

MSE-628

## CCMX Advanced Course - Advanced X-ray Diffraction Methods for Coatings: strain, defects and deformation analysis of thin films

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Cursus	Sem.	Type
Materials Science and Engineering		Obl.

Language of teaching	English
Credits	1
Session	
Exam	Written
Workload	30h
<b>Hours</b>	<b>18</b>
Courses	13
TP	5
<b>Number of positions</b>	<b>16</b>

### Frequency

Every 2 years

### Summary

After introducing thin film and HR-XRD characterisation methods, theory and limitations are discussed, including examples and how the film structure influences its characteristics. Protocols are presented for establishing reproducible and reliable measurements, and for interpreting their results.

### Content

Please find information on the link below.

### Resources

#### Websites

- <https://ccmx.epfl.ch/courses-and-events/x-ray2019/>