Your Master plan: AI for Smart Sensors and Actuators

AI for Smart Sensors and Actuators, M.Eng.

PROGRAMME CONTENTS

- Process of Machine Learning (neuronal networks)
- Embedded Control for Smart Sensors and Actuators
- Sensor Technology (e.g. MEMS)
- Methods of System Networking (wired and wireless communication)
- Methods of Data Processing (e.g. Big Data, IoT)
- System Design

COURSE OF STUDY

- Duration: **3 semesters**
- Start: **summer semester & winter semester** (March & October)
- Location: **Campus Cham**
- Teaching language: **English**
- **Applied & interactive teaching style**
- **Personal support**, **small groups** and **close contact with professors**

ENTRY REQUIREMENTS

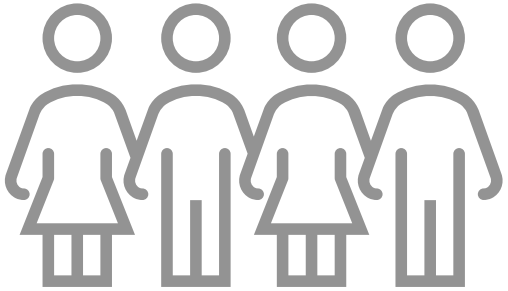
- **Bachelor degree with a minimum of 210 ECTS in mechatronics** or another related study course or a degree that is equivalent to such a university degree
- **Admission test** (written exam, online and on-site)
- **Language requirements**:
  - B2 English certificate
    (if English is not your first language)

Is this programme suitable for you?

Yes, if...

...you want to **become an expert in the development and use of intelligent, technical systems of data processing, data analysis and automation**.

...you want to study in a **practical way**.



...you have a Bachelor's degree in **Mechatronics** or related fields.

...you are open **to work hands-on in international groups**.

...you have an interest in **artificial intelligence, machine learning** and **innovative sensors/actuators**.

...you are interested to **work creatively in research and development departments**.

Highlights

- The study programm places a great emphasis on **practical application**. Using numerous **case studies conducted with industrial experts**, students learn to apply the theoretical knowledge they have acquired in lectures.

- The programme is hosted at campus Cham in the charming **town of Cham** located in the beautiful **Bavarian Forest**.
  Find out more: **www.th-deg.de/campus-cham-studies**




Artificial Intelligence for Smart Sensors and Actuators – what's next?

The programme prepares you to take on **key roles** in a **wide variety of positions** in **different areas** - depending on your personal interests and background.

Job profile

- AI Engineer
- Data Scientist
- Software Engineer for intelligent systems
- Robotics Engineer
- Automation Engineer

Areas and industries

- Automotive & Mobility
- Healthcare & Medical Technology
- Manufacturing & Industrial Automation
- Information & Communication Technology
- Environmental Monitoring & Sustainability

Helpfull soft skills

- Critical Thinking
- Problem-Solving
- Interdisciplinary Teamwork
- Adaptability
- Curiosity

Voices of DIT

“Since completing my bachelor's degree, I’ve always wanted to dive deeper into the topic of building my own robot. During my master’s program, I learned more than I expected – from how to simulate my robot and design its behaviour, to how to communicate between IoT protocols. The opportunities in companies are vast, as we’ve gained knowledge in various fields that we can apply. The challenge today is how to integrate new creations into private networks and ensure the system’s efficiency.”

Raquel, student of Master AI for Smart Sensors and Actuators

Would you like to find out more?

Would you like more detailed information about the programme, or do you have any questions?

You are very welcome to contact **studium-cham@th-deg.de** or you can reach out to Raquel, one of our students on this programme: **ask-kim-cham-student@th-deg.de**