

<b>Module title</b>		<b>Abbreviation</b>
Physical Chemistry for Biology and Food Chemistry Students		o8-PC-NF-152-m01
<b>Module coordinator</b>		<b>Module offered by</b>
lecturer of lecture "Thermodynamik, Kinetik, Elektrochemie für Studierende der Biologie and Lebensmittelchemie"		Institute of Physical and Theoretical Chemistry
<b>ECTS</b>	<b>Method of grading</b>	<b>Only after succ. compl. of module(s)</b>
4	numerical grade	--
<b>Duration</b>	<b>Module level</b>	<b>Other prerequisites</b>
1 semester	undergraduate	--
<b>Contents</b>		
This module deals with basics of thermodynamics, kinetics and electrochemistry.		
<b>Intended learning outcomes</b>		
German intended learning outcomes available but not translated yet.		
Der/Die Studierende verfügt über Grundkenntnisse der Thermodynamik, der Kinetik und der Elektrochemie. Er/Sie ist dadurch befähigt, grundlegende Prozesse in Natur und Technik zu verstehen und zu erläutern.		
<b>Courses</b> (type, number of weekly contact hours, language – if other than German)		
V (2) + Ü (1) Once a year, winter semester		
<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)		
written examination (approx. 60 minutes)		
<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) Biochemistry (2013) Bachelor' degree (1 major) Biology (2011) Bachelor' degree (1 major) Biology (2013) Bachelor' degree (1 major) Chemistry (2010) Bachelor' degree (1 major) Chemistry (2009) Bachelor' degree (1 major) Geography (2010) Bachelor' degree (1 major) Computer Science (2014) Bachelor' degree (1 major) Food Chemistry (2009) Bachelor' degree (1 major) Mathematics (2014) Bachelor' degree (1 major) Mathematics (2013) Bachelor' degree (1 major) Musicology (2011) Bachelor' degree (1 major) Physics (2012) Bachelor' degree (1 major) Psychology (2010) Bachelor' degree (1 major) Business Management and Economics (2013) Bachelor' degree (1 major) Business Management and Economics (2010) Bachelor' degree (1 major) Nanostructure Technology (2012) Bachelor' degree (1 major) Economathematics (2009) Bachelor' degree (1 major) Economathematics (2012)		

Bachelor' degree (1 major) Economathematics (2008)  
 Bachelor' degree (1 major) Business Information Systems (2014)  
 Bachelor' degree (1 major) Indology/South Asian Studies (2013)  
 Bachelor' degree (1 major) Human-Computer Systems (2010)  
 Bachelor' degree (1 major) Computational Mathematics (2014)  
 Bachelor' degree (1 major) Aerospace Computer Science (2014)  
 Bachelor' degree (1 major) Media Communication (2012)  
 Bachelor' degree (1 major) Political and Social Studies (2011)  
 Bachelor' degree (1 major) Romanic Languages (French/Spanish) (2013)  
 Bachelor' degree (1 major) Functional Materials (2012)  
 Bachelor's degree (1 major, 1 minor) Pedagogy (2011)  
 Bachelor's degree (1 major, 1 minor) Pedagogy (2009)  
 Bachelor's degree (1 major, 1 minor) Pedagogy (2013)  
 Bachelor's degree (1 major, 1 minor) French Studies (2013)  
 Bachelor's degree (1 major, 1 minor) History (2010)  
 Bachelor's degree (1 major, 1 minor) History of Medieval and Modern Art (2013)  
 Bachelor's degree (1 major, 1 minor) Philosophy (2010)  
 Bachelor's degree (1 major, 1 minor) Philosophy (2013)  
 Bachelor's degree (1 major, 1 minor) Pre- and Protohistoric Archaeology (2012)  
 Bachelor's degree (1 major, 1 minor) Spanish Studies (2010)  
 Bachelor's degree (1 major, 1 minor) Science of Music Education (2011)  
 Bachelor's degree (1 major, 1 minor) Philosophy and Religion (2014)  
 Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2010)  
 Bachelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2010)  
