

<b>Module title</b>		<b>Abbreviation</b>
Statistical Mechanics and Reaction Dynamics		o8-PCM2-161-m01
<b>Module coordinator</b>		<b>Module offered by</b>
lecturer of seminar "Chemische Dynamik" (Chemical Dynamics)		Institute of Physical and Theoretical Chemistry
<b>ECTS</b>	<b>Method of grading</b>	<b>Only after succ. compl. of module(s)</b>
5	numerical grade	--
<b>Duration</b>	<b>Module level</b>	<b>Other prerequisites</b>
1 semester	graduate	--
<b>Contents</b>		
This module discusses selected topics in statistical mechanics and reaction dynamics. Topics to be covered include the fundamental principles of statistical thermodynamics, the transition state theory, uni- and bimolecular reactions as well as charge and energy transfer.		
<b>Intended learning outcomes</b>		
Students have become familiar with selected topics in statistical mechanics and reaction dynamics. They have learned and are able to apply the fundamental principles of statistical thermodynamics.		
<b>Courses</b> (type, number of weekly contact hours, language – if other than German)		
S (2) + Ü (1) Module taught in: German or English		
<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)		
a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
150 h		
<b>Teaching cycle</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>		
Master's degree (1 major) Chemistry (2016) Master's degree (1 major) Mathematics (2016) Master's degree (1 major) Computational Mathematics (2016) Master's degree (1 major) Functional Materials (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 degree (1 major) Computational Mathematics (2019) Master's degree (1 major) Mathematics (2019) 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)		

Master's degree (1 major) Computational Mathematics (2022)  
Master's degree (1 major) Functional Materials (2022)  
Master's degree (1 major) Mathematics (2022)  
Master's degree (1 major) Chemistry (2024)  
Master's degree (1 major) Computational Mathematics (2024)  
Master's degree (1 major) Mathematics (2024)