



Deutscher Akademischer Austauschdienst
German Academic Exchange Service



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Master's degree



Master of Science in Scientific Instrumentation

University of Applied Sciences Jena • Jena



Overview

Degree	Master of Science in Scientific Instrumentation
Teaching language	<ul style="list-style-type: none">English
Languages	Courses are held in English (100%). Participants can choose to write their Master's theses in English or German.
Full-time / part-time	<ul style="list-style-type: none">full-time
Mode of study	Less than 50% online
Programme duration	4 semesters
Beginning	Winter semester
Application deadline	1 April 2025 For more information on the application procedure and deadlines, please refer to https://www.eah-jena.de/en/study-programme/study-program/master-scientific-instrumentation .
Tuition fees per semester in EUR	None
Combined Master's degree / PhD programme	No
Joint degree / double degree programme	No
Description/content	Depending on the prerequisites of each individual student, the first semester includes foundation modules on advanced topics of applied physics, electronics and precision engineering. Beginning in semester two, students choose a number of areas of specialisation: Materials for Sensors and Electronics, Micro- and Nanotechnology, Optical Instruments, Gas Sensing and Aerosol Measurement, FEM and Simulation, Advanced 3D-Design, Precision Instrumentation, Scientific Computing and Data Science / Machine Learning. Semester three consists of a research internship,

and semester four is dedicated to research work on the Master's thesis. The language of instruction for the entire curriculum is English.

Course Details

Course organisation	<p>The curriculum has a modular structure. Credit points are granted according to the European Credit Transfer System (ECTS) for every successfully completed module. This system facilitates the recognition of course modules studied at different universities. The modules contain lectures, tutorials, seminars and laboratory work according to the requirements of the particular topic. Tutorials in small groups are important for learning how to apply theoretical knowledge. There is close interaction between students and professors. Various modules include laboratory work. Students, usually in groups of two, perform experiments in our well-equipped laboratories. By working in the laboratories, students gain practical skills and deepen and strengthen their theoretical knowledge. The third semester consists of a research project and the fourth semester is dedicated to work on the Master's thesis, in which a research project or a high-tech development project is carried out. This allows students to work with state-of-the-art science and technology. The research work for the project and the Master's thesis can be carried out at our university, at one of our partner universities, at a research centre or at a research department in industry. It is supervised jointly by the respective institution and our university.</p> <p>» PDF Download</p>
A Diploma supplement will be issued	Yes
International elements	<ul style="list-style-type: none">• Language training provided
Description of other international elements	The mandatory research internship and the Master's thesis can be completed abroad.
Integrated internships	Research project in the third semester
Course-specific, integrated German language courses	Yes
Course-specific, integrated English language courses	No

Costs / Funding

Tuition fees per semester in EUR	None
Semester contribution	The semester contribution amounts to 253 EUR per semester. The enrolment fee includes free public transport (trains, buses) in the greater Jena area.
Costs of living	Living expenses depend very much on individual lifestyle. On average, a total amount of 934 EUR per month should be sufficient to cover all expenses. The total amount should cover accommodation, health insurance, food, transport, a monthly fraction of the semester contribution and miscellaneous expenses.

Funding opportunities within the university

Yes

Description of the above-mentioned funding opportunities within the university

1. **DAAD Prize:** This is awarded with 1,000 EUR, tendered once per year at the EAH Jena. The DAAD Prize honours international students who have achieved excellent study results and showed remarkable social or intercultural commitment.
2. **End-Of-Study Scholarship of the DAAD:** This supports international students to help them focus on the successful completion of their degree courses in the last phase of their studies.
3. **Deutschlandstipendium:** This is for gifted and talented young people who also show special social commitment.

Requirements / Registration

Academic admission requirements

Students must have completed an undergraduate university degree programme in a natural or engineering science (usually a Bachelor's degree). Best suited are degrees in physics engineering, physics, applied physics, microtechnology, precision instrumentation, mechanical engineering, mechatronics, electronics engineering, electrical engineering, instrumentation engineering or materials sciences. Graduates of other engineering or science courses may also fulfil the entry requirements.
Good performance in your undergraduate programme is required.

