Welcome to Aachen
@RWTH Aachen University

M. Sc. Metallurgical Engineering
Introduction

Dr. Simon Münstermann

Senior Engineer @ RWTH Aachen University

M. Sc. Metallurgical Engineering

Responsible for M. Sc. Metallurgical Engineering
- Coordinator of the Examination Board
- Academic Guidance Counselor
Studying in Aachen

**General aim:**
RWTH alumni as group leaders in
• academics
• research facilities
• industry

**Required skills:**
• (self-) motivation
• (self-) organization
• (self-) responsibility
Studying in Aachen

… an individual process

accommodation

• private appartements
• very few student dorms

study organization:

• self-organized learning groups
• no mandatory presence

(study) administration

• minor guidance => self-responsibility
Studying @ RWTH Aachen University
M. Sc. Metallurgical Engineering

M. Sc. Metallurgical Engineering

• first Master course at RWTH Aachen
• dedicated to foreign B. Sc. of any kind

40 years of cooperation with USTB, China. Students from anywhere in the world welcome!
M. Sc. Metallurgical Engineering Structure

Specification fields

- **Process Technology of Metals**
- Physical Metallurgy and Materials
- Materials Science of Steel
- Corrosion Engineering
- Structural Integrity
M. Sc. Metallurgical Engineering
Structure

Specification fields

• Process Technology of Metals

• Physical Metallurgy and Materials

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M. Sc. Metallurgical Engineering Structure

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M. Sc. Metallurgical Engineering Structure

Specification fields

• Process Technology of Metals
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Basic subjects (6 out of 10):

Subject-specific emphasis

- Process Technology of Metals
- Physical Metallurgy and Materials
- Materials Science of Steel
- Corrosion Engineering
- Structural Integrity

- Master Thesis (incl. colloquium)
- Student Research Project
- Internship or Experimental Student Research Project (incl. colloquium)
- Supplementary Subject (e.g. German Language Course)
M. Sc. Metallurgical Engineering

Future development

Metallurgical Engineering

Global challenges
- climate
- mobility
- energy

Materials and Metallurgical Engineering
Other fields of interest? 
**Individualize your study!**

Choose your topic for…
- Study-integrated thesis („mini thesis“)
- Industrial internship or 2nd study-integrated thesis
- Master thesis

…from any institute of the Department of Materials Science and Engineering
…or any other faculty at RWTH
…or at cooperation partners at Forschungszentrum Jülich (National Research Center)
Basic subjects (6 out of 10):
Where am I?
Department of Materials Science and Engineering
www.muw.rwth-aachen.de

YOU (student)
Regulations: „Examination rules“

Help & guidance within the rules
Administrative student counsellor: Ms. Rave-Wortmann

Help & guidance outside the rules
Dr. Simon Münstermann
Academic student counsellor
Coordinator Examination Board
What am I intended to do?

Finish my studies @ RWTH
and pursue a career in science/research/industry
leading a group!

Leading a group means

- motivating other people,
- organizing other people,
- maintain regulations and deadlines given.

=> TOUGH JOB!
What am I intended to do in detail?

- attend the lectures *(if I like to!)*
- pass the exams
- do my mini theses/internship
- do my master thesis

while doing the above:

- learn about and follow formal regulations

academic knowledge
- max. 49%

self-organization motivation
- min. 51%
Who is helping me?

Student Advisory Services

Administrative counselling
Ms. Rave-Wortmann
- General questions
- Problems with Campus online system
- Internship
- Filing applications to the Examination Board

Academic counselling
Dr. S. Münstermann
- Study outlines
- Study breaks
- Difficult situations
- Etc.

Examination Board
Dr. S. Münstermann
- All deviations from standard study
- Internships in research facilities
- 2nd mini thesis
- External master thesis etc.
Who is helping me?

Student Advisory Services

Mrs. Jana Rave-Wortmann

Phone: +49 (0)241-80-95859

E-Mail: InfoMuW@rwth-aachen.de

ADVISORY HOURS:

Intzestraße 1, Room 128

see local announcement and www.muw.rwth-Aachen.de

PLEASE NOTE:

No counseling is possible outside the office hours. However, you may send an email any time.
General information I

**RWTH online system**
- One & only decisive tool for lecture and exam planning
- New system => errors to be expected…

**Zentrales Prüfungsamt (ZPA), Super C**
- Central Examination Office => Data storage center
- Strictly following the law, no decisions on exception
Administrative procedures

Exams

- 3 dates per exam (2 in semester, 1 in the following semester)
- registration for 1<sup>st</sup> OR 2<sup>nd</sup> date
- failure, illness etc.: registration for next date to be done!
- additional oral exam only upon application

Workbook

- contains your entire study life
- is used for certifying academic achievements (=> ZPA)

(ZPA = Central Examination Office, “data storage center”)
General information II

Semester scheme

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<tr>
<th>Winter semester</th>
<th>Summer semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>lectures</td>
<td>exams</td>
</tr>
<tr>
<td></td>
<td>lectures</td>
</tr>
</tbody>
</table>

– no holiday foreseen (if so: lecture time!)

