### Module title

**Laboratory Course Physics A(Mechanics, Heat, Electromagnetism)**

### Abbreviation

11-P-LA-152-m01

### Module coordinator

Managing Director of the Institute of Applied Physics

### Module offered by

Faculty of Physics and Astronomy

### ECTS

2

### Method of grading

Only after succ. compl. of module(s)

### (not) successfully completed

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### Duration

1 semester

### Module level

undergraduate

### Other prerequisites

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### Contents

Measurement tasks in mechanics, thermodynamics and electricity theory, e.g. measurement of voltages and currents, heat capacity, calorimetry, density of bodies, dynamic viscosity, elasticity, surface tension, spring constant, drafting of graphs and drafting of measurement protocols.

### Intended learning outcomes

The student has knowledge and mastery of physical measuring instruments and experimental techniques. He/She is able to plan experiments independently and to perform well in cooperation with others, and to document the measurement results in a measurement protocol.

### Courses

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

**P (2)**

### Method of assessment

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

**practical assignment with talk (approx. 30 minutes)**

Preparing, performing and evaluating (record of readings or lab report) the experiments will be considered successfully completed if a Testat (exam) is passed. Exactly one experiment that was not successfully completed can be repeated once. After completion of all experiments, talk (with discussion; approx. 30 minutes) to test the candidate's understanding of the physics-related contents of the module. Talks that were not successfully completed can be repeated once. Both components of the assessment have to be successfully completed.

### Allocation of places

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### Additional information

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### Referred to in LPO I

(examination regulations for teaching-degree programmes)

§ 53 I Nr. 1 c)

§ 77 I Nr. 1 d)

### Module appears in

First state examination for the teaching degree Grundschule Physics (2015)

First state examination for the teaching degree Realschule Physics (2015)

First state examination for the teaching degree Gymnasium Physics (2015)

First state examination for the teaching degree Mittelschule Physics (2015)

First state examination for the teaching degree Grundschule Physics (2018)

First state examination for the teaching degree Realschule Physics (2018)

First state examination for the teaching degree Gymnasium Physics (2018)

First state examination for the teaching degree Mittelschule Physics (2018)