MICRO-607 **Highlights in microtechnology**

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Cursus	Sem.	Type
Advanced Manufacturing		Obl.
Microsystems and Microelectronics		Obl.
Robotics, Control and Intelligent Systems		Obl.

Language of teaching	English
Credits	4
Session	
Exam	
Workload	120h
Hours	**56**
Courses	42
TP	14
Number of positions	**22**

Frequency

Every year

Remark

Next time: June 2020

Summary

The course offers 10 intensive days of lectures and practicals on various topics at the hearth of microtechnology. It is articulated on two thematic weeks: "general methods for microtech-nology" and a second topic changing every year.

Content

The course include lectures and laboratories on the following subjects: Micro-Optics, MEMS, 3D micro-machining, Microrobotics, Nanomaterials, Self-assembly processes, AFM, SEM, TEM... Other subjects are treated, which change every year. Each lecture lasts 2 hours and is given by a different professor. Students may choose 2 laboratories out of 5, each one lasting two afternoons. In addition, shorter workshops are organized on micromachining, microrobotic, microassembly and microactuators.
Two visits to High-Tech companies are organized.

Note

The course offers high-specialized lectures in the mornings, and hands-on experiences or visits to high-tech companies in the afternoons.
A maximum of 30 students is accepted for the course. This number is set by the laboratories capacities: 6 students per laboratory.

Learning Prerequisites

Recommended courses

Master in Microtechnology or a related topic.

Resources

Websites

- http://phd.epfl.ch/page83590.html