

<b>Module title</b>		<b>Abbreviation</b>
Physical Chemistry 1 for engineering students		o8-IPC-122-m01
<b>Module coordinator</b>		<b>Module offered by</b>
lab course supervisor "Physikalische Chemie für Studierende der Ingenieurwissenschaften, Praktikum"		Institute of Physical and Theoretical Chemistry
<b>ECTS</b>	<b>Method of grading</b>	<b>Only after succ. compl. of module(s)</b>
18	numerical grade	--
<b>Duration</b>	<b>Module level</b>	<b>Other prerequisites</b>
1 semester	undergraduate	--
<b>Contents</b>		
This module provides students with an overview of the theoretical principles of physical chemistry. In addition, it introduces the fundamental techniques of physical chemistry in a lab course.		
<b>Intended learning outcomes</b>		
Students have become familiar with the fundamental principles of physical chemistry. They are able to identify fundamental problems in chemistry and perform experiments to solve them.		
<b>Courses</b> (type, number of weekly contact hours, language – if other than German)		
This module comprises 3 module components. Information on courses will be listed separately for each module component. <ul style="list-style-type: none"> <li>• o8-IPC-2-062: V + Ü (no information on SWS (weekly contact hours) and course language available)</li> <li>• o8-IPC-1-091: V + Ü (no information on SWS (weekly contact hours) and course language available)</li> <li>• o8-IPC-3-122: P (no information on SWS (weekly contact hours) and course language available)</li> </ul>		
<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)		
Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.		
<p><b>Assessment in module component o8-IPC-2-062:</b> Physical Chemistry 2 (basics of quantum mechanics and spectroscopy) for engineering students Physical Chemistry 2 (basics of quantum mechanics and spectroscopy) for engineering students</p> <ul style="list-style-type: none"> <li>• 8 ECTS, Method of grading: numerical grade</li> <li>• written examination (approx. 90 minutes)</li> </ul> <p><b>Assessment in module component o8-IPC-1-091:</b> Physical Chemistry 1 (thermodynamics, electrochemistry) for engineering students Physical Chemistry 1 (thermodynamics, electrochemistry) for engineering students</p> <ul style="list-style-type: none"> <li>• 5 ECTS, Method of grading: numerical grade</li> <li>• written examination (approx. 90 minutes)</li> </ul> <p><b>Assessment in module component o8-IPC-3-122:</b> Physical Chemistry for engineering students, laboratory course</p> <ul style="list-style-type: none"> <li>• 5 ECTS, Method of grading: (not) successfully completed</li> <li>• Vortestate (pre-experiment exams, approx. 15 minutes), assessment of practical performance (log approx. 5 to 10 pages), Nachtestate (post-experiment exams, approx. 15 minutes)</li> <li>• Assessment offered: once a year, summer semester</li> <li>• Language of assessment: German or English</li> <li>• Only after successful completion of module components: Successful completion of the two module components o8-IPC-1 and o8-IPC-2 is a prerequisite for participation in module component o8-IPC-3.</li> </ul>		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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**Workload**

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**Teaching cycle**

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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) Functional Materials (2012)