Course/Programme requirements

Admission criteria

- Higher education entrance qualification equivalent to German Abitur or Fachhochschulreife
- All applicants, who have obtained their higher education entrance qualification at a non-German institution, must apply for a VPD at uni-assist
- Level B2 English language skills
- If German is not your native language, you must prove that your German language skills are at least at level A2 according to the CEFR

Personal commitment/Assessment of motivation/ Other skills

Students of Applied Artificial Intelligence should have the ability to think logically and abstractly, be creative and enjoy problem solving and be open to mathematics and technological trends. The ability to work in a team and independently are also required during the course of study.

Application process

- Start of the course: winter semester
- Application period: from 15 April to 15 July
- Application for a VPD at uni-assist is possible all year round.
- Application online
- Admission to the course is not restricted

☞ **For more information please scan here:**

Contact

For general questions regarding your choice of study programmes, please contact the Central Student Advisory Office

Phone: +49 (0)8031 805-2495

E-mail: studienberatung@th-rosenheim.de

Picture: D. Bazold

Studying in Rosenheim

Rosenheim Technical University of Applied Sciences is the most important educational institution in south-eastern Bavaria and it combines a regional profile with an international reputation. Close contacts to the industry in one of Germany's strongest economic regions allow students to gain the practical skills that are indispensable for a successful career. A friendly atmosphere, close contact between students and faculty and a modern campus setting provide an ideal learning environment.

Technische Hochschule Rosenheim
Technical University of Applied Sciences

Hochschulstraße 1, 83024 Rosenheim

Phone: +49 (0)8031 805-0, E-mail: info@th-rosenheim.de

www.th-rosenheim.de

Picture on front page: Max Baudrexl, April 2025

Bachelor´s Degree Programme Applied Artificial Intelligence

Bachelor of Science (B.Sc.)

Rosenheim
Technical University of Applied Sciences

BACHELOR´S DEGREE PROGRAMME
Applied Artificial Intelligence

- Degree: Bachelor of Science (B.Sc.)
- Duration: 7 semesters (6 theoretical semesters and 1 practical semester)
- Teaching language: English
- Credit Points (CP): 210
- Accreditation: accredited by ASIIN e.V.
- Costs:
  - Student Union fee of 85 € per semester for all students
  - Tuition fee of 500 € per semester for non-EU students
- Education with "advanced work experience" is possible

Why study Artificial Intelligence?

We live in a world, where Artificial Intelligence (AI) is progressing rapidly. In almost all areas of our daily life we have touchpoints with AI. Autonomous driving or voice support are currently the best-known areas of application. But AI is also used in other industries, such as medical research, nursing, climate protection or production – to name just a few.

AI is diverse, offers a wide range of possible applications and requires a broad knowledge to apply. The need for qualified specialists and managers in this area is huge, worldwide. For this reason, Rosenheim Technical University of Applied Sciences designed the Applied Artificial Intelligence Bachelor's degree. This course will take place entirely in English and is one of the first study programmes in the field of AI throughout universities of applied sciences in Germany.

Contents and structure of the course

Programme structure

The Bachelor's degree programme covers seven semesters.

Semester 1 - 4

In the first four semesters students learn the fundamentals of artificial intelligence, computer science and mathematics.

Semester 5

The fifth semester is a practical semester with 18 weeks of work experience and two weeks of accompanying lectures.

Semester 6 + 7

In the last two semesters students work on at least two practical projects in close collaboration with regional companies. The Bachelor's thesis is to be completed in the seventh semester.

In addition, the curriculum includes specialist required elective modules (FWPM) from different disciplines out of computer science, mathematics and engineering. You can choose among these to develop your individual specialist skills you'll need for your further study or career.
At the end of the programme, you'll be able to design, build, analyse and solve problems in many areas relating to artificial intelligence.

Career prospects

As a graduate of the Bachelor's degree programme in Applied Artificial Intelligence you will have the best career prospects in all industries – regionally and globally. Numerous national and international IT companies are located in the region around Munich and you will face many exciting, and partly newly developed job profiles:

- Software Engineer
- Robotics Engineer/Control
- Cloud Solution Architect
- Software Developer
- MLOps
- Expert for AI & Data Analytics
- Algorithm Developer
- Data Scientist
- AI Consultant
- Retail/Marketing
- NUI Developer
- Computer Vision Engineer
- Deep Learning Engineer
- Education
- Machine Learning Engineer
- Speech Processing Expert
- Internet of Things
- Medicine/Healthcare/Care
- Production/Construction
- Law and Contracts
- Smart Home
- Big Data
- Automotive/Transportation
- Gaming
- Environment/Agriculture
- Security

This is only a small selection of your options. Of course, you can extend your studies with a master's degree. A doctorate is also possible.

SEMESTER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	CREDIT POINTS (CP)
1	Programming Basics							Computer Science Fundamentals							Linear Algebra							Analysis I										28
2	Object-Oriented Programming				Computer Science Fundamentals				Introduction to AI				Analysis II							Stochastics											29
3	Database Systems				IT Systems				Supervised Learning				Unsupervised and Reinforcement Learning				Numerical Methods and Optimization					Digital Business Models										31
4	Software Engineering				Neural Networks and Deep Learning				Data Science				Embedded Artificial Intelligence				IT Law & Ethics					Project Management										30
5	Internship Seminar Part I			Internship in a company (18 weeks)																									Internship Seminar Part II			30
6	Practical Software Engineering				IT Security				Natural Language Processing				Required Elective Modules (FWPM)																			31
7	Computer Vision				Required Elective Modules (FWPM)				Bachelor's Thesis																				Bachelor's Thesis Seminar			29
																															total 210 CP	

Module assignment legend: ■ Artificial Intelligence ■ Computer Science ■ Core Competencies & Soft Skills □ Mathematics
We cannot guarantee the accuracy of this information. Current timetables are available online in the study and examination regulations.