OVERVIEW

Degree
- Master of Engineering (M.Eng.)

Duration
- 3 semesters (1.5 yrs)

Start
- Summer semester, 15 March

Admission requirements
- Successful completion of a bachelor's degree in Mechatronics, Robotics or a closely related field
- Proof of B2 English language level
- A2 German language level must be completed by the end of the studies, either by passing the German course A2/part 3+4 at DIT or proven by a certificate acknowledged by DIT.
- A GATE or GRE (general) certificate is recommended to be submitted if your undergraduate degree has been completed in a non-member state of the Lisbon convention to further substantiate your eligibility for this study programme.
- Aptitude assessment is required

Language of Instruction
- English

Location
- Campus Cham

APPLICATION

Application period
th-deg.de/deadlines-m

Online application
- in the Primuss portal at www.th-deg.de/en/apply

Deadline for Submission of Required Documents
- Summer Semester: 15 January
- Winter Semester: 15 July

Notice of acceptance or denial
- Primuss portal, winter semester, until the beginning of August
- in the Primuss portal, until the beginning of February
- Deferred admission will not be granted

Enrolment
- Information available in the letter of admission

STUDY LOCATION

Campus Cham
Badstraße 21
93413 Cham, Germany

TECHNISCHE HOCHSCHULE DEGGENDORF THD
Campus Cham

CONTACT

You are interested in the Master course Intelligent Robotics and would like to find out more?

General information about studying at DIT - Campus Cham

- www.th-deg.de/campus-cham
- studium-cham@th-deg.de
- +49 (0)9971 99673-29 or -21

General information about studying at DIT

- welcome@th-deg.de
- www.th-deg.de/en/advice

DIT DEGGENDORF INSTITUTE OF TECHNOLOGY

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DEGGENDORF INSTITUTE OF TECHNOLOGY DIT

Master
INTELLIGENT ROBOTICS

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YOUR COURSE

The Master's degree programme in Intelligent Robotics will be based on the content of the TC Intelligent Robotics and the requirements of regional companies and will include industrial and/or medical technology applications, for example. Graduates should be able to work in research and development, but also in industrial applications.

The internationally oriented Master's degree programme enables students to deepen their knowledge and understanding of robotics in general and the use of artificial intelligence in robotics in particular. By combining teaching content on robotics, systems engineering and human-robot interaction as well as machine learning and computer science, expert knowledge on the fundamental disciplines of intelligent robotics is imparted. In addition, students acquire specialist knowledge in the areas of perception in robotics, modern automatic control and decision-making systems (e.g. motion planning), robot modelling and simulation as well as on the application side in the field of industrial robotics and automation. This enables students to cope with the increased use of robotic systems in industry and to help shape this - from development and commissioning to application and interface analysis through to supporting end users.

Other key course content includes intelligent multi-agent systems and project-based case studies in the field of robot programming (ROS). Students acquire the necessary specialised knowledge, skills and methods to independently apply scientific findings and processes in industry and the service sector.

In addition, students acquire basic knowledge and skills in concepts, results and methods that correspond to the current state of science and allow them to familiarise themselves independently with further technical developments.

COURSE CONTENT

The master's programme "Intelligent Robotics" takes place at Campus Cham. The ultra-modern research and development centre the programme is embedded in mainly focuses on the areas of robotics, control engineering as well as cooperative and autonomous systems. The programme consists of three theoretical study semesters and concludes with the master's thesis. Upon successful completion of the postgraduate examinations, the Deggendorf Institute of Technology awards you the academic degree Master of Engineering (M.Eng.).

Semester 1	Robot Dynamics, Advanced Methods in Control Engineering, Statistics and Machine Learning, Technical Project Management, Embedded Systems, Case Study ROS Robot Programming
Semester 2	Advanced Methods in Robotics, Image-Processing and Computer Vision, Robot-Modelling & Simulation, Industrial Robotics & Automation, Case Study Robotic Systems, Intelligent Multi-Agent Systems
Semester 3	Subject-Related Elective Course (FWP), **Master's Module**, Master's Thesis, Master's Seminar (two parts: Master's colloquium and seminar series "Career Start into German Technology Companies")

All lectures are conducted in English. In-depth knowledge of the English language is thus a prerequisite for this master's programme. For students whose native language is not German, language courses are compulsory.

THE FUTURE STARTS NOW

Key course content includes intelligent multi-agent systems and project-based case studies in the field of robot programming (ROS). You acquire the necessary specialised knowledge, skills and methods to independently apply scientific findings and processes to the industry and the service sector. In addition, you acquire basic knowledge and skills in concepts, results and methods that correspond to the current state of science and allows you to familiarise yourself independently with further technical developments.

After completing the master's programme "Intelligent Robotics", you will have all the qualifications required to establish yourself as an expert in this transitioning professional world and to participate actively in its development.

CAREER PROSPECTS

The programme is designed to qualify students for scientifically sound engineering activities in the following fields of work, for example:

- Development, construction and application of robots in various fields of application, for example production and medical technology
- Development, construction and application of complex robot systems in the production environment
- Leading and managing technical projects
- Research and teaching

Attention is paid to a wide-ranging, qualified and scientifically sound education, which enables graduates to work in a variety of professions. Career opportunities are available not only in commercial and industrial companies, but also in research and teaching as well as in the private sector.