CREDIT TRANSFER FORM (Anrechnungsformular)

**Master – Biological Chemistry 066/863**

**Curriculum 2018 - general**

For every course of this curriculum please enter the name of the equivalent course that you attended (if there is one). Specify also the type of the course (VL=lecture, UE=exercises, KV=combination of lecture and exercises, PR=laboratory, SE=seminar) as well as its duration (hours/week). In the empty table OTHERS enter the courses which are not available before.

**Name: Matr. Nr.:**

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| Fundamentals of Chemistry and Technology for Biological Chemists (17.8 ECTS)  | **Type** | **ECTS** | **Equivalent course**  | **Type** | **ECTS** | **Mark** |
| Biochemical Laboratory Techniques | VL | 1.3 |  |  |  |  |
| Industrial Biotechnology | VL | 2.6 |  |  |  |  |
| Preparative Chemistry Laboratory for Biological Chemists | PR | 6.0 |  |  |  |  |
| Advanced Instrumental Analysis | PR | 2.4 |  |  |  |  |
| Exercises Spectroscopy and Structure Elucidation II | UE | 1.6 |  |  |  |  |
| Organic Chemistry III (Natural Products) | VL | 2.6 |  |  |  |  |
| Spectroscopy and Structure Elucidation II | VL | 1.3 |  |  |  |  |
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| Bridge subject: Fundamentals of Biology for Technical Chemists (USB Budweis) (16.0 ECTS)  | **Type** | **ECTS** | **Equivalent course**  | **Type** | **ECTS** | **Mark** |
| Biochemistry 2 (USB Budweis) | VL | 4.0 |  |  |  |  |
| Biology of Microorganisms (USB Budweis) | VL | 4.0 |  |  |  |  |
| Introduction to Cell Biology (USB Budweis) | VL | 1.0 |  |  |  |  |
| Methods in Molecular Biology (USB Budweis) | PR | 4.0 |  |  |  |  |
| Molecular Biology and Genetics (USB Budweis) | VL | 3.0 |  |  |  |  |
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| Fundamentals of Chemistry and Technology for Technical Chemists (9.2 ECTS)  | **Type** | **ECTS** | **Equivalent course**  | **Type** | **ECTS** | **Mark** |
| Biochemical Laboratory Techniques | VL | 1.3 |  |  |  |  |
| Advanced Instrumental Analysis | PR | 2.4 |  |  |  |  |
| Exercises Spectroscopy and Structure Elucidation II | UE | 1.6 |  |  |  |  |
| Organic Chemistry III (Natural Products) | VL | 2.6 |  |  |  |  |
| Spectroscopy and Structure Elucidation II | VL | 1.3 |  |  |  |  |
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| Support Courses**(5.6 ECTS)** | **Type** | **ECTS** | **Equivalent course**  | **Type** | **ECTS** | **Mark** |
| **Gender Studies** | **---** | **0.00 - 3.00** | **(Select A or B. You do not have to take Gender Studies, if you passed a gender studies course in previous study.)** | **---** | **---** | **---** |
| **Choice A:** Ethics and Gender Studies | VL | 3.0 |  |  |  |  |
| **Choice B:** Gender Studies Managing Equality TN | KV | 3.0 |  |  |  |  |
| Molecular Biologists fit for Non-Academic Careers | VL | 1.5 |  |  |  |  |
| Literature Searching, Publishing and Patents | VL | 1.5 |  |  |  |  |
| Patent Law and Intellectual Property | VL | 2.6 |  |  |  |  |
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| Biology and Biochemistry (USB Budweis) (30.0 ECTS) | **Type** | **ECTS** | **Equivalent course**  | **Type** | **ECTS** | **Mark** |
| Applications of Molecular Modelling (USB Budweis) | UE | 2.0 |  |  |  |  |
| Bioenergetics (USB Budweis) | KV | 4.0 |  |  |  |  |
| Computational Chemistry and Modelling of Biomolecules (USB Budweis) | VL | 4.0 |  |  |  |  |
| Electron Microscopy I (USB Budweis) | KV | 4.0 |  |  |  |  |
| Enzymology (USB Budweis) | VL | 3.0 |  |  |  |  |
| Molecular Biology and Genetics II (USB Budweis) | VL | 3.0 |  |  |  |  |
| Genetics and protein engineering (USB Budweis) | KV | 4.0 |  |  |  |  |
| Protein Chemistry (USB Budweis) | VL | 4.0 |  |  |  |  |
| Seminar in Advanced Biological Chemistry I (USB Budweis) | SE | 1.0 |  |  |  |  |
| Seminar in Advanced Biological Chemistry II (USB Budweis) | SE | 1.0 |  |  |  |  |
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**Chemical Elective:** Students need to select two of the chemical elective subjects. Students with a Bachelor degree in Biological chemistry or equivalent must choose a total of 26.1 ECTS from two of the three chemical elective subjects, with a minimum of 10 ECTs in each of the selected ones.

