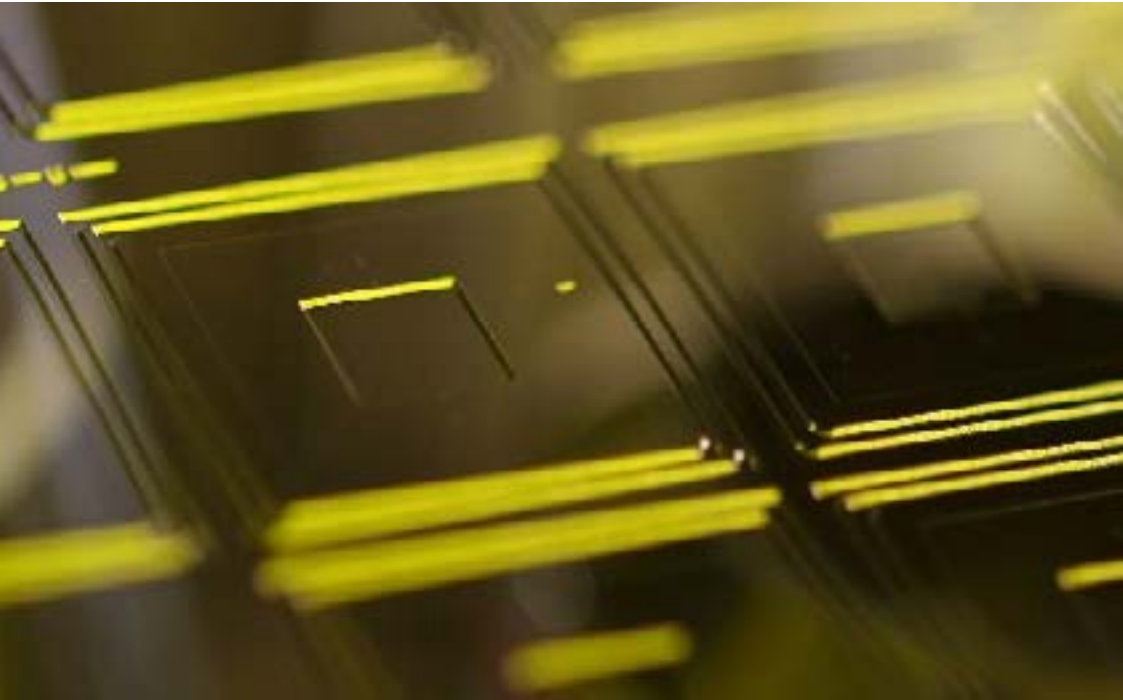




**Interstate University of Applied  
Sciences of Technology Buchs**

University of Applied Sciences  
of Eastern Switzerland



**Institute for Micro- and  
Nanotechnology**

**Hands-on MEMS Course**

... feeling at ease  
working in the micro world

## Hands-on MEMS Course

### PROGRAM DETAILS

Basics of wafer processing for the fabrication of microelectromechanical systems (MEMS) in a cleanroom environment

#### For course dates

see our webpage

[www.ntb.ch/mnt/courses](http://www.ntb.ch/mnt/courses)

Institute for Micro- and Nanotechnology,  
NTB Buchs SG

### WHO SHOULD ATTEND

Engineers and scientists from industrial and academic institutions with a need to obtain a competent hands-on introduction into the day-to-day work of a microfabrication facility.

Technical managers with an interest in familiarizing themselves with the working environment of a cleanroom facility and in understanding the equipment and process options available to the MEMS engineer.

### COURSE OUTLINE (3 DAYS)

- wafer processing basics, mask design
- cleanroom working environment and procedures

- wafer handling, wet cleaning, photolithography
- isotropic wet etching, anisotropic etching of silicon
- physical vapor deposition, anodic bonding
- wafer dicing, packaging aspects, characterization

### WHAT IS A MEMS DEVICE

Typical examples of microelectromechanical systems (MEMS) are pressure sensors, printheads, micro mirrors, acceleration sensors and gyroscopes, as well as microfluidic or RF devices. MEMS devices have typically smallest dimensions in the range of micrometers. They are fabricated using wafer-based batch-processing technologies as used in the integrated circuit industry.

