MSE-636(b)

Scanning electron microscopy techniques (b)

Cantoni Marco, Navratilova Lucie, Oveisi Emad

Cursus	Sem.	Type
Advanced Manufacturing		Opt.
Materials Science and Engineering		Opt.

Language of teaching	English
Credits	1
Session	
Exam	Written
Workload	30h
Hours	**15**
Courses	12
Exercises	1
TP	2
Number of positions	

Frequency

Every year

Summary

This intensive course is intended for researchers who envisage to use scanning electron microscopy techniques for their research or who want to understand how to interpret SEM images and analytical results presented in scientific publications.

Content

This intensive course is intended for researchers who are potential new users of scanning electron microscopes. It will provide them with a basic understanding of the instruments, optics of SEM, the imaging modes, the associated analytical techniques EDS and EBSD, related theories of image formation.
Demonstrations will be given on the microscopes.
2x Year Spring (b) and autumn (a).

Keywords

SEM, FIB, ESEM

Assessment methods

Written

Resources

Websites

- https://www.epfl.ch/research/facilities/cime/teaching/doctoralschools/mse-636/