 Bachelor's degree (1 major, 1 minor) Political and Social Studies (2013)  
 Bachelor's degree (1 major, 1 minor) Museology and material culture (2013)  
 Bachelor's degree (1 major, 1 minor) English and American Studies (2010)  
 Bachelor's degree (1 major, 1 minor) Russian Language and Culture (2008)  
 Bachelor's degree (1 major, 1 minor) Russian Language and Culture (2012)  
 Bachelor's degree (1 major, 1 minor) Gallo-Roman philology (2010)  
 Bachelor's degree (1 major, 1 minor) German Language and Literature (2013)  
 Bachelor's degree (1 major, 1 minor) German Language and Literature (2010)  
 Bachelor's degree (1 major, 1 minor) Italian Studies (2010)  
 Bachelor's degree (2 majors) Egyptology (2011)  
 Bachelor's degree (2 majors) Classical Archaeology (2013)  
 Bachelor's degree (2 majors) Pedagogy (2013)  
 Bachelor's degree (2 majors) Protestant Theology (2009)  
 Bachelor's degree (2 majors) History of Medieval and Modern Art (2013)  
 Bachelor's degree (2 majors) Musicology (2011)  
 Bachelor's degree (2 majors) Philosophy (2010)  
 Bachelor's degree (2 majors) Philosophy (2013)  
 Bachelor's degree (2 majors) Comparative Indo-European Linguistics (2012)  
 Bachelor's degree (2 majors) Special Education (2009)  
 Bachelor's degree (2 majors) Pre- and Protohistoric Archaeology (2012)  
 Bachelor's degree (2 majors) Science of Music Education (2011)  
 Bachelor's degree (2 majors) Philosophy and Religion (2013)  
 Bachelor's degree (2 majors) Philosophy and Religion (2014)  
 Bachelor's degree (2 majors) Digital Humanities (2012)  
 Bachelor's degree (2 majors) Digital Humanities (2009)  
 Bachelor's degree (2 majors) Political and Social Studies (2011)  
 Bachelor's degree (2 majors) Russian Language and Culture (2012)  
 Bachelor's degree (2 majors) European Ethnology (2013)  
 Magister Theologiae Catholic Theology (2013)

Bachelor's degree (2 majors) Geography (2010)  
 Bachelor's degree (2 majors) French Studies (2013)  
 Bachelor's degree (2 majors) History (2009)  
 Bachelor's degree (2 majors) Italian Studies (2013)  
 Bachelor's degree (2 majors) Spanish Studies (2013)  
 Bachelor's degree (2 majors) Spanish Studies (2009)  
 Bachelor's degree (2 majors) English and American Studies (2009)  
 Bachelor's degree (2 majors) Gallo-Roman philology (2009)  
 Bachelor's degree (2 majors) German Language and Literature (2013)  
 Bachelor's degree (2 majors) German Language and Literature (2009)  
 Bachelor's degree (2 majors) Italian Studies (2009)  
 Bachelor' degree (1 major) Biochemistry (2015)  
 Bachelor' degree (1 major) Biology (2015)  
 Bachelor' degree (1 major) Chemistry (2015)  
 Bachelor' degree (1 major) Geography (2015)  
 Bachelor' degree (1 major) Computer Science (2015)  
 Bachelor' degree (1 major) Food Chemistry (2015)  
 Bachelor' degree (1 major) Mathematics (2015)  
 Bachelor' degree (1 major) Musicology (2015)  
 Bachelor' degree (1 major) Physics (2015)  
 Bachelor' degree (1 major) Psychology (2015)  
 Bachelor' degree (1 major) Business Management and Economics (2015)  
 Bachelor' degree (1 major) Nanostructure Technology (2015)  
 Bachelor' degree (1 major) Economathematics (2015)  
 Bachelor' degree (1 major) Business Information Systems (2015)  
 Bachelor' degree (1 major) Biomedicine (2015)  
 Bachelor' degree (1 major) Mathematical Physics (2015)  
 Bachelor' degree (1 major) Human-Computer Systems (2015)  
 Bachelor' degree (1 major) Modern China (2015)  
 Bachelor' degree (1 major) Science of Music Education (2015)  
 Bachelor' degree (1 major) Computational Mathematics (2015)  
 Bachelor' degree (1 major) Aerospace Computer Science (2015)  
 Bachelor' degree (1 major) Media Communication (2015)  