### HOW YOU WILL BENEFIT

- Discover the world of micro-fabrication
- Learn the basic cleanroom procedures
- Understand how microelectro-mechanical systems (MEMS) are designed and fabricated
- Gain hands-on experience in the basic wafer processing techniques
- Be on the forefront of MEMS processing

## WHO WE ARE

The Institute for Micro- and Nanotechnology (MNT) is an institute of the University of Applied Sciences (NTB) in Buchs, Switzerland. A team of more than 20 scientists and engineers is ready to support you.

The institute is actively engaged in research and development in a number of disciplines of micro- and nanotechnology. We design and fabricate microsystems, develop customized microfluidic devices, find new solutions for our partners in the field of photonics, and work on novel applications in the area of life sciences.

In order to meet the diverse challenges in our research and development activities, we have dedicated people working in process development and process integration, packaging, test and characterization, failure analysis and analytics as well as simulation and modeling.

### COURSE DETAILS

3 days course including classroom lectures, cleanroom use, consumables, handouts, lunch and refreshments:  
see [www.ntb.ch/mnt/courses](http://www.ntb.ch/mnt/courses)

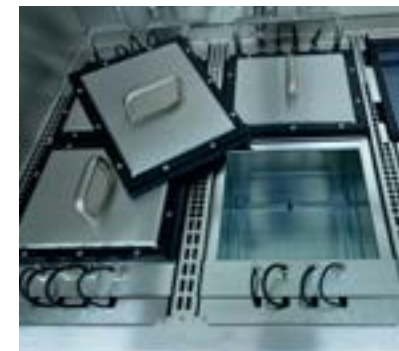
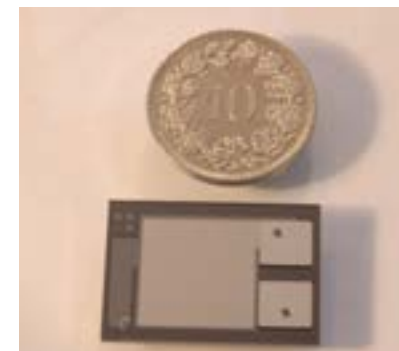
The course is given in English or German, depending on the preference of the participants.

Cancellations must be received in writing (e-mail, fax, or mail) 10 or more business days prior to the course start date for a full refund. If canceled less than 10 business days prior to the course start date, no refund will be issued.

A minimum number of four participants is required for the course to take place.

**COME AND WORK WITH US IN A MODERN CLEANROOM FACILITY!**

[www.ntb.ch/mnt](http://www.ntb.ch/mnt)



Institute for Micro- and Nanotechnology

# CONTACT

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## Course Enrolment

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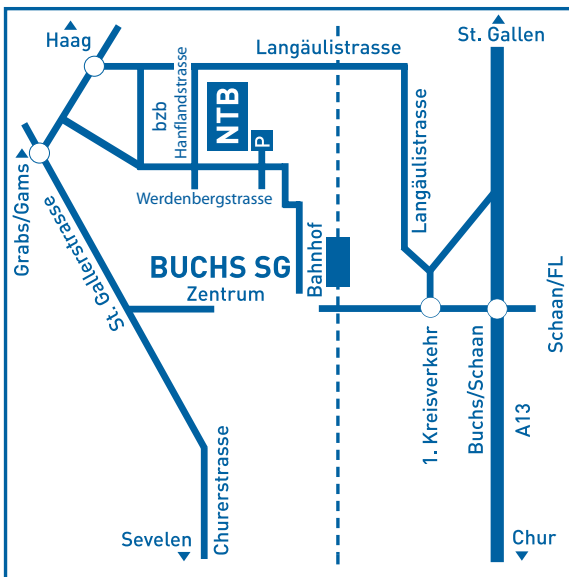
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