Module title
Laboratory Course Quantum Technology B (Classical Physics, Electricity, Circuits)

Abbreviation
11-P-NB-212-m01

Module coordinator
Managing Director of the Institute of Applied Physics

Module offered by
Faculty of Physics and Astronomy

ECTS
4

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
Students are highly recommended to complete modules 11-P-PA and 11-P-FR1 prior to completing module 11-P-NB.

Contents
Physical laws of optics, vibrations and waves, science of electricity and circuits with electric components.

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. He/She is able to evaluate the measurement result using error propagation and basics of statistics, to draw conclusions and to present and to discuss theses conclusions.

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)
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Module appears in
Bachelor' degree (1 major) Quantum Technology (2021)