

# INTERNATIONAL PROGRAMMES

### **Table of Contents**

Master's degree	. 2
Artificial Intelligence and Robotics (MSc) • Hof University of Applied Sciences • Hof	2

## Master's degree



## **Artificial Intelligence and Robotics (MSc)**

**Hof University of Applied Sciences • Hof** 









### Overview

Degree	Master of Science
Teaching language	• English
Languages	All modules are taught in English.
Full-time / part-time	• full-time
Programme duration	3 semesters
Beginning	Summer semester
Application deadline	Our application portal is open during the following application period:  5 November – 30 November for the following summer semester
Tuition fees per semester in EUR	None
Combined Master's degree / PhD programme	No
Joint degree / double degree programme	No
Description/content	Experts who are familiar with artificial intelligence, machine learning and robotics are among the most sought-after professionals of our time. With this brand-new Master's degree, you will gain the expertise you need and create splendid career prospects.
	Programme objectives
	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.

#### Your benefits

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 Localisation 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.

#### Career perspectives

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

- Robotics application developer
- Al developer
- IT project manager
- Consultant
- ML architect
- Data engineer
- Machine learning engineer

#### **Course Details**

#### Course organisation

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 programme, Hof University of Applied Sciences awards the academic degree Master of Science (MSc).

#### Semester 1:

#### **Core Modules**

- Applied Deep Learning
- Intelligent Robotics
- New Technologies in Computer Science
- New Technologies in AI and Robotics
- Predictive Maintenance and Condition Monitoring

#### **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 Al
- Generative Al
- Al Project
- Industry 4.0 / Data Management

#### 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 Visualisation

Semester 3: Master's thesis in a company

A Diploma supplement will be issued	Yes
International elements	<ul> <li>Specialist literature in other languages</li> <li>International comparisons and thematic reference to the international context</li> <li>International guest lecturers</li> </ul>
Course-specific, integrated German language courses	No
Course-specific, integrated English language courses	No

### Costs / Funding

Tuition fees per semester in EUR	None
Semester contribution	Administrative fee of approx. 125 EUR per semester
Costs of living	The cost of living in the city of Hof is moderate compared to both other European countries and bigger cities in Germany. On average, living expenses for a student range between 800 and 1.000 EUR per month in total.  The following is an approximate cost calculation of expenditures per month:  • accommodation: 350 to 550 EUR • mandatory health insurance: about 120 EUR • food and personal expenditures: at least 350 EUR
Funding opportunities within the university	No

## Requirements / Registration

## Academic admission requirements

For admission in this Master's programme, you need to fulfil the following admission criteria:

- Bachelor's degree in 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 programme
- Bachelor's degree with 210 credits and at least afinal grade of "good" (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 in advance. To ensure a smooth admission, we recommend sending your documents to uni-assist at least four weeks before the application deadline of Hof University.

#### Language requirements

Applicants must be **proficient in English**. This can be proven with one of the following options:

- TOEFL minimum 90 (Test of English as a Foreign Language)
- IELTS 6.5 or above (International English Language Testing Systems)

In addition: basic language skills in German, proven by official test score documents –minimum A1 level according to CEFR (Common European Framework of Reference for Languages)

#### Application deadline

Our application portal is open during the following application period: 5 November – 30 November for the following summer semester

#### Submit application to

- University entrance certificates from abroad have to be assessed by uni-assist before being sent to Hof University (at least four weeks before the application deadline at Hof University).
- 2. Submit application via our online application portal.

#### **Services**

#### Accommodation

The Housing Office supports international students in finding appropriate accommodation.

Rent for a single student room is approx. 350 to 550 EUR. Rent for a private one-room apartment for one tenant or for a couple is more than 550 EUR. We also have a limited number of double rooms for friends that cost about 250 to 300 EUR per person. Beside the rent, there are additional costs for water, energy, broadcast fee, and Internet.

For a full overview of the practical issues related to living in Hof and our support services for international students, please have a look at the website of our **Welcome Service** and **Housing Office**.

#### Career advisory service

The Career Service team at Hof University offers you awide range of career preparation and orientation services, including workshops, company excursions, and job fairs. Wewill prepare you for the German labour market by providing you with specific information, counselling, and qualifications. Thus, you will be able to start your individual career as an intern and as a graduate.

## Support for international students and doctoral candidates

- Accompanying programme
- Specialist counselling
- Cultural and linguistic preparation
- Visa matters
- Help with finding accommodation
- Support with registration procedures

## General services and support for international students and doctoral candidates

We know that adjusting to your new life in Germany is an adventure that is both exciting and challenging. There is no need to be scared – we are here to help you!

At Hof University, we are proud of ourwarm welcome culture and offer numerous services for our international students. Our team will assist you in all aspects of your stay in Hof. We will help you find the right academic programme and language courses and support you in organising all formalities such as visas, residency, insurance, and banking.

