### Module title and Abbreviation

| Physics of Advanced Materials | 11-PMM-132-m01 |

### Module coordinator and Module offered by

| Managing Director of the Institute of Applied Physics | Faculty of Physics and Astronomy |

### ECTS, Method of grading, and Only after succ. compl. of module(s)

| 6 | numerical grade | Only after succ. compl. of module(s) |

### Duration, Module level, and Other prerequisites

| 1 semester | graduate | -- |

### Contents

General properties of various material groups such as liquids, liquid crystals and polymers; magnetic materials and superconductors; thin films, heterostructures and superlattices. Methods of characterising these material groups; two-dimensional layer materials.

### Intended learning outcomes

The students know the properties and characterising methods of some modern materials.

### Courses (type, number of weekly contact hours, language — if other than German)

| V + R (no information on SWS (weekly contact hours) and course language available) |

### Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)

Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.

Language of assessment: German, English

### Allocation of places

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### Additional information

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### Referred to in LPO I (examination regulations for teaching-degree programmes)

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### Module appears in

- Bachelor’ degree (1 major) Physics (2010)
- Bachelor’ degree (1 major) Physics (2012)
- Bachelor’ degree (1 major) Nanostructure Technology (2010)
- Bachelor’ degree (1 major) Nanostructure Technology (2012)
- Master’s degree (1 major) Physics (2010)
- Master’s degree (1 major) Physics (2011)
- Master’s degree (1 major) Nanostructure Technology (2011)
- Master’s degree (1 major) Nanostructure Technology (2010)
- Master’s degree (1 major) FOKUS Physics (2010)
- Master’s degree (1 major) FOKUS Physics (2011)