

<b>Linz</b>	<b>ECTS</b>	<b>Semester</b>
<b>1. Fundamentals of Chemistry and Technology for Biological Chemists</b>	<b>17,80</b>	
VL Biochemical Laboratory Techniques	1,3	WS
PR Preparative Chemistry Laboratory for Biological Chemists	6,0	SS
VL Industrielle Biotechnologie	2,60	SS
PR Advanced Instrumental Analysis	2,40	SS
UE Exercises Spectroscopy and Structure Elucidation II	1,60	WS
VL Organic Chemistry III (Natural Products)	2,60	WS
VL Spectroscopy and Structure Elucidation II	1,30	WS
<b>2. Fundamentals of Chemistry and Technology for Technical Chemists</b>	<b>9,20</b>	
VL Biochemical Laboratory Techniques	1,30	WS
PR Advanced Instrumental Analysis	2,40	SS
UE Exercises Spectroscopy and Structure Elucidation II	1,60	WS
VL Organic Chemistry III (Natural Products)	2,60	WS
VL Spectroscopy and Structure Elucidation II	1,30	WS
<b>3. Support Courses</b>	<b>5,60</b>	
Gender Studies	3,00	WS/SS
KV Gender Studies Managing Equality TN	3,00	WS/SS
VL Ethics and Gender Studies	3,00	WS/SS
VL Patent Law and Intellectual Property	2,60	SS

<b>4. Chemical Electives</b>	<b>18,20 - 26,10</b>	
<b>4.1 Chemical Elective: Advanced Chemistry</b>	<b>7,50 - 16,10</b>	
<b>Obligatory courses (Chemical Elective: Advanced Chemistry)</b>	<b>4,20</b>	
SE Seminar on Bioinorganic and Biomimetic Systems	1,60	SS
VL Stereochemistry	2,60	WS
<b>Supplementary courses (Chemical Elective: Advanced Chemistry)</b>	<b>3,30 - 11,90</b>	
VL Current Topics in Biological Chemistry	1,30	WS
VL Photochemistry	26,0	WS
PR Practical Photochemistry	2,40	WS
VL Bioanalytics II	3,00	SS
VL Bioanalytics I	3,00	WS
VL Bionics - biomimetic Materials and Polymers	1,30	SS
VL Technical Biopolymers	1,30	SS
VL Inorganic Chemistry III	2,60	SS
<b>4.2 Chemical Elective: Advanced Physical Chemistry and Biophysics</b>	<b>7,50 - 16,10</b>	
<b>Obligatory courses (Chemical Elective: Advanced Physical Chemistry and Biophysics)</b>	<b>4,20</b>	
SE Seminar in Biophysical Chemistry	1,60	WS/SS
VL Physical Chemistry II	2,60	SS
<b>Supplementary courses (Chemical Elective: Advanced Physical Chemistry and Biophysics)</b>	<b>3,30 - 11,90</b>	
PR Biophysics Laboratory II for Biological Chemistry	2,40	SS
VL Current Topics in Biophysical Chemistry	1,30	WS/SS
VL Introduction to Nano-Biomechanics	1,50	WS
PR Practical Atomic Force Microscopy	2,40	WS/SS
VL Structure and Properties of Biological Materials	1,30	WS
VL Biophysik III	3,00	WS
VL High Resolution Microscopy II - Scanning Probe Techniques	1,50	SS
VL High Resolution Microscopy I - Optical and Electron Microscopy Techniques	1,50	SS
VL Physical Chemistry of Surfaces and Interfaces	1,50	SS
VL Molecularly Imprinted Polymers	1,30	WS

<b>4.3 Chemical Elective: Structural Biochemistry</b>	<b>7,50 - 16,10</b>	
<b>Obligatory courses (Chemical Elective: Structural Biochemistry)</b>	<b>4,50</b>	
KV Advanced NMR 2	1,60	SS
VL Protein Science	1,30	SS
SE Seminar in Structural and Computational Biochemistry	1,60	SS
<b>Supplementary courses (Chemical Elective: Structural Biochemistry)</b>	<b>3,00 - 11,60</b>	
VL Current Topics in Structural Biochemistry	1,30	SS
PR Practical NMR	2,40	WS/SS
PR Modellierung von biologischen Makromolekülen I	3,00	WS
VL Theoretical Modelling of Biological Systems	3,00	SS
UE Exercises in Spectroscopy and Structural Elucidation I	1,60	WS
VL Advanced NMR 1	1,30	WS
VL Chemometrische Verfahren	2,60	SS

<b>Budweis</b>	<b>ECTS</b>	<b>Semester</b>
<b>5. Bridge subject: Fundamentals of Biology for Technical Chemists</b>	<b>16</b>	
VL +SE Biochemistry 2	4	SS
VL +PR Biology of Microorganisms	5	WS
PR Methods in Molecular Biology	4	SS
VL Molecular Biology and Genetics I	3	WS

<b>6. Advanced Biology and Biochemistry</b>	<b>32</b>	
VL Biochemistry at the Service of Medicine	3	WS
PR Applications of Molecular Modelling	2	WS
VL + PR Bioenergetics	4	WS
VL Computational Chemistry and Modelling of Biomolecules	4	WS
VL + PR Electron Microscopy I	4	WS
VL Enzymology	3	WS
VL + PR Genetics and protein engineering	4	WS
VL Molecular Biology and Genetics II	3	WS
VL + PR Protein Chemistry	4	SS
SE Seminar in Advanced Biological Chemistry	1	WS/SS

<b>7. Biological Electives</b>	<b>22</b>	
<b>7.1 Biological Elective: Advances in Biological Systems</b>	<b>min. 10</b>	
VL Biopharmacy	3	SS
VL Glycobiochemistry	3	WS
VL Immunology	3	SS
VL Methods of Functional Genomics	5	SS
VL + PR Xenobiochemistry and Toxicology	5	SS
<b>7.2 Biological Elective: Molecular and Developmental Biology</b>	<b>min. 10</b>	
VL Cell Regulation and Signaling	4	WS
VL Developmental and Comparative Biochemistry	3	WS
VL +PR Molecular Phylogenetics	4	WS
VL Virology	3	SS
<b>7.3 Biological Elective: Structural Biology Techniques</b>	<b>min. 10</b>	
VL +PR Cell Line Cultures in Vitro	3	SS
VL +PR Electron Microscopy II	4	SS
VL Fluorescence Spectroscopy in Biology and Medicine	3	SS
VL Molecular Environment and Bio-organic molecular Structure	5	SS
VL +PR X-Ray Crystallography	4	WS

<b>Linz/Budweis</b>	<b>ECTS</b>	<b>Semester</b>
<b>Master's Thesis Seminar Biological Chemistry</b>	3	WS/SS
<b>Free Electives</b>	16,50 - 17,00	WS/SS