



Application requirements

- ▶ a diploma or Bachelor's degree in materials engineering, materials science or a comparable scientific or technical degree programme
- ▶ a good command of English, demonstrated either by a TOEFL or IELTS test (minimum levels: paper-based TOEFL 550 points, internet-based TOEFL 79 points, IELTS overall band score of 6.0; the test shall not date back more than two years)
- ▶ to be eligible for admission, 80 out of 110 possible points are required:
 - weighting of the final grade of the first academic degree (up to 45 points)
 - evaluation of the quality and fit of the completed Bachelor's degree (up to 50 points)
 - evaluation of the quality of special scientific achievements through research work in a relevant field (up to 15 points)



Contact

Application www.eah-jena.de/bewerbung

Dean's Office phone: +49 (0) 36 41/2 05-400
e-mail: scitec@eah-jena.de

Study Course Management Prof. Dr. Jörg Töpfer
phone: +49 (0) 36 41/2 05-479
e-mail: joerg.toepfer@eah-jena.de

www.eah-jena.de

www.eah-jena.de

 **Ernst-Abbe-Hochschule Jena**
University of Applied Sciences

Carl-Zeiss-Promenade 2
Postfach 10 03 14
07703 Jena, Germany

Department of SciTec
House 4, 3rd floor

All information is subject to subsequent change. No legally binding claims can be derived from this information flyer.

Status: 07/2025



More information about the study programme:



At a glance

Admission: Eligibility (check application requirements)
Application period: December 1st - April 1st
Enrolment: October 1st
Extent: 4 semesters, 120 ECTS
Degree: Master of Engineering (M. Eng.)
Language: English

Department of SciTec

Applied Materials Science

Master's Degree Course



www.eah-jena.de



You have got the choice!

You have studied materials science or materials engineering and would like to deepen your knowledge in a Master's programme in Germany? Then welcome to the University of Applied Sciences Jena.

The Master's programme Applied Materials Science is designed to deepen your skills and expand your knowledge. Come and study in Jena, a vibrant and student-friendly city that welcomes people from all backgrounds of life and offers a lively academic and cultural atmosphere.



Programme overview

The Applied Materials Science Master's programme builds on a Bachelor's degree in materials science or technology. In four semesters, the knowledge from the Bachelor's degree course is expanded and systematically deepened.

Emphasis is placed on independent scientific work and research under supervision during the courses. In the final semester, you will complete your Master's thesis and will present it in the final colloquium.

The Master's programme is offered in the winter semester. The language of instruction is English.



Distinctive features

- ▶ international all-English Master's degree programme
- ▶ strong focus on practice-oriented teaching and research
- ▶ intense collaboration with universities in Germany and abroad
- ▶ state-of-the-art equipment for lab courses and research
- ▶ Master's thesis can be completed in Germany or abroad



Career opportunities

Materials science and engineering are of enormous strategic importance for the development of innovative products and for the performance and competitiveness of the economy.

Employment opportunities exist in numerous branches of industry, e.g.:

- ▶ energy technology
- ▶ automotive industry
- ▶ electronics and information technology
- ▶ optical industry
- ▶ medical and environmental engineering

Typical applications can be found in the materials manufacturing and processing industry:

- ▶ building materials manufacturer, metallurgy
- ▶ glass and ceramics industry
- ▶ polymer and metal processing

Our graduates also work in research institutions. With an excellent Master's degree, the path to a doctorate is also open to you.



Curriculum

1st semester	Advanced Materials Characterisation I		Polymer Physics and Modern Polymer Applications		Physical Metallurgy I	Physical Fundamentals of Ceramics	Required electives I	Non-technical required electives I	
2nd semester	Advanced Materials Characterisation II		Advanced Polymer Processing	Physical Metallurgy II		Required electives II		Non-technical required electives II	
3rd semester	Nano-technology	Integrative Computational Materials Engineering		Composite Materials	Current Topics in Materials Engineering		Ceramics Technology		Required electives III
4th semester	Master Thesis								Colloquium
Required electives I	Intercultural Business Communication	Intercultural Training			Non-technical modules I	German as a Foreign Language I	Special Topics of Business Administration	Business English	Further Foreign Language
					Non-technical modules II	German as a Foreign Language II	Special Topics of Business Administration	English for Specific Purposes	Further Foreign Language
Required electives II	Modelling and Simulation	Advanced 3D-Design	Introduction to Programming and Data Science	Failure Analysis	Processes for Micro- and Nanotechnology		Precision Instrumentation		Materials for Sensors and Electronics I
Required electives III	German as a Foreign Language III		Sustainability for Materials Scientists		Materials for Sensors and Electronics II				