Prior to the start of each semester, we organise an **orientation period** for our new international students. With the expert assistance from our motivated team, you will smoothly settle into your new personal and academic environment. Additionally, our **International Student Network**, a group of motivated students, will help you feel at home by organising social activities.



## Welcoming our new students

In this video, we accompany our new students during their first day (which also serves as the beginning of the Orientation Week) at Hof University. The students also talk about their first impressions of Germany and Hof University.

#### » more:

https://www.youtube.com/watch? v=Nln1z59HwKQ&t=190s

## Hof University of Applied Sciences



International students on the Hof University campus

#### Studying at Hof University - your benefits at a glance

- first-class, hands-on education focused on employability
- friendly and open-minded study environment, especially for international students
- extensive personal support for international students from the Welcome Service, International Office, and Career Service

- assistance in finding accommodation in Hof
- orientation week prior to the start of the studies
- career-promoting activities, such as intercultural trainings, field trips, and company visits

#### **About Hof University**

Founded in 1994, our university offers a very attractive study environment with its modern architecture and its state-of-the-art classrooms, laboratories, and dormitories. You will receive a first-class, hands-on education here. As a practice-oriented university of applied sciences with integrated internships in all programmes, the employability of our graduates is the main focus of our teaching.

We offer more than 40 modern Bachelor's and Master's programmes in business, computer science, and engineering as well as in interdisciplinary and innovative sciences. Students with at least one year of professional experience find exciting further education opportunities completely in the English language at Hof University Graduate School

#### Strong practice orientation

All professors have a strong academic background as well as practical experience in industry. Teaching is based on innovative methods to convey application-oriented knowledge (e.g. projects with industry, site visits, involvement of company representatives). As a result, our graduates are ideally prepared for the domestic and international labour markets.

#### Intensive personal support

We are well-known for our friendly study atmosphere. An excellent student-to-lecturer ratio allows for frequent and personal contact between students and professors and an active exchange of ideas. Students receive intensive personal support during their studies and benefit from numerous services, such as orientation sessions, social integration events, and housing support.

The outlook of the university is extremely international, with more than 130 partner universities all over the world. More than twenty percent of students come from abroad, creating a truly multinational atmosphere.

#### Applied research

The university's five research institutes concentrate on**information systems**, **biopolymers**, and **material sciences** as well as **sustainable water systems** and **hydrogen and energy management**. The guiding principles for our research are practice-orientation, internationalisation and resource efficiency (focusing on indoor climate systems / water).

Students who are interested in a start-up or in the formation of a company get advice and support a Einstein 1, the digital business incubator on campus of Hof University.





#### University location

Hof is a medium-sized town located at the top of Bavaria and in the heart of Europe, right in the middle of Berlin, Munich, and Prague. Hof has a population of about 50,000 and is an appealing and safe university town with plenty of leisure activities. To relax and unwind, there are numerous bars, cinemas, an orchestra, a theatre, a landscaped park called Theresienstein, and a beautiful lake – the Untreusee. Hof is also known for the International Hof Film Festival, which is one of the most important German film festivals.

The region around Hof has the second-highest industrial density in all of Europe, mainly specialising in manufacturing machinery and plastic (automobile) parts. The companies are mostly small and medium-sized businesses, the so-called hidden champions, and they provide ample opportunities for internships and entry jobs.

The city of Hof is surrounded by beautiful nature. It is located between the low mountain regions of the Fichtelgebirge and the Franconian Forest on the banks of the Saale River. You will find excellent possibilities for all outdoor sporting activities such as cycling, hiking, climbing, and skiing.

### **Contact**

#### **Hof University of Applied Sciences**

Welcome Center

95028 Hof

- Course website: https://www.hof-university.com/studying-at-hof-university/our-degree-programs/artificial-intelligence-and-robotics-msc.html
- f https://www.facebook.com/HochschuleHof/
- in https://www.linkedin.com/school/hochschule-hof/
- https://www.instagram.com/hof.university.international/
- https://www.youtube.com/c/hochschulehof1

Last update 03.07.2024 05:29:11

### International Programmes in Germany - Database

www.daad.de/international-programmes www.daad.de/sommerkurse

#### Editor

DAAD - Deutscher Akademischer Austauschdienst e.V. German Academic Exchange Service Section K23 – Information on Studying in Germany Kennedyallee 50 D-53175 Bonn www.daad.de

#### **GATE-Germany**

Consortium for International Higher Education Marketing www.gate-germany.de

#### Disclaimer

The data used for this database was collected and analysed in good faith and with due diligence. The DAAD and the Content5 AG accept no liability for the correctness of the data contained in the "International Programmes in Germany" and "Language and Short Courses in Germany".

The publication is funded by the German Federal Ministry of Education and Research and by contributions of the participating German institutions of higher education.

