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

### 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)

### 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
(P, 2)

### Method of assessment
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
§ 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)
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