Master in Artificial Intelligence and Robotics M.Sc. - Hof University — Hof University

With our modules in the areas of artificial intelligence, especially machine learning and deep learning, you will gain the necessary knowledge to implement effective AI-based solutions in a wide variety of application areas.

We place a special focus on the application area of robotics. You will learn how to design intelligent robotics solutions and deepen your skills through practical exercises in various modules.

With our Master's degree in Artificial Intelligence and Robotics, you will develop an in-depth understanding in the fields of AI and intelligent robotics and learn about state of the art algorithms. In various modules, you will gain knowledge of complex methods and models, such as Deep Generative Models, Variational Autoencoders, Deep Reinforcement Learning, Simultaneous Localization and Mapping, or Robot Imitation Learning, and how they contribute to solving different classes of problems.

The skills you acquire will enable you to independently plan, execute, and evaluate complex projects in these areas. Through versatile application examples in the different modules, you know a wide range of solution strategies that you can transfer to unknown tasks and new application areas.

The standard period of study is three semesters. In the first two semesters, you study practical theory and apply it in seminars and an internship. In the third semester, you write your master's thesis in a company.

Upon successful completion of the program, Hof University of Applied Sciences awards the academic degree Master of Science (M.Sc.).

Semester 1:

Core Modules

Applied Deep Learning

Intelligent Robotics

New Technologies in Computer Science

New Technologies in AI and Robotics

Industry 4.0 / Data Management

Intercultural Competence

For international students: German as a foreign language (next higher level)

For German students: Intercultural Competence or Unicert courses

Semester 2:

Core Modules:

Advanced Architectures in AI

Generative AI

AI Project

Predictive Maintenance and Condition Monitoring

Electives (select one)

Security of Information Systems

Data Engineering and Analysis Methods

Mixed Media (AR, VR, MR)

IoT Architectures

Security Research Seminar

Information Structuring and Visualization

Semester 3:Master thesis in a company

As a graduate, you will have excellent career prospects in various fields, such as:

Robotics application developer

AI developer

IT project manager

Consultant

ML architect

Data engineer

Machine learning engineer

Academic requirements

Bachelor's degreein computer science or in an engineering or natural science course of study that has provided a basic knowledge of information technology sufficient for study in the Artificial Intelligence and Robotics master's program

Bachelor's degree with 210 credits and at least a final grade of 2.5 (for <210 credits we offer an appropriate additional module)

Applicants who have completed their first degree abroad must have their documents checked by Uni-Assist e.V. in advance. To ensure a smooth admission, we recommend sending your documents to uni-assist e.V. at least 4 weeks before the respective application deadline of Hof University.

Language requirements

You need to prove yourproficiency in English. This can be done with either of the following:

TOEFL minimum 90

IELTS 6.5 or above

In addition:Basic language skills in German, proven by official test score documents -minimum level A1

All applications must be done via ouronline application portal Primuss.

The application period is between November 05 and November 30.

An admission committee intensively scrutinizes all applications and decides about final admission. Admission letters will be issued in December.

If you acquired your university entrance certificate abroad, uni-assist must assess the certificate before you can send it to Hof University. We advise you to send your documents touni-assistat least 4 weeks before our application deadline.

If you have any questions concerning the application process, please contactadmission(at)hof-university.de.

Intensive support

Hof University offers a safe, friendly and open-minded study environment. Find out more about our intensive personal support for international students!

Artificial Intelligence and Robotics

November 5 - November 30

Info and services

Timetable

Here you find your timetable. After login, you see your personal timetable.

The campus is the management and administrative center of the university. Here you will find the university library, high-tech laboratories and university sports facilities.

More about Campus Hof

Vincent from Germany

"The Artificial Intelligence and Robotics program is the perfect opportunity to learn everything about AI. Not only do you get a mathematical look behind the technology, but you also learn how to apply it in project work and your own implementations. All questions related to the field are answered in class, and it is not uncommon for social issues to be addressed.

As a location, Hof University has the great advantage of being very active in science and research. Not only do you have access to the concentrated, up-to-date knowledge of the professors and lecturers, but you can also easily use the technical solutions of the university for all your needs. As a result, you are excellently trained in the field and have the best possible opportunities for a career in industry or research.

I have enjoyed every aspect of my studies and can hardly imagine that the opportunities available could be topped anywhere else. I can highly recommend the course and Hof University!"

Alaa from Syria

"Studying master's Artificial Intelligence and Robotics at Hof University has been an enriching experience. I appreciate the program's comprehensive and up-to-date curriculum especially because it combines both theoretical knowledge and hands-on lab work. Moreover, the professors are extremely knowledgeable about the field, and they are always keeping up with the latest advancements which can be seen in their lectures.

In addition, the university's staff are very nice and extremely helpful, and almost all of them speak English which is a plus for new international students. The university also provides language courses at multiple levels for quicker integration into society. As for the city of Hof, it's a very relaxed and welcoming city with everything a student would need, it also has very nice scenery and beautiful nature."

Tariq from India

"Hello everyone, I'm Tariq from Jamnagar, India. The Master's in Artificial Intelligence and Robotics at Hof provides a comprehensive understanding of AI, covering the latest architectures and their integration with robotics. The course is primarily in English, but the additional German language knowledge provides benefits for daily communication. Despite Hof being a smaller town, it offers various attractive places like a bowling alley, ice skating, a picturesque lake, and a watchtower for city views.

What sets Hof University apart is its exceptional support and infrastructure. The institution facilitates various opportunities, such as the I2P2 project. Through this initiative, I had the privilege to collaborate with students from Pennsylvania State University in Philadelphia, USA, on a robotics project. This experience not only enriched my academic journey but also allowed me to explore different places, striking a perfect balance between studies and exploration."

Neha from India

"Hof is a very quiet and ideal place for a student to live. The university itself is very supportive, with many opportunities for students like me to get involved in various events. I am a student who is interested in research. Hof University has given me a good foundation by allowing me to participate in various winter and summer schools, conferences, etc.

The university has supported me with a scholarship to help me focus on my studies and also participate in external career-oriented events. The Welcome Center at Hof organizes events such as a cultural workshop at the beginning of my studies, which helped me a lot in dealing with the culture shock."

Head of Program

Student Affairs - Program manager

Prof. Dr. Michael Spangenberg

Sabine Figura-Ogrodnik

Please contact our Welcome Center.