



UNIVERSITÄT ZU LÜBECK



LÜBECK AND SØNDERBORG

Founded in 1134, the Hanseatic City of Lübeck has approximately 210.000 inhabitants and is situated near the Baltic Sea. It is a center of commerce, industry and higher education that is playing an increasingly important role in bringing together the people of Denmark, Sweden, Finland, Russia, the Baltic States and Poland.

For more information: www.visit-luebeck.com

Sønderborg is a charming city located directly at the Baltic Sea in the Danish-German border region. The city combines modernity and historically important places, such as Sønderborg Castle at the cosy harbor or Dybbøl Mill. Because of many educational institutions and the local industry, Sønderborg also offers lots of leisure time activities for students.

For more information: www.visitsonderborg.com



INFORMATION

www.mmt-master.de

info@mmt-master.de

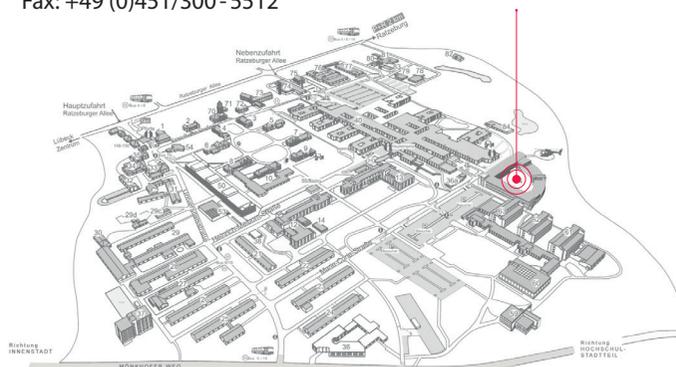
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Campusmap Lübeck

Building 64

Study Coordination Office



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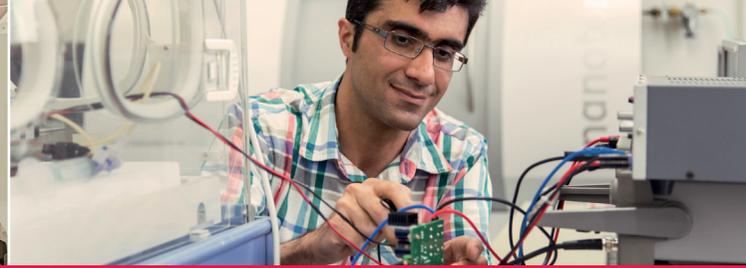
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International Master Program

MEDICAL MICRO-TECHNOLOGY



MEDICAL MICROTECHNOLOGY IN LÜBECK AND SØNDERBORG

The German-Danish Master Program Medical Microtechnology offers plenty of opportunities to students participating in this program. Three Universities merge various competences from Medical Technology as well as Microtechnology to contribute to this unique study program.

The program explicitly addresses the area of miniaturisation, which on the one hand covers the entire field of minimally invasive surgery (endoscopes, instruments, surgical robots) and, on the other hand e.g. includes implants for drug delivery. The integration of sensors and actuators leads to new options for diagnosis and therapy.

The Technische Hochschule Lübeck and the Universität zu Lübeck have developed many research and teaching activities in the Biomedical Engineering field, including two other related joint Master Programs. They focus their efforts according to different strengths: basic research as well as applied research. Their total enrollment is more than 10,000 students.

With researchers and students from more than 50 countries, SDU Sønderborg offers a unique international environment. The university works closely together with the regional companies. With the unique location of Sønderborg at the gateway to Germany and Europe, the university is also characterised by strong international networks, including universities, companies and hospitals.

FEATURES AND CONCEPT OF THE PROGRAM

- Degree: Master of Science in Medical Microtechnology
- Joint program offered by the Technische Hochschule Lübeck, Universität zu Lübeck, and the University of Southern Denmark
- Duration: four semesters, 120 credit points
- Courses begin in September/October
- 1st semester in Germany, 2nd semester in Denmark
- Language of instruction: English
- Project oriented work

For more information: www.mmt-master.de

| 1st Semester, 30 ECTS | 2nd Semester, 30 ECTS | 3rd Semester, 30 ECTS | 4th Semester, 30 ECTS |
|--|--|---|-----------------------------------|
| System Theory (6 ECTS) Signals and Systems (3 ECTS) Numerical Methods (3 ECTS) | Cleanroom Microfabrication (5 ECTS) | Research Internship (24 ECTS) (might be divided into two separate projects) | Master Thesis (26 ECTS) |
| MatLab-Project (4 ECTS) | Computational Multi-Physics (10 ECTS) | | |
| Medicine (8 ECTS) Anatomy and Physiology (4 ECTS) Microbiology and Hygiene (4 ECTS) | Optics for Engineers (5 ECTS) | | |
| Natural Sciences (4 ECTS) Biomechanics (2 ECTS) Biophysics (2 ECTS) | Clinical Application / Regulatory Affairs (5 ECTS) | | |
| Medical Technology (8 ECTS) Medical Technology (6 ECTS) Medical Technology-Lab (2 ECTS) | Electives (5 ECTS) | Student Conference (6 ECTS) | Final Examination (4 ECTS) |
| | Electives, 5 ECTS each Nanofabrication Technology Real-time Systems Summer School | | |

■ Lübeck ■ Sønderborg
■ Program

REQUIREMENTS

Bachelor degree in:

- Electrical Engineering, Mechanical Engineering, Mechatronic Engineering, Physics, Physical Technology, Material Sciences, Computer Sciences, or equivalent

Proof of English language skills

Application deadline for the following winter semester:

- May 1st (non-EU-students)
- August 31st (EU-students)

