

# Materials Science and Engineering

## *Master's degree*



## Your Contact

### Dean of Studies

Prof. Dr. Hans-Christoph Mertins

### Study Coordinator

Dipl.-Betriebsw. Ruth Kühn M.A.

Tel.: +49 2551 9-62362

materials-science@fh-muenster.de

### Office for Academic Affairs

Kirsten Elfering M.Sc.

Tel.: +49 2551 9-62311

kirsten.elfering@fh-muenster.de

## International Reception Service Team

### International Office

Johann-Krane-Weg 25, 48149 Münster (visitor's address)

Hüfferstraße 27, 48149 Münster (mailing address)

Tel.: +49 251 83-64102

fhirst@fh-muenster.de

[https://en.fh-muenster.de/internationaloffice/international\\_students\\_staff/international\\_students\\_1273254.php](https://en.fh-muenster.de/internationaloffice/international_students_staff/international_students_1273254.php)

## Course Orientation and Study Decision

### Student Counselling and Information Centre (ZSB)

Johann-Krane-Weg 25, Room 308, 48149 Münster (visitor's address)

Hüfferstraße 27, 48149 Münster (mailing address)

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)

Johann-Krane-Weg 25, Room 201-208, 48149 Münster (visitor's address)

Huefferstraße 27, 48149 Münster (mailing address)

Tel.: +49 251 83-64700

int-zul@fh-muenster.de

<https://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 the right fit 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, life-science 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>



**CIW** FB Chemieingenieurwesen  
Department of Chemical Engineering

**PT** FB Physikalische Technik  
Department of Engineering Physics

**ITB** 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.)
- **Course Start** Winter Term
- **Costs** Semester Fee approx. 290 Euro incl. Semester Ticket Steinfurt
- **Place to Study** B.Sc. „very good - 2,5“, English B2
- **Admission** <https://en.fh-muenster.de/studium/studienbewerbung/studienbewerbung.php>
- **Application**

## 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.



## Study Plan Materials Science and Engineering (M.Sc.)

Compulsory Modules	Solid State Physics and Semiconductors Dielectrics and Ceramics Macromolecular Chemistry and Polymer Application	
Electives I	Chemical Nanotechnology Technology of Coatings Incoherent Light Sources Life-Cycle Assessment Advanced Physical Chemistry Optical and Electrical Characterization of Materials Chemical Technology of Materials Membrane Separations Advanced Inorganic Chemistry Innovative Materials	Halbleitertechnik Quantum Statistical Physics Biomedical Materials Microscopy/Surface Science Analytics of Plastics and Polymers Chemical Sensors Modern Crystallographic Methods FEM zur Entwicklung von MOEMS Business Simulation Project Management
Electives II	Bridging Courses from Physics B.Sc. Programmes German as a Foreign Language Photovoltaische Systeme	or Bridging Courses from Chemistry B.Sc. Programmes Intercultural Communication and Competence or Bridging Course Basics in Physics
Projects	Literature Research and Project Work	
Final Phase	Master's Thesis and Colloquium	