

Module description

Module title					Abbreviation
Physics of Advanced Materials					11-PMM-Int-201-m01
Module coordinator				Module offered by	
Managing Director of the Institute of Applied Physics				Faculty of Physics and Astronomy	
ECTS	Method of grading		Only after succ. compl. of module(s)		
6	nume	rical grade			
Duration		Module level	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 to characterize these material groups. Two-dimensional layered structures.

Intended learning outcomes

Familiarity with the properties and characterization methods of various groups of modern materials.

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

V(3) + R(1)

Module taught in: English

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 to 120 minutes) or
- b) oral examination of one candidate each (approx. 30 minutes) or
- c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or
- d) project report (approx. 8 to 10 pages) or
- e) presentation/talk (approx. 30 minutes).

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: English

Assessment offered: In the semester in which the course is offered and in the subsequent semester

Allocation of places

--

Additional information

--

Workload

180 h

Teaching cycle

--

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

--

Module appears in

Master's degree (1 major) Physics International (2020)

Master's degree (1 major) Quantum Engineering (2020)

exchange program Physics (2023)

Master's degree (1 major) Quantum Engineering (2024)

Master's degree (1 major) Physics International (2024)



Module description

JMU Würzburg • generated 18.04.2025 • Module data record 110408