Language requirements

Good knowledge of English language, demonstrated via a TOEFL score of 550 (paper-based), 79 (Internet-based), or an IELTS overall band score of 6.0. The test should not be older than two years.

Applicants from countries where English is the primary language or who speak English as a native language or students from one of our partner universities may apply to be exempted from TOEFL or IELTS.

Technical equipment and programmes

Technical equipment: computer or tablet PC, headset, internet connection

Platforms: Moodle

Programmes: BigBlueButton, module-specific software tools (e.g. design and simulation software)

Application deadline

1 April 2025

For more information on the application procedure and deadlines, please refer to <https://www.eah-jena.de/en/study-programme/study-program/master-scientific-instrumentation>.

Submit application to

Please apply for the course via our only portal:
<https://campusportal.eah-jena.de/qisserver/pages/cs/sys/portal/hisinoneStartPage.faces>

Services

Possibility of finding part-time employment

In year one, we recommend students to focus on the course. Master's students who perform their research internship (semester three) and their Master's theses (semester four) in industry or at a research institute frequently receive some payment.

Accommodation

Student halls of residence ("Wohnanlagen") are operated by the "Studierendenwerk Thüringen". The "Studierendenwerk" is a non-profit organisation that provides various services to students. Depending on size and standard of the accommodation, monthly rents for a room can vary from 140 to 380 EUR.

Career advisory service

Career group: support with preparing application documents and advice on how to find vacancies for internships or final projects

Support for international students and doctoral candidates

- Welcome event
- Tutors
- Specialist counselling
- Cultural and linguistic preparation

General services and support for international students and doctoral candidates

Tutor service: reception at arrival in Jena, support with flat-hunting and at visits to authorities, introduction to the university procedures, campus tour and help with general questions

Cultural programme

Social & psychosocial counselling and legal advice: offered by "Studierendenwerk Thüringen"

University of Applied Sciences Jena



Ernst-Abbe-Hochschule Jena

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The University of Applied Sciences Jena (Ernst-Abbe-Hochschule Jena, EAH) was founded on 1 October 1991 as one of the first institutions of higher education of its kind in the eastern German states. Short study periods and a practical orientation form a perfect complement to the education received at traditional universities and technical universities. Currently, the nine departments of University of Applied Sciences Jena offer a wide selection of Bachelor's and Master's programmes covering engineering sciences, business administration and social and health sciences. At present, approx. 4,300 students are enrolled at the EAH Jena. This number includes about 1,000 international students. The teaching staff comprises 124 professors and 29 teachers for special tasks. The EAH's total staff of approx. 500 also includes people engaged in various projects, in administration and in services as well as two apprentices. More than 26,000 m² of floor space, the EAH Jena boasts more than 124 extremely well-equipped, specialised laboratories and rooms for practical courses, seven modern lecture halls and 52 seminar rooms. The teaching rooms, labs and offices are accommodated in five campus buildings of considerable architectural interest.

In the interest of a scientifically profound and practically oriented education, the university cooperates with universities in Europe and beyond. Intensive cooperation is also maintained with industry: world-famous companies like Zeiss, JENOPTIK, Siemens, Bosch, and the industrial research institutions in Jena represent modern technology, up-to-date management and scientific innovation.



University location

Located in the centre of Germany, the city of Jena has a long tradition in optics and instrumentation. In the 19th century, the physicist Ernst Abbe developed the fundamentals of optical instruments and, together with Carl Zeiss, built up Jena's world-renowned optics industry. Today, a large number of research institutes and high-tech companies are situated in and around Jena. Nearly a quarter of the 111,000 inhabitants of the city of Jena are students at the universities. There are many student clubs, cultural arrangements and sports facilities in Jena. The charming landscape around Jena is perfect for outdoor recreation at weekends and on holidays.

Contact

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🌐 Course website: <https://www.eah-jena.de/scitec/international/masters-degree-programme-scientific-instrumentation-msc>
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 <https://de-de.facebook.com/EAHJena/>

 <https://twitter.com/EAHJena>

 <https://www.linkedin.com/school/eahjena>

 <https://www.instagram.com/eahjena/>

 <https://www.youtube.com/user/FachhochschuleJena>

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International Programmes in Germany - Database

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

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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".

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