

Module title		Abbreviation
Modern Physics 2 (Molecule and Solid State Physics)		11-L-M2-152-m01
Module coordinator		Module offered by
Managing Director of the Institute of Applied Physics		Faculty of Physics and Astronomy
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
2 semester	undergraduate	--
Contents		
Mechanical, dielectric and magnetic properties of molecules, rotational, vibrational and electronic excitation of molecules, measuring methods, structure of solids, scattering methods, lattice vibrations, thermal properties of insulators.		
Intended learning outcomes		
Understanding of the structure of molecules and chemical bonding, knowledge of experimental methods for the examination of molecules, understanding of the structure of crystalline solids, their modelling as translation-invariant lattices and the consequences.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (3) + Ü (1) Module taught in: Ü: German or English		
Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
written examination (approx. 90 to 120 minutes) Language of assessment: German and/or English		
Allocation of places		
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Additional information		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
§ 77 I Nr. 1 b)		
Module appears in		
First state examination for the teaching degree Gymnasium Physics (2015) First state examination for the teaching degree Gymnasium Physics (2018) First state examination for the teaching degree Gymnasium Physics (2020)		