 Bachelor' degree (1 major) Political and Social Studies (2015)  
 Bachelor' degree (1 major) Romanic Languages (French/Italian) (2015)  
 Bachelor' degree (1 major) Romanic Languages (French/Spanish) (2015)  
 Bachelor' degree (1 major) Romanic Languages (Spanish/Italian) (2015)  
 Bachelor' degree (1 major) Functional Materials (2015)  
 Bachelor' degree (1 major) Academic Speech Therapy (2015)  
 Bachelor' degree (1 major) Indology/South Asian Studies (2015)  
 Bachelor's degree (1 major, 1 minor) Egyptology (2015)  
 Bachelor's degree (1 major, 1 minor) Classical Archaeology (2015)  
 Bachelor's degree (1 major, 1 minor) Pedagogy (2015)  
 Bachelor's degree (1 major, 1 minor) French Studies (2015)  
 Bachelor's degree (1 major, 1 minor) History (2015)  
 Bachelor's degree (1 major, 1 minor) Italian Studies (2015)  
 Bachelor's degree (1 major, 1 minor) History of Medieval and Modern Art (2015)  
 Bachelor's degree (1 major, 1 minor) Musicology (2015)  
 Bachelor's degree (1 major, 1 minor) Philosophy (2015)  
 Bachelor's degree (1 major, 1 minor) Spanish Studies (2015)  
 Bachelor's degree (1 major, 1 minor) Pre- and Protohistoric Archaeology (2015)  
 Bachelor's degree (1 major, 1 minor) Ancient World (2015)  
 Bachelor's degree (1 major, 1 minor) Science of Music Education (2015)

Bachelor's degree (1 major, 1 minor) Philosophy and Religion (2015)  
 Bachelor's degree (1 major, 1 minor) Geography (Focus Physical Geography) (2015)  
 Bachelor's degree (1 major, 1 minor) Theological Studies (2015)  
 Bachelor's degree (1 major, 1 minor) Geography (Focus Human Geography) (2015)  
 Bachelor's degree (1 major, 1 minor) Political and Social Studies (2015)  
 Bachelor's degree (1 major, 1 minor) Museology and material culture (2015)  
 Bachelor's degree (1 major, 1 minor) English and American Studies (2015)  
 Bachelor's degree (1 major, 1 minor) Russian Language and Culture (2015)  
 Bachelor's degree (1 major, 1 minor) German Language and Literature (2015)  
 Bachelor's degree (1 major, 1 minor) Indology/South Asian Studies (2015)  
 Bachelor's degree (2 majors) Egyptology (2015)  
 Bachelor's degree (2 majors) Classical Archaeology (2015)  
 Bachelor's degree (2 majors) Pedagogy (2015)  
 Bachelor's degree (2 majors) Protestant Theology (2015)  
 Bachelor's degree (2 majors) History of Medieval and Modern Art (2015)  
 Bachelor's degree (2 majors) Musicology (2015)  
 Bachelor's degree (2 majors) Philosophy (2015)  
 Bachelor's degree (2 majors) Comparative Indo-European Linguistics (2015)  
 Bachelor's degree (2 majors) Special Education (2015)  
 Bachelor's degree (2 majors) Pre- and Protohistoric Archaeology (2015)  
 Bachelor's degree (2 majors) Latin Philology (2015)  
 Bachelor's degree (2 majors) Science of Music Education (2015)  
 Bachelor's degree (2 majors) Philosophy and Religion (2015)  
 Bachelor's degree (2 majors) Theological Studies (2015)  
 Bachelor's degree (2 majors) Digital Humanities (2015)  
 Bachelor's degree (2 majors) Political and Social Studies (2015)  
 Bachelor's degree (2 majors) Russian Language and Culture (2015)  
 Bachelor's degree (2 majors) Greek Philology (2015)  
 Bachelor's degree (2 majors) European Ethnology (2015)  
 Bachelor's degree (2 majors) Indology/South Asian Studies (2015)  
 Bachelor's degree (2 majors) Ancient Near Eastern Studies (2015)  
 Bachelor's degree (2 majors) Geography (2015)  
 Bachelor's degree (2 majors) French Studies (2015)  
 Bachelor's degree (2 majors) History (2015)  
 Bachelor's degree (2 majors) Italian Studies (2015)  
 Bachelor's degree (2 majors) Spanish Studies (2015)  
