

MSE-663

**Powder Diffraction School - Modern Synchrotron Methods**

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Cursus	Sem.	Type
Materials Science and Engineering		Opt.

Language of teaching	English
Credits	2
Session	
Exam	Oral
Workload	60h
<b>Hours</b>	<b>34</b>
Lecture	23
Exercises	9
Practical work	2
<b>Number of positions</b>	<b>40</b>

**Frequency**

Every 2 years

**Remark**

Next time: 2025

**Summary**

Modern synchrotron-radiation methods not only provide data of exceptional quality, but have allowed previously inaccessible experiments to be performed. The school will give a broad overview of all possibilities using synchrotron radiation, including hands-on practicals.

**Content**

<https://www.epfl.ch/research/domains/ccmx/courses-and-events/2023pds/>

**Keywords**

powder diffraction, x-rays, neutron diffraction

**Learning Prerequisites****Important concepts to start the course**

Participants are supposed to be already familiar with both the fundamentals of crystallography and X-ray powder diffraction.

**Assessment methods**

Written exam

**Resources****Websites**

- <https://www.epfl.ch/research/domains/ccmx/courses-and-events/2023pds/>