

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 knowlegde of **control** and **mechanical engineering**.





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

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

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 programm 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**.