

Your Master plan: Mechatronic and Cyber-Physical Systems in Cham

Mechatronics and Cyber-Physical Systems, M.Eng. (Cham)

PROGRAMME CONTENTS

- Cyber-physical systems
- Modelling & simulation
- Autonomous systems
- Robotics
- Innovative HMI
- VR/AR
- Additive manufacturing
- Functional safety
- Four case studies

COURSE OF STUDY

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

ENTRY REQUIREMENTS

- Bachelor degree in the fields of **industrial engineering, technical physics, mechanical engineering, electrical engineering, mechatronics** or a degree that is equivalent to such a university degree
- **Admission test** (online or on-site)
- **Language requirements:**
 - B2 English certificate (if English is not your first language)
 - B2 German (if German is not your first language)

Is this programme suitable for you?

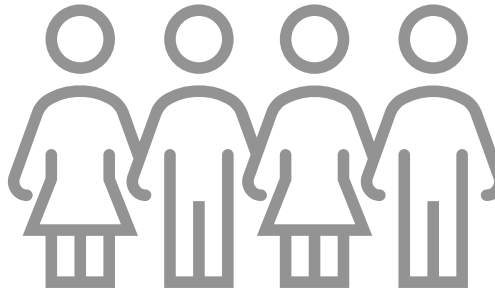
Yes, if...

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

...you want to develop your expertise in **simulation systems, additive manufacturing, human-machine interfaces, and cyber-physical systems**.

...you have a Bachelor's degree in **Mechanical, Electrical or Industrial, Engineering, Technical Physics, Mechatronics** or related fields.

...you have a basic understanding of **robotics** and a good knowledge of **control** and **mechanical engineering**.



...you enjoy **solving technical challenges that combine software, hardware, control, sensing, and innovation** with interdisciplinary teams.

...you are interested in pursuing a career in **autonomous systems, robotics or functional safety**.

Highlights

- **CHE University Ranking 2021/2022:** The Faculty of Mechanical Engineering and Mechatronics is in the top group in the area of "Practical Relevance".
- The study program places a great emphasis on **practical application**. Using **numerous case studies**, students learn to translate theoretical concepts into real-world solutions (24 ECTS in total).
 - Example Case Study Projects:
 - 3D print of a key fob
 - Hand gesture recognition
 - Modelling of a virtual bank simulation with dynamic object animations



Highlights

- 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



Mechatronic and Cyber-Physical Systems – 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

- Autonomous Systems Engineer
- Robotics Engineer
- System Integration Engineer
- Embedded System Engineer
- ...

Areas and industries

- Hardware & software design
- Research & development
- Autonomous systems design
- Robotics
- Energy systems
- Manufacturing
- Mobility & Automotive
- ...

Helpfull soft skills

- Communication
- Critical Thinking
- Problem-Solving
- Teamwork
- Adaptability

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.