# **Overview of the Degree Program**

#### **✓** Degree

Master of Science (M.Sc.)

#### **✓** Regular Program Length

4 semester (full-time program)

#### ✓ Credit Points (ECTS)

120 credit points

#### **✓** Language of Instruction

English

#### **✓** Admission Requirements

- » completed bachelor's degree in a relevant subject with the following subject:
  - minimum of 21 CP in Higher Mathematics (with specific content)
  - ▶ minimum of 6 CP in Electrical Engineering
  - minimum of 6 CP in Technical Mechanics or Thermodynamics
  - minimum of 6 CP in Control Systems Engineering (with specific content)
- » proof of sufficient knowledge of English of at least CEFR B2 level

Details can be found in the current admission regulations.

### **✓** Limited Capacity

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### ✓ Application Deadline

September 30 / March 31 for the 1st semester (for applicants with German or EU nationality)

July 15 / January 15 for the 1st semester (for all other international applicants)

# Questions?

If you have **general questions** about the degree program, studying at KIT or the **application process**:

Karin Schmurr, your student advisor at ZSB: karin.schmurr@kit.edu



Information in this flyer was accurate at the time of printing. Program structure, study plan or deadlines could have changed since then.

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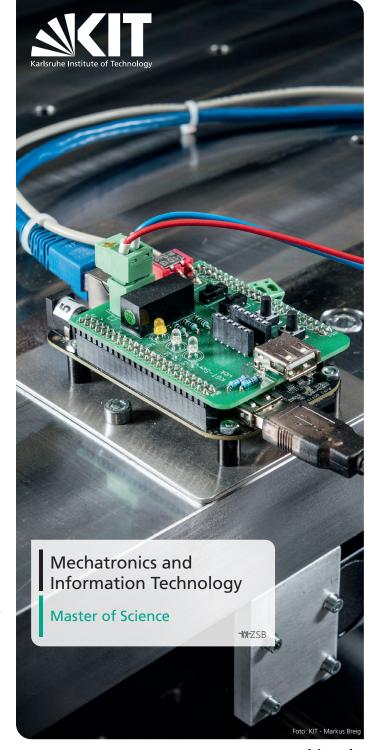
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# Karlsruhe Institute of Technology

The Karlsruhe Institute of Technology (KIT), a fusion of a university and a large-scale research facility, represents one of the leading research and teaching institutions in Europe in natural science and engineering. Students who choose to study here opt for a scientific education that is predominately research-oriented. The wide range of offered subjects provides a high level of freedom of choice and individual specialization options in the master's degree programs. The particularly high qualification standards at KIT are known among employers and thus offer graduates a well-paved road into starting a professional career or continuing with a doctorate.

### Mechatronics and Information Technology (M.Sc.)

The master's degree program in Mechatronics and Information Technology continues on from the bachelor's degree program of the same name. It gives you the opportunity to deepen your knowledge and specialize. In addition to a compulsory General Mechatronics component, you can choose from one of eight specializations. There is also an elective area (interdisciplinary subject) and the master's thesis. A professional internship is not planned, but can be completed additionally, also as part of a semester abroad.

The modules can be arranged in any order and can be chosen according to purely content-related aspects. As a rule, a course is offered once a year, i.e. either in the summer or winter semester. Fields of specilaization are:

- » Vehicle Systems Engineering
- » Energy Technology
- » Micro System Technology
- » Industrial Informatics and Systems Engineering
- » Autonomous Systems and Al
- » Automation, Control, and Robotics
- » Design of Mechatronic Systems

In addition, 2 to 3 courses in interdisciplinary qualifications (of your choice) are completed.

### **Career Prospects**

The industries and activies in professional live are as diverse as the specialization options. Mechatronic principles are now used in all vehicles, installtions and devices. Engineers develop everything from the smalles embedded systems to complete production lines. In addition to typical areas such as design, maintenance and testing, well-trained specialists are also needed in sales and logistics. A master's degree from KIT demonstrates the ability to apply complex knowledge to research, innovation and high-quality products and opens doors to interesting positions in research and industry.

### Characteristic Features of the Degree Program at KIT

- » international orientation due to English curriculum
- » large interdisciplinary curriculum
- » Anwendungszentrum Mechatronik for student projects
- » study abroad, e.g. EUCOR, GEARE or ERASMUS+
- » double degree with TU Budapest possible
- » support in organizing your studies offered by Studiengangservice and Zentrale Studienberatung (Student Advisory Services)
- » cooperations and practical projects with companies

### What KIT has to offer

- » central campus close to the city forest and right next to the city center
- » 24/7 library offering single and group working places
- » wide range of inexpensive catering options on campus (dining hall, cafeteria, Koeriwerk and Pizzawerk)
- » numerous interdiciplinary offers for personal and professional development
- » study abroad, e.g. Erasmus
- » excellent university sports facilities with a large selection of sports
- » comprehensive cultural offerings such as university orchestra, choirs and theater groups
- » extensive support for career entry and self-employment
- » internationally oriented degree programs and diverse exchange programs
- » modern laboratories and practical teaching methods
- » diverse student initiatives, clubs and opportunities to actively aprticipate in campus life



# **Program Structure**

• Elective area (22 CP)

• Interdisciplinary qualifications (8 CP)

. Master's thesis (30 CP)

1st to 3rd semester

· Field of Specialization methodical / general / laboratory (30 CP)

• Supplementary electives (up to 30 CP)