed with the language center's courses.

Furthermore, the university hosts other clubs such as orchestra, amateur radio, debate, and improvisation theatre.

Work and study

Motivated students interested in becoming more hands on during their studies while earning some money can look into the possibility of getting a student job with one of the institutes.

Travelling outside Stuttgart

Those interested in travelling will find many exciting destinations easily accessible by train. With the TGV high-speed train, Paris is just three hours away. And the airport, only 15 minutes from campus, offers regular connections to other international destinations.





Faculty and University

The Faculty

The Computer Science, Electrical Engineering and Information Technology faculty is one of the oldest at the university; its first professorship was founded in 1882.

The Department of Electrical Engineering

Electrical engineering and information technology evolved to deal with questions that affect all areas of life: How can telecommunications become more reliable? Under what circumstances can things communicate with each other intelligently and in a targeted manner? How can we make driving a car more environmentally friendly? How can we integrate renewable energies into the power grid?

The University

The University of Stuttgart was founded in 1829 and became a technical university in 1890. Renowned for its engineering and science programs, it also boasts outstanding departments in the Humanities, Social Sciences and Economics. It is dedicated to researching and strengthening the interfaces between technology, society and culture in an interdisciplinary manner, often referred to as the 'Stuttgart Way'.

The University has established itself as an internationally recognized center for research and training and is ranked among the top universities in Germany, including the TU 9.

Life at the university has a clear international profile: approximately 20% of the 27,000 students at the university come from more than 100 different countries.

Life in and around Stuttgart

The Stuttgart region is an industrial center specializing in high-tech industries. Many renowned companies such as Bosch, Daimler, Porsche and IBM have their headquarters and factories in the area.

Despite being an industrial city, Stuttgart has many parks and is surrounded by forests and vineyards. A large number of cultural highlights can be found in the city including opera, ballet, concert halls and musicals as well as various museums and art galleries.

The city also hosts a rich variety of attractive sporting events and is home to the second largest „Volksfest“ (Oktoberfest) in Germany. Stuttgart’s nightlife offers something for everyone: from clubs and lounges on the Theodor-Heuss-Straße to small bars and cafes in the city’s west end.



above
Mercedes-Benz
Museum, below
Opera at
Schlossplatz





Stuttgart, the state capital of Baden-Württemberg, is one of the safest cities in Europe. Situated between the hills of the Swabian Alb and the Black Forest, it is a cosmopolitan city full of cultural diversity that offers a high quality of living.





www.artes-code.de

Contact

Program Management Electrical Engineering

University of Stuttgart
Pfaffenwaldring 47
70569 Stuttgart

Tel: +49 711/685 67 239
info@ei.uni-stuttgart.de
www.uni-stuttgart.de/eeng

Application Information

www.uni-stuttgart.de/en/study/application
Application deadlines:
January 15 (starting in October),
July 15 (starting in April)



Picture credits: All images © Universität Stuttgart except: Title: © shutterstock/S.Borisov; S.2 big picture: © shutterstock/sdecoret; small pictures (from top to bottom): © shutterstock/asharkyu /Diyana Dimitrova /agsandrew; S.5 small picture right: © shutterstock/science photo; S.14: Mercedes-Benz Museum © Daimler AG; Ballet © pixabay/skeeze; Opera © pixabay/Nikiko; S.15: Schlossplatz © Stuttgart-Marketing GmbH/Thomas Niedermüller, „Volksfest“ © shutterstock/tichr