 Bachelor's degree (2 majors) Sport Science (Focus on health and Pedagogics in Movement) (2015)  
 Bachelor's degree (2 majors) English and American Studies (2015)  
 Bachelor's degree (2 majors) German Language and Literature (2015)  
 Bachelor' degree (1 major) Mathematical Physics (2016)  
 Bachelor' degree (1 major) Human-Computer Systems (2016)  
 Bachelor's degree (1 major, 1 minor) Theological Studies (2011)  
 Bachelor's degree (2 majors) Theological Studies (2011)  
 Bachelor's degree (1 major, 1 minor) French Studies (2016)  
 Bachelor's degree (2 majors) French Studies (2016)  
 Bachelor's degree (1 major, 1 minor) Italian Studies (2016)  
 Bachelor's degree (2 majors) Italian Studies (2016)  
 Bachelor's degree (1 major, 1 minor) Spanish Studies (2016)  
 Bachelor's degree (2 majors) Spanish Studies (2016)  
 Bachelor' degree (1 major) Romanic Languages (French/Italian) (2016)  
 Bachelor' degree (1 major) Romanic Languages (French/Spanish) (2016)  
 Bachelor' degree (1 major) Romanic Languages (Spanish/Italian) (2016)  
 Bachelor' degree (1 major) Business Information Systems (2016)

Bachelor' degree (1 major) Games Engineering (2016)  
 Bachelor's degree (1 major, 1 minor) English and American Studies (2016)  
 Bachelor's degree (2 majors) English and American Studies (2016)  
 Bachelor' degree (1 major) Media Communication (2016)  
 Bachelor' degree (1 major) Food Chemistry (2016)  
 Bachelor's degree (1 major, 1 minor) Digital Humanities (2016)  
 Bachelor' degree (1 major) Biology (2017)  
 Bachelor's degree (1 major, 1 minor) Geography (2017)  
 Bachelor's degree (1 major, 1 minor) History of Medieval and Modern Art (2017)  
 Bachelor's degree (2 majors) History of Medieval and Modern Art (2017)  
 Bachelor's degree (2 majors) Comparative Indo-European Linguistics (2017)  
 Bachelor' degree (1 major) Aerospace Computer Science (2017)  
 Bachelor' degree (1 major) Modern China (2017)  
 Bachelor' degree (1 major) Biochemistry (2017)  
 Bachelor' degree (1 major) Chemistry (2017)  
 Bachelor's degree (1 major, 1 minor) Museology and material culture (2017)  
 Bachelor' degree (1 major) Economathematics (2017)  
 Bachelor' degree (1 major) Games Engineering (2017)  
 Bachelor' degree (1 major) Computer Science (2017)  
 Bachelor' degree (1 major) Media Communication (2018)  
 Bachelor' degree (1 major) Biomedicine (2018)  
 Bachelor' degree (1 major) Human-Computer Systems (2018)  
 Bachelor's degree (2 majors) Classical Archaeology (2018)  
 Bachelor's degree (1 major, 1 minor) Classical Archaeology (2018)  
 Bachelor's degree (1 major, 1 minor) Digital Humanities (2018)  
 Bachelor's degree (2 majors) Digital Humanities (2018)  
 Bachelor' degree (1 major) Computer Science (2019)  
 Bachelor's degree (1 major, 1 minor) English and American Studies (2019)  
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 Bachelor' degree (1 major) Business Information Systems (2020)  
 Bachelor's degree (1 major, 1 minor) Political and Social Studies (2020)  
 Bachelor's degree (2 majors) European Ethnology (2020)  
 Bachelor's degree (2 majors) Political and Social Studies (2020)  
 Bachelor's degree (2 majors) Special Education (2020)  
 Bachelor' degree (1 major) Physics (2020)  
 Bachelor' degree (1 major) Nanostructure Technology (2020)  
 Bachelor' degree (1 major) Mathematical Physics (2020)  
 Bachelor' degree (1 major) Aerospace Computer Science (2020)  
 Bachelor's degree (1 major, 1 minor) Museology and material culture (2020)  
 Bachelor's degree (1 major, 1 minor) Pedagogy (2020)  
 Bachelor's degree (2 majors) Pedagogy (2020)  
 Bachelor' degree (1 major) Psychology (2020)