CONTACT

Your Contact

Dean of Studies

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Study Coordinator

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International Reception Service Team

International Office

Hüfferstraße 27, 48149 Münster Tel.: +49 251 83-64102

fhirst@fh-muenster.de

https://en.fh-muenster.de/internationaloffice/international students staff/ fhirst.php

Course Orientation and Study Decision

Student Counselling and Information Centre (ZSB)

Hüfferstraße 27, 48149 Münster

Tel.: +49 251 83-64150

studienberatung@fh-muenster.de

https://en.fh-muenster.de/studium/studienberatung/zsb/zsb.php

Application and Enrollment

Service Office for Students (SOS)

Hüfferstraße 27, 48149 Münster

Tel.: +49 251 83-64700 int-zul@fh-muenster.de

en.fh-muenster.de/studium/studienberatung/sos/

service-office-studierende.php



Are you fascinated by new materials?

Would you even like to design high-tech-materials yourself? Then our new international Master's degree programme Materials Science and Engineering might be just right for you!

Reasons to study Materials Science and Engineering

The development of innovative materials creates important preconditions for new industrial processes and modern products. Thus, they promote social progress, improve quality of life and solve important problems in areas of energy technology, lifescience or information technology.

Reasons to study at the University of Applied Sciences Münster

- High quality of teaching and intensive mentoring
- Practical and research-based
- Strong network with companies
- International partner universities
- Qualification for PhD programmes

Further Information

https://en.fh-muenster.de/materials-science/index.php





Materials Science and Engineering



FB Chemieingenieurwesen Department of Chemical Engineering

FB Physikingenieurwesen Department of Engineering Physics



Institut für Technische Betriebswirtschaft Institute of Business Administration & Engineering

Revolutionize and develop materials. Optimize processes. Improve quality of life.

At a Glance

Standard Study Period 4 Semesters

Degree Master of Science (M.Sc.)

Start of Programme Winter Term

Costs Semester Fee approx. 300 Euro incl. Semester Ticket

Study Location Steinfurt

Admission
B.Sc. "very good - 2,5", English B2

Application https://en.fh-muenster.de/studium/studien-

bewerbung/studienbewerbung.php

Content

This study course focuses on the combination of materials science and materials engineering. It is held in English and reconciles both fields in an international environment. The contents aim at i.e. the transfer of profound knowledge of solid state physics and polymer science in order to qualify for future professional fields. You will model material properties on a macroscopic and microscopic level to develop materials in consideration of sustainability aspects.

Target Group

Bachelor graduates from the fields of chemistry, physics, mechanical engineering or corresponding engineering sciences

Career Perspectives

After your studies you will have the opportunity to work in various professional fields in the industry or you can enroll in a PhD programme. The Master's degree programme provides you with comprehensive skills for jobs in research or in the industry. The University of Applied Sciences Münster offers excellent cooperations for PhD candidates as well as with the industry which allows you to build up an important professional network during your studies. You can also obtain additional degrees abroad via double degree programmes and thereby qualify for the global job market.



Curriculum Materials Science and Engineering (M.Sc.)

Electives I (Module Contents) Understanding Materials

Chemical Nanotechnology Physical Chemistry Advanced Inorganic Chemistry

Membrane Separations Biomedical Materials

Quantum Statistical Physics

Analysis of Materials

Surface Science Electron Microscopy

X-Ray Analytics of Materials Modern Crystallography

Optical and Electrical Analytics of Materials

Analytics of Plastics & Polymers

Chemical Sensors

Life-Cycle Assessment

Technology of Materials

Innovative Materials/Light Metal Design/

Chemical Technology of Materials Technology of Coatings

Optical Technology Light Sources

Semiconductor Technology Solar Cells Battery/Energy Storage

FEM & Micro Optical Mechanical Systems

Project Management Business Simulation

Laser Material Processing

Electives II

German as a Foreign Language or Intercultural Communication and Competence Bridging Courses from Physics/Chemistry B.Sc. Program Arbitrary Module

Compulsory Modules

Solid State Physics and Semiconductors
Dielectrics and Ceramics
Macromolecular Chemistry and Polymer Application
Project Work: Literature Research, Practical Experimental Work
and Own Projects in Various Laboratories

Final Phase Master

Master's Thesis and Colloquium