

Module description

Module title					Abbreviation
Practio	al Cou	rse			11-PG-IAF-072-m01
Module coordinator				Module offered by	
Managing Director of the Institute of Applied Physi				Faculty of Physics and Astronomy	
ECTS	Meth	od of grading	Only after succ. compl. of module(s)		
4	(not)	ot) successfully completed			
Duration		Module level	Other prerequisites		
1 semester		undergraduate	Module 11-PFR recommended.		
Contents					

Contents

Physical laws of mechanics, thermodynamics, optics, science of electricity, vibration and waves, Atomic and Nuclear Physics and wave optics. Basic measuring methods using computers and storage oscilloscopes.

Intended learning outcomes

The students have knowledge and skills of physical measuring instruments and experimental techniques. They are able to independently plan and conduct experiments in cooperation with others, and to document the results in a measurement protocol.

 $\textbf{Courses} \ (\textbf{type}, \, \textbf{number of weekly contact hours, language} - \textbf{if other than German})$

Beispiele aus Mechanik, Wärmelehre und Elektrik (Examples from Mechanics, Thermodynamics and Electricity, BAM): P (2 weekly contact hours)

Klassische Physik (Classical Physics, KLP): P (2 weekly contact hours)

Elektrizitätslehre und Schaltungen (Electricity and Circuits, ELS): P (2 weekly contact hours)

Wellenoptik (Physical Optics, WOP): P (2 weekly contact hours)

Atom- und Kernphysik (Atomic and Nuclear Physics, AKP): P (2 weekly contact hours)

Computer und Messtechnik (Computers and Measurement Technology, CMT): P (2 weekly contact hours)

 $\textbf{Method of assessment} \ (\textbf{type}, \textbf{scope}, \textbf{language} - \textbf{if other than German, examination of fered} - \textbf{if not every semester, information on whether} \ \\$ module is creditable for bonus)

This module has the following assessment components

- 1. Lab course in part 1: a) Preparing, performing and evaluating the experiments will be considered successfully completed if a Testat (exam) is passed. b) Talk (with discussion) to test the students' understanding of the physics-related contents of the course (approx. 30 minutes).
- 2. Lab course in part 2: a) Preparing, performing and evaluating the experiments will be considered successfully completed if a Testat (exam) is passed. b) Talk (with discussion) to test the students' understanding of the physics-related contents of the course (approx. 30 minutes).

Students must register for assessment components 1 and 2 online (registration deadline to be announced). Students will be offered one opportunity to retake element a) and/or element b). To pass an assessment component, they must pass both elements a) and b).

To pass this module, students must successfully complete two out of the six courses.

Students must attend BAM, KLP or ELS courses prior to attending WOP, AKP or CMT courses.

To pass this module, students must pass both assessment component 1 and assessment component 2.

Allocation of places

Additional information

Workload

Teaching cycle



Module description

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

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Module appears in

Bachelor' degree (1 major) Mathematics (2008)

Bachelor' degree (1 major) Mathematics (2007)

Bachelor' degree (1 major) Computational Mathematics (2009)

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