University of Rostock

Founded in 1419, the University of Rostock is the oldest university in the Baltic Sea region and the third oldest in Germany. Under the motto „Traditio et Innovatio“, it combines maritime and Hanseatic traditions with cutting-edge research and teaching. There are 290 professorships, 5,800 employees and 13,000 students from 90 different nationalities in 9 faculties, central facilities and university clinics.

Faculty of Computer Science and Electrical Engineering (IEF)
The University of Rostock was the first classical university in Germany, which in 1951 extended its profile to a technical faculty. The IEF continues the engineering traditions and combines the fields of electrical engineering since 1953, business informatics since 1966 and computer science since 1969. At eight institutes of electrical engineering and computer science with a total of 34 professors and about 270 employees, about 1,560 students are enrolled.

Offers for study orientation
- Long Night of Sciences (in Rostock)
- University-Information-Day (in Rostock)
- Uni-/IEF-Visit-Day (visit for pupils at IEF in Rostock)
- Kick Me To Science (Workshops in Rostock / at schools)
- Technical & Engineering Summer School (in Rostock)
- „Youth researches“-Pupil-Groups (at IEF in Rostock)
- Internships for pupils (at IEF in Rostock)
- Junior Study: study as a pupil
- Nationwide Robotics Competition Formel SPURT
- State Olympics Computer Science MV
- Information at trade fairs for study orientation
- Student ambassadors inform schools
- Rent-a-Professional (Lecture in the school)
- Lectures and information stands (at schools)
Study
- Study year: winter semester begins in October, summer semester begins in April
- Bachelor: Start in the winter semester
- Master: Start in winter and summer semester
- Online enrollment: directly on www.uni-rostock.de
- no admission restriction (numerus clausus), exception: for Medical Information Technology admission required

Courses of study
(B) Bachelor, (M) Master, (S) First State Examina, (NC) numerus clausus
- Electrical Engineering (B, M, M with Double Degree possible)
- Information Technology/Technical Computer Science (B, M)
- Medical Information Technology (B with NC, M in planning)
- Computer Science (B, M: Master in German and in English)
- Business Informatics (B, M, M with Double Degree possible)
- Computational Science and Engineering (M, in English)
- Electrical Engineering (M, in English)
- Visual Computing (M)
- Computer Science for teaching at Secondary Schools (S)
- Computer Science for teaching at Regional Schools (S)

Courses of study with IEF participation (selection)
- Teaching Profession Education (B, M)
  with first subjects Electrical Engineering or Information Technology and second subject Computer Science
- Teaching Business Education (B, M)
  with Second Subject: Computer Science
- Industrial Engineering (B, M)
  with area Electrical Engineering with 3 specializations
- Mechatronics (B, M)

Support offers for students
Mentoring of students for students at the start of studies • Individual part-time study • Internships in Germany and abroad

Further education for teachers
(in the state of MV recognized as training for teachers)
- ILTIS – Computer Science Teacher Day in the Südstadt
- HILFI – Autumn computer science teacher training
- State meeting of the computer science teachers in MV
- Courses for teachers in the SPURT lab

Forschung und Promotion
The IEF conducts elite research at the highest stage. Many projects are financed by external funds and involve students early. A DFG Collaborative Research Center with integrated PhD Research Training Group, an EU doctoral training network, a BMBF Center for Innovation Competence, five Steinbeis Transfer Centers, a Research and Innovation Center, an Application Center and numerous basic and industry-related projects open wide possibilities for further research and graduation as PhD. The IEF organizes many recognized national and international events.

Research focus
- modeling and simulation: system biology / medicine, company and knowledge modeling, simulation of complex technical systems and networks
- human centered engineering: life science engineering, assistive systems, visual analytics and visual computing, medical technology
- technologies: embedded systems (cyberphysical systems), reliability of electronic circuits, micro- and nano-technologies, sensors (for medical applications)
- system engineering: maritime systems, robotics and automation, electrical energy technology and renewable energies, information and communication technology
- software engineering: human centered software engineering, service-oriented architectures and efficient middleware, web-based services, modeling languages and algorithm development

Participation in central academic institutions of the university and university-related institutions
- Interdisciplinary Faculty of the University of Rostock
- Fraunhofer-Institute for graphic data processing
- Center for Life Science Automation (CELISCA)
- Center for Marine Information Systems (CeMarIS)
- Visual Computing Research and Innovation Center
- 5 Steinbeis Transfer Centers
- Research Organization IuK

Cooperations and spin-offs
IEF works with numerous universities, research institutions and industrial companies worldwide. Since 1990, more than 100 engineering companies with over 1,600 jobs have been spun out of the faculty.