Module title
Structure and Properties of Modern Materials: Experiments and Simulations

Abbreviation
08-MW-122-m01

Module coordinator
holder of the Chair of Chemical Technology of Material Synthesis

Module offered by
Chair of Chemical Technology of Material Synthesis

ECTS
5

Method of grading
numerical grade

Only after succ. compl. of module(s)
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Duration
1 semester

Module level
graduate

Other prerequisites
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Contents
Material properties of metals and ceramics: correlation of structure/property relations through experiments and simulations.

Intended learning outcomes
Students gain an insight into the properties of modern materials: aerospace aluminium alloys and high-performance ceramics. They are introduced to measuring methods and calculation methods using numerical simulation. A special focus is on the relation between the micro/nanoscopic structure of materials and the resulting properties.

Courses
V + S (no information on SWS (weekly contact hours) and course language available)

Method of assessment
a) talk (approx. 30 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes)

Allocation of places
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Additional information
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Referred to in LPO I
(examination regulations for teaching-degree programmes)

Module appears in
Master's degree (1 major) Functional Materials (2012)