

<b>Module title</b>		<b>Abbreviation</b>
<b>Advanced Undergraduate Laboratory (Optics, Basic Semiconductor Circuits)</b>		11-PGB-NRN-072-m01
<b>Module coordinator</b>		<b>Module offered by</b>
Managing Director of the Institute of Applied Physics		Faculty of Physics and Astronomy
<b>ECTS</b>	<b>Method of grading</b>	<b>Only after succ. compl. of module(s)</b>
2	(not) successfully completed	--
<b>Duration</b>	<b>Module level</b>	<b>Other prerequisites</b>
1 semester	undergraduate	--
<b>Contents</b>		
Physical laws of atomic physics, nuclear physics and wave optics. Basic measuring methods using computers and storage oscilloscopes.		
<b>Intended learning outcomes</b>		
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.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
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)		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
<p>This module has the following assessment components</p> <ul style="list-style-type: none"> <li>• Lab course: 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).</li> </ul> <p>Students must register for assessment online (registration deadline to be announced). Students will be offered one opportunity to retake element a) and/or element b). To pass an assessment, students must pass both elements a) and b). To pass this module, students must successfully complete one out of the three courses. To pass this module, students must pass the assessment components.</p>		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Bachelor' degree (1 major) Nanostructure Technology (2008) Bachelor' degree (1 major) Nanostructure Technology (2007) Bachelor's degree (1 major, 1 minor) Physics (Minor, 2008)		