



Graduate course

Mechanics in micro-systems

25 - 26 April, 2022

**Faculty of Mechanical, Maritime and Materials Engineering
Department of Precision and Microsystems Engineering
Delft University of Technology**

General

Microsystems play a large part in modern equipment and are used as sensors, actuators, displays, etc. The mechanical aspects of these micro and nanometer sized structures play an important part in their functioning. Due to scaling effects the behavior of microsystems can be quite different from more traditional systems and other physical phenomenon can dominate behavior. In this course we will look at the mechanics at the very small scale, the physical phenomena and how they can be used.

The following topics are included:

- Size and scaling effects
- Microsystem fabrication and the influences on the mechanics.
- Mechanics of graphene MEMS devices.
- AFM and other instrumentation.

Local organization

The course is organized by the Precision and Microsystems Engineering group of the Delft University of Technology

Lecturers

- Hans Goosen
- Gerard Verbiest
- Murali Ghatkesar
- Sabina Caneva

Lecture notes

Lecture notes will be distributed during the course.

Fee/Registration

The course is free for registered members of the graduate school Engineering Mechanics and for the research members of the contributing research groups. The course fee is € 400 (Full fee), € 100 (EM fee) , € 80 (Reduced fee).They will receive an invoice after accepted registration.

Participants need to register on line : [Courses – Graduate School on Engineering Mechanics](#)
Deadline for registration: **April 21st 2022** to the Secretariat of the Graduate School Engineering Mechanics, Eindhoven University of Technology.
Members of the Graduate School Engineering Mechanics receive priority in case of over-subscription.

Further information

For more information on the contents of the course, contact:

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Further information about the educational programme and other activities of the Graduate School on Engineering Mechanics can be found at:
www.engineeringmechanics.nl/courses/