

ARTIFICIAL INTELLIGENCE

Master of Science

English Language
Degree Programme

 mai.fhws.de



FH·W-S

**University of Applied Sciences
Würzburg-Schweinfurt**

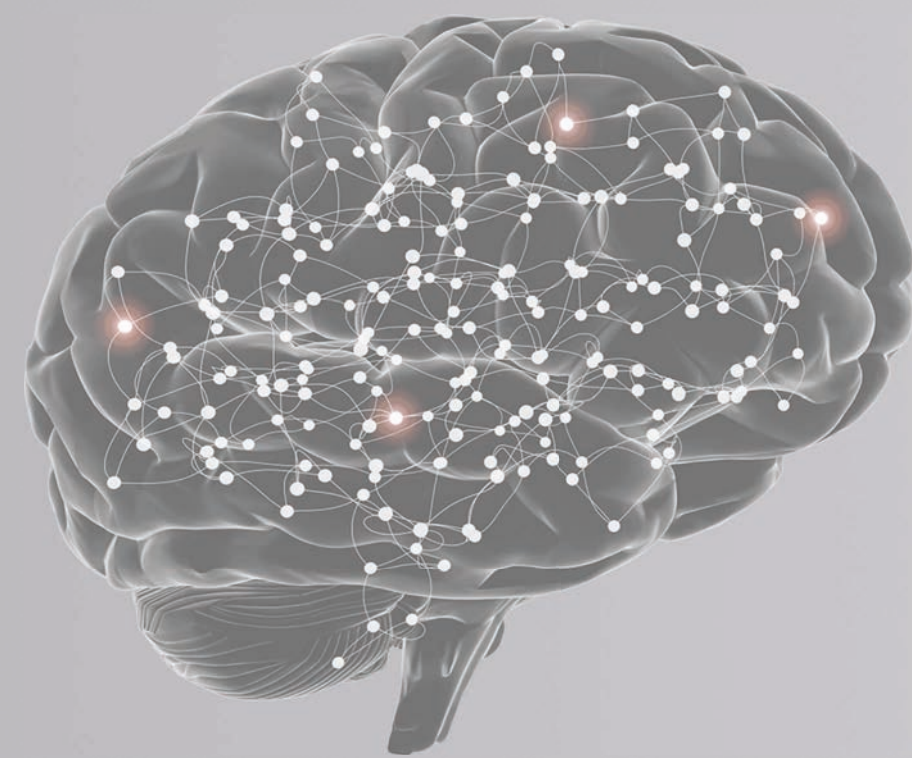
ARTIFICIAL INTELLIGENCE MASTER OF SCIENCE

Degree:	Master of Science
Duration:	3 Semesters (1.5 Years)
Start:	Summer Semester
Mode of Study:	Full-Time
Credit Points:	90 ECTS
Language:	100% English
Study Location:	Würzburg



STUDY GOALS

MASTER ARTIFICIAL INTELLIGENCE



● Training responsible Artificial Intelligence (AI) experts

● Developing and operating AI systems

● Using innovative strong AI techniques (semantics, cognitive models, sensor technology, etc.)

● Monitoring transformation processes (ethics, law, digital transformation of the working world)

MODULE PLAN

MASTER OF SCIENCE ARTIFICIAL INTELLIGENCE

***SWS**

required attendance of students at the university per module in one semester week.
(1 SWS = 45 minutes)

Semester 1

Mathematical and Theoretical Foundations of AI (5 ECTS / 4 SWS*)	Artificial Intelligence and Machine Learning (5 ECTS / 4 SWS)	Artificial Neural Networks and Cognitive Models (5 ECTS / 4 SWS)
Reasoning and Decision Making under Uncertainty (5 ECTS / 4 SWS)	Elective 1 (5 ECTS / 4 SWS)	Project Module (Part 1) (5 ECTS / 4 SWS)