Exams, Lectures, Exercises

– registration

– DEADLINE end of November/end of May
Examination Rules:  
The Law of M. Sc. Metallurgical Engineering

- define the standard study scheme incl. study plans for specification
- define potential deviations from these schemes, (exceptions possible, but only upon application to the board)
- official German version see “Amtliche Bekanntmachungen” at RWTH web page
- non-official English version downloadable under www.muw.rwth-Aachen.de
Examination Board

Coordinator:
Dr. Simon Münstermann
Materials Chemistry
Kopernikusstraße 10, 3rd floor, Room 02_225
Phone: +49 (0)241-80-25985
E-Mail: s.muenstermann@mch.rwth-aachen.de

Office hours:
Anytime, best try: 9:00-11:30 and 14:00-15:30
Examination Board: Cases and Applications

Anything that is not defined as standard in the examination rules.

- Internship in a research institute
  (Max-Planck-Institute, Forschungszentrum Jülich, Fraunhofer Institute etc.)

- Replacing the Internship by a second study integrated thesis.

- External Master thesis
  (in a company, Max-Planck-Institute, Forschungszentrum Jülich, Fraunhofer Institute etc.)
Examination Board: Standard Cases/Important Facts

Anything that is not defined as standard in the examination rules.

Every external thesis/internship has to be supervised by an “internal” Professor. Please let your internal supervisor sign your application.

Every internship and Master thesis ends with a mandatory presentation to your internal supervisor.

Prior to starting your internal/external Master thesis you have to get the signature of Mrs. Rave-Wortmann in your work book.

The internship can be done after the master thesis.
Examination Board: Standard Cases/Important Facts

Anything that is not defined as standard in the examination rules.

The internship has to be done in a German or at least European company throughout the world. Generally previous work in your home country will NOT be recognized.

Other (older) students are NOT a source for reliable information on the study outline.
Everytime you come to me you will be asked the following questions:

Have you read the examination rules on that topic?

Have you contacted the Administrative Student Counselor?

When did you first get to know of this issue (and why are you coming so late)?
At the heart of Europe…
Studying @ RWTH Aachen University
M. Sc. Metallurgical Engineering

At the heart of Europe

Aachen

- 2.5h flight to Paris
- 1.5h flight to Rome
- 2h train / 1h flight to Amsterdam
- 3.5h train / 1h flight to Berlin
- 1.5h flight to Prague
- 2.5h flight to Vienna

London
- 1.5h flight to Aachen

Brussels
- 1h train / 1h flight to Aachen
- 2.5h train / 1h flight to Paris

At the heart of Europe
### Ausbildung

<table>
<thead>
<tr>
<th>Institution</th>
<th>Study Title</th>
<th>Dates</th>
<th>Major</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWTH Aachen University</td>
<td>Dr. -Ing., Materials Science and Engineering</td>
<td>2012 – 2016</td>
<td></td>
</tr>
<tr>
<td>RWTH Aachen University</td>
<td>Master, Metallurgical Engineering</td>
<td>2009 – 2012</td>
<td>Focused Major: Materials Science of Steel</td>
</tr>
<tr>
<td>University of Science and Technology Beijing</td>
<td>Bachelor, Materials Science and Engineering</td>
<td>2005 – 2009</td>
<td>Focused Major: Materials Science of Metallic Materials</td>
</tr>
</tbody>
</table>

**Lin Shang**

**R&D Project Manager**

Balzers, Balzers, Liechtenstein
Maschinenbau & Betriebstechnik
What to do next…

• Fetch documents at Administrative student counseling office
• Choose specialization field (may be changed within 1st semester only!)
• Lectures, Exercises
  – no mandatory presence
  – no mandatory registration in RWTH online system (=> though recommend to get access to electronic learning room)
  – practical courses: generally presence required
Thank you –
and welcome to
M. Sc. Metallurgical Engineering