

## At a Glance

|                       |   |
|-----------------------|---|
| <b>Requirement</b>    | Training or experience in the field of engineering or natural science is necessary.   |
| <b>Location</b>       | OHM Professional School<br>Kressengartenstraße 2, 90402 Nuremberg<br>Germany  |
| <b>Duration</b>       | 2 days  |
| <b>Lectures</b>       | <ul style="list-style-type: none"> <li>■ Practical Course Materials Testing for metals: Classroom lectures and practical training sessions</li> <li>■ Introduction to Metallurgy &amp; Properties of Ferrous Materials: Classroom lectures</li> </ul>                                       |
| <b>Starting dates</b> | Current training dates are published on <a href="http://www.ohm-professional-school.de">www.ohm-professional-school.de</a> .  |
| <b>Investment</b>     | <ul style="list-style-type: none"> <li>■ Practical Course Materials Testing for metals: EUR 1890,-<br/>(EIT RawMaterials partner: EUR 1590,-)</li> <li>■ Introduction to Metallurgy &amp; Properties of Ferrous Materials: EUR 1390,-<br/>(EIT RawMaterials partner: EUR 1100,-)</li> </ul> |

## Organizer

### Technische Hochschule Nürnberg/Nuremberg Tech

Nuremberg Tech with around 13,000 students is **one of the biggest universities in Germany** and known for its wide range of studies, interdisciplinary research, applied science and international orientation. As university with the highest research intensity and most success in acquiring external research funding in Bavaria Nuremberg Tech is an **important innovation driver** in the Nuremberg metropolitan area and has excellent contacts with industry.

### OHM Professional School

The OHM Professional School (OPS) of the Nuremberg Institute of Technology (Nuremberg Tech) is your partner for **goal-oriented academic training** in the Nuremberg metropolitan region. The OPS developed out of the Management Institute of Nuremberg Tech and the Verbund Ingenieur Qualifizierung gGmbH. Each institution looks back on **more than 15 years of experience** in continuing education.

Based on a comprehensive academic foundation, the OHM Professional School provides practical expertise within the framework of **professional development**. Our expertise in technical and economic fields are emphasized in our master's and bachelor's degree programs, internationally oriented MBA courses in General Management as well as modular certificate courses, seminars, conferences and colloquia for specialists and executives.

Selected teams of university professors and top lecturers from the business world guarantee the effective **linking of theory and practice**, thus ensuring the transfer of state of the art knowledge.

## Contact



### OHM Professional School

Sabine Betz-Ungerer  
Kressengartenstraße 2  
90402 Nürnberg  
Phone +49 911 5880-2801  
Fax +49 911 5880-6800  
Email [ops-info@th-nuernberg.de](mailto:ops-info@th-nuernberg.de)

[www.ohm-professional-school.de](http://www.ohm-professional-school.de)



© Oliver Kussinger

EDUCATION PAYS OFF!

Advanced  
vocational Training

Courses  
Raw Materials

In cooperation with



## Our partner EIT RawMaterials

In cooperation with EIT RawMaterials OHM Professional School offers two courses for professionals, PhD and Master students in the field of raw materials. Trainees will have a grasp of materials behavior and the influence of raw materials quality and processing on the quality of materials.

EIT is the European Institute of Innovation and Technology. Their innovation community RawMaterials is the largest consortium in the raw materials sector worldwide. It unites more than 100 partners from more than 20 EU countries. They collaborate on finding new, innovative solutions to secure the supplies and improve the raw materials sector all along its value chain - from extraction to processing, from recycling to reuse.

For more information, have a look at [www.eitrawmaterials.eu](http://www.eitrawmaterials.eu).

### Target Audience

- Employees of raw materials producers and recycling companies
- PhD and Master students in the field of chemistry, electronics, processing science



### Course Introduction to Metallurgy & Properties of Ferrous Materials

To educate Engineers and economists with experience in the raw materials sector on the further processing and use of raw materials for the producing sector. A short introduction into materials engineering is given. Focus is on metallurgy, processing and use of ferrous alloys. Special properties and behavior of these materials is discussed.

The attendees should get an overview of the production chain/processes following the raw material extraction and processing. Aim is to initiate an appreciation for the needs of the producing industry sector.

### Course Content

- Extraction and processing of raw materials
- Phase Diagrams
- Microstructure
- Introduction to metallurgy
- Forming and shaping processes
- Mechanical Properties of metals
- Exemplary applications



### Practical Course Materials Testing for metals

This practical course is designed to give specialists and engineers a finer understanding in the properties of materials. After a short introductory lesson, the students will perform testing of materials hands-on in the materials testing labs.

Goal is to give the attendees a better grasp of the relationship of materials composition, processing and properties.

### Course Content

- Introduction to Materials Testing
- Structure-Property-Relations in Metals
- Heat Treatment
- Mechanical Properties: Tensile Test, Hardness, Abrasion, Impact
- Microstructure