Semester 2

Trustworthy AI and AI Regulations (5 ECTS / 4 SWS)	Artificial Intelligence in Robotics (5 ECTS / 4 SWS)	Semantic Data Processing and Representation (5 ECTS / 4 SWS)
Learning of Structured Data (5 ECTS / 4 SWS)	Scientific Seminar (5 ECTS / 4 SWS)	Project Module (Part 2) (5 ECTS / 4 SWS)

Semester 3

Master's Thesis (25 ECTS)	Elective 2 (5 ECTS / 4 SWS)
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FACULTY OF COMPUTER SCIENCE AND BUSINESS INFORMATION SYSTEMS (FIW)

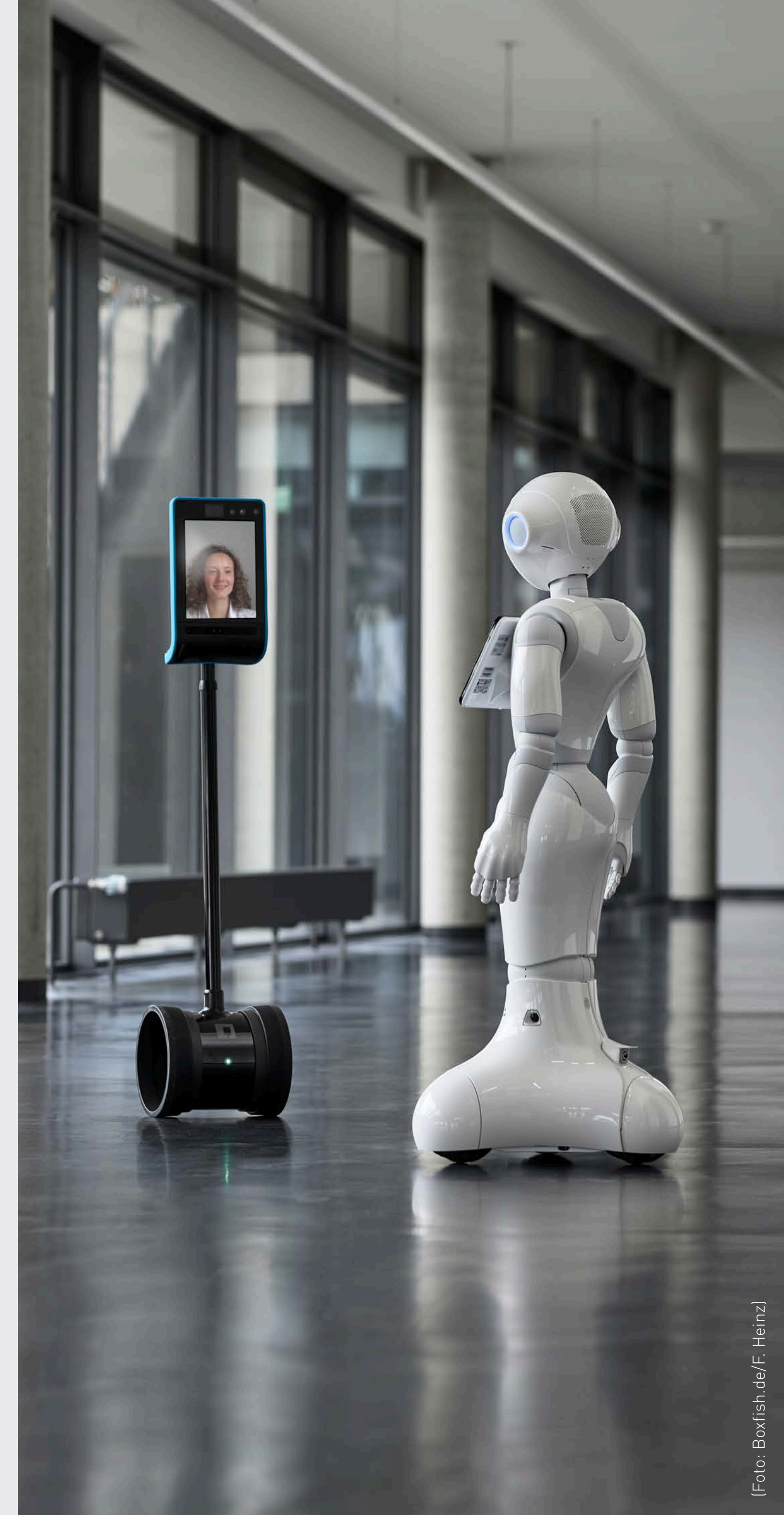


We offer the following degree programmes:

- E-Commerce (Bachelor of Science)
- Computer Science (Bachelor of Engineering)
- Business Information Systems (Bachelor of Science)
- Information Systems (Master of Science)
- Artificial Intelligence (Master of Science)

UNIVERSITY OF APPLIED SCIENCES WÜRZBURG-SCHWEINFURT

- **One of the largest universities** of applied sciences in Southern Germany (9,159 students 2019/20)
- Degree programmes with a combination of **theoretical and practical components**
- **Modern infrastructure** and state-of-the-art facilities
- More than 40 degree programmes offered by 10 faculties
- **Close cooperation with** regional and trans-regional **companies**



COMPETENCE CENTER FOR ARTIFICIAL INTELLIGENCE

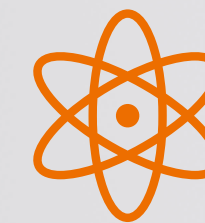


Center for Artificial Intelligence and Robotics
(CAIRO)



Objectives:

- A more holistic understanding of AI
- Facilitating effective knowledge transfer to the practical domain within various industry sectors
- Ethical and legal aspects of AI



CAIRO provides space for laboratories and offices.

Lecture Halls are at FIW (Campus SHL)



KEY FACTS AT A GLANCE

- CAIRO location: Würzburg
- Place for:
 - Lab activities
 - Research
 - Technology transfer

AREAS OF APPLICATION OF ARTIFICIAL INTELLIGENCE

AI Represents a New Age

Artificial Intelligence is shaping our everyday lives. AI has an almost unlimited range of potential applications. Where large quantities of data are processed, AI can be used to great advantage.

Areas of Applications of AI

1. Dialogue processes – human to machine
2. Machine-to-machine processes
3. Intelligent automation
4. Intelligence enhancement/intelligent decision support
5. New application fields





STUDYING IN WÜRZBURG

GERMANY

The city of Würzburg is located in Lower Franconia in the northwest of Bavaria and is well-known for its exquisite wines. With 130,000 inhabitants, Würzburg is not the largest city in Bavaria, but it sure has a lot to offer! In addition to flourishing culture and entertainment, Würzburg is characterised by its vineyards, the central Ringpark and the riverbank of the Main.

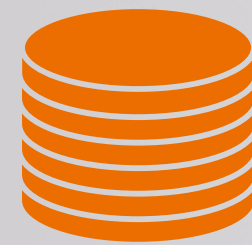




STUDYING IN WÜRZBURG

GERMANY

Costs



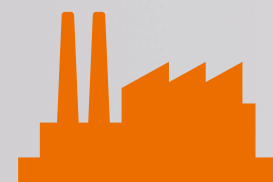
1. Semester fee: about EUR 140
(includes public transport at your study location.)
2. Living costs: about EUR 1,000 per month

Accommodation



Every semester, the Studentenwerk Würzburg offers rooms at a fair price. As FHWS student you can apply for one such room.

Working in Germany



With a student visa, students are allowed to work 120 days full-time or 240 days part-time per year.

ADMISSION REQUIREMENTS

Applicants must have completed a higher education degree of 210 ECTS credits with an overall grade of 2.5 or higher in the fields of computer science, business information systems, robotics, mathematics or a related field of study. If less ECTS credits were achieved additional courses need to be completed.



Application Period

15. Nov - 15. Jan for the following summer semester

Language Requirements



A solid knowledge of the English language (at least B2 level of CEFR) is required for English-taught programmes at FHWS.



BECOME AN AI EXPERT

STUDY AT FHWS

More information on the degree programme:

 mai.fhws.de

General information about the application and admission process
for international applicants:

 i-campus@fhws.de



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