

MSE-713 CCMX Advanced Course - From Additive Manufacturing to Field-assisted Sintering

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Cursus	Sem.	Type
Materials Science and Engineering		Obl.

Language of teaching	English
Credits Session	1
Exam Workload Hours Courses Exercises Number of positions	Written 30h 18 17 1

Frequency

Every year

Summary

This course introduces the basics behind the processing and sintering of powders, highlighting, additive manufacturing, the use of field and pressure assisted sintering and describing different modelling aspects (MD/FEM).

Content

Please find information on the link below.

Keywords

precipitation; inorganic powders; supersaturation; nucleation mechanism; growth mechanism; aggregation mechanism; characterisation; reactors; sol-gel routes; aqueous; non-aqueous; thermodynamic modelling, kinetic modelling

Assessment methods

Written

Resources

Websites

• https://ccmx.epfl.ch/courses-and-events/advanced-course-from-additive-manufacturing-to-field-assisted-sintering-2019