

Module title		Abbreviation
Molecular Materials (Lecture)		o8-FU-MoMaV-152-mo1
Module coordinator		Module offered by
degree programme coordinator Funktionswerkstoffe (Functional Materials)		Chair of Chemical Technology of Material Synthesis
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Chemical bonds and molecular interactions, supramolecular chemistry, molecular materials, colloids, nanoparticles, thin films.		
Intended learning outcomes		
Students have developed an understanding of the relationship between the physical, chemical and technological properties of materials and their structure. They know the significance of various inter and intramolecular interactions and how they determine the properties of molecular materials. They have learned how to familiarise themselves with a topic in the field, deliver a presentation on that topic, discuss it as well as to give and receive feedback.		
Courses (type, number of weekly contact hours, language – if other than German)		
V (3) + S (1)		
Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
[a] written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes)] as well as talk (approx. 30 minutes), weighted 3:1 Language of assessment: German and/or English		
Allocation of places		
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Additional information		
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Workload		
150 h		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor' degree (1 major) Nanostructure Technology (2015) Bachelor' degree (1 major) Functional Materials (2015) Master's degree (1 major) Chemistry (2016) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016) Master's degree (1 major) Chemistry (2018) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020) Bachelor' degree (1 major) Nanostructure Technology (2020) Bachelor' degree (1 major) Quantum Technology (2021)		