Facts and Figures

Duration: 2 years
Programme start: April and October
Language: German and English

Application Deadlines:
Winter semester: 1 June / 15 July*
Summer semester: 15 December / 15 January*
Requirements: BSc in Computer Science, IT, Electrical or Electronics Engineering or similar
Fees: 284 Euro per year

(*Please check web page for details)

How to apply

Please send the following documents by post:
- Completed application form (online)
- A certified copy of your undergraduate diploma
- A certified copy of your grade transcript
- A certified copy of your secondary school certificate
- Proof of English proficiency (TOEFL or IELTS)
- Proof of German proficiency (B1 level)
- Curriculum vitae or résumé
- Personal statement of intent
The Master's Programme

Embedded Systems are a key technology of modern society. Whether in the automotive industry, aerospace and medical technology or in telecommunications, media and entertainment industries – embedded systems always play a major role in state-of-the-art technology.

The Master of Science programme in Embedded Systems Engineering (ESE) has been designed for highly qualified graduate students with a Bachelor’s degree in Computer Science and/or Engineering, Information Technology, Electrical and/or Electronics Engineering, Microsystems Engineering, Physics or in a closely related engineering field.

ESE students at the Faculty of Engineering benefit from:
- A very flexible curriculum
- Individual mentoring by one of the professors
- A modern campus with state-of-the-art equipment
- Excellent job prospects in Germany and abroad
- Living in one of Germany’s most appealing cities

The Curriculum

The curriculum encompasses courses belonging to the following areas:
- Design of microelectronic and micromechanic devices
- Software based components
- System integration
- System optimisation regarding speed, cost and energy efficiency
- Safety and reliability

Six different concentration areas are offered:
- Circuits and systems
- Design and simulation
- Sensors and actuators
- Reliable embedded systems
- Distributed systems
- Robotics and computer vision

Depending on the electives chosen, 10 – 30% of a student’s classes will be held in German. Advanced German proficiency is therefore required.

During the six months preparation time for the dissertation, ESE students can become involved in an actual research project of one of the research groups at the Faculty of Engineering.

The Faculty of Engineering

Founded in 1457, the University of Freiburg is one of the most renowned universities in Germany. Its Faculty of Engineering focuses on higher education and research in key technologies, such as microsystems engineering, embedded systems and computer science. It does not only explore new ways in research, but it also has been awarded various prizes for striving to implement new methods and technologies in the teaching process.

The Faculty of Engineering consists of a Department of Computer Science and a Department of Microsystems Engineering, thus offering the perfect environment for an interdisciplinary study programme like Embedded Systems Engineering. Situated on a new campus, the Faculty of Engineering features modern facilities including a cleanroom, electronics and robotics laboratories as well as WiFi and several computer pools for its students.