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| Chemical Elective: Advanced Chemistry | **Type** | **ECTS** | **Equivalent course**  | **Type** | **ECTS** | **Mark** |
| **Obligatory courses**  | **---** | **4.2** |  | **---** | **---** | **---** |
| Seminar on Bioinorganic and Biomimetic Systems | SE | 1.6 |  |  |  |  |
| Stereochemistry | VL | 2.6 |  |  |  |  |
| **Supplementary courses**  | **---** | **3.3 – 11.9** |  | **---** | **---** | **---** |
| Current Topics in Biological Chemistry | VL | 1.3 |  |  |  |  |
| Photochemistry | VL | 2.6 |  |  |  |  |
| Practical Photochemistry | PR | 2.4 |  |  |  |  |
| Bioanalytics II | VL | 3.0 |  |  |  |  |
| Bioanalytics I | VL | 3.0 |  |  |  |  |
| Bionics - biomimetic Materials and Polymers | VL | 1.3 |  |  |  |  |
| Technical Biopolymers | VL | 1.3 |  |  |  |  |
| Inorganic Chemistry III | VL | 2.6 |  |  |  |  |
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| Chemical Elective: Advanced Physical Chemistry and Biophysics | **Type** | **ECTS** | **Equivalent course**  | **Type** | **ECTS** | **Mark** |
| **Obligatory courses**  |  | **4.2** |  |  |  |  |
| Seminar in Biophysical Chemistry | SE | 1.6 |  |  |  |  |
| Physical Chemistry II | VL | 3.0 |  |  |  |  |
| **Supplementary courses**  | **---** | **3.3 – 11.9** |  | **---** | **---** | **---** |
| Biophysics Laboratory II for Biological Chemistry | PR | 2.4 |  |  |  |  |
| Current Topics in Biophysical Chemistry | VL | 1.3 |  |  |  |  |
| Introduction to Nano-Biomechanics | VL | 1.5 |  |  |  |  |
| Practical Atomic Force Microscopy | PR | 2.4 |  |  |  |  |
| Structure and Properties of Biological Materials | VL | 1.3 |  |  |  |  |
| Biophysik III | VL | 3.0 |  |  |  |  |
| High Resolution Microscopy II - Scanning Probe Techniques | VL | 1.5 |  |  |  |  |
| High Resolution Microscopy I - Optical and Electron Microscopy Techniques | VL | 1.5 |  |  |  |  |
| Physical Chemistry of Surfaces and Interfaces | VL | 1.5 |  |  |  |  |
| Molecularly Imprinted Polymers | VL | 1.3 |  |  |  |  |
| Physics and Chemistry of Organic Semiconductors | VL | 2.6 |  |  |  |  |
| Physical and theoretical Chemistry | VL | 2.6 |  |  |  |  |
| Advanced Materials | SE | 1.5 |  |  |  |  |
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| Chemical Elective: Structural Biochemistry  | **Type** | **ECTS** | **Equivalent course**  | **Type** | **ECTS** | **Mark** |
| **Obligatory courses**  | **---** | **4.5** |  | **---** | **---** | **---** |
| Advanced NMR 2 | KV | 1.6 |  |  |  |  |
| Protein Science | VL | 1.3 |  |  |  |  |
| Seminar in Structural and Computational Biochemistry | SE | 1.6 |  |  |  |  |
| Advanced NMR 1 | VL | 1.3 |  |  |  |  |
| **Supplementary courses**  | **---** | **3.0 – 11.6** |  | **---** | **---** | **---** |
| Current Topics in Structural Biochemistry | VL | 1.3 |  |  |  |  |
| Practical NMR | PR | 2.4 |  |  |  |  |
| Modellierung von biologischen Makromolekülen II | PR | 3.0 |  |  |  |  |
| Modellierung von biologischen Makromolekülen I | PR | 3.0 |  |  |  |  |
| Exercises in Spectroscopy and Structure Elucidation I | UE | 1.5 |  |  |  |  |
| Chemometrische Verfahren | VL | 2.6 |  |  |  |  |
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**Biological Elective:** Students can two from three subject groups. A total of 25 ECTS from two of the three biological elective subjects must be taken, with a minimum of 10 ECTS for each.

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| **Advanced Biology and Biochemistry (USB Budweis) (min. 10.0 ECTS)** | **Type** | **ECTS** | **Equivalent course**  | **Type** | **ECTS** | **Mark** |
| Biopharmacy (USB Budweis) | VL | 3.0 |  |  |  |  |
| Glycobiochemistry (USB Budweis) | VL | 3.0 |  |  |  |  |
| Immunology (USB Budweis) | VL | 3.0 |  |  |  |  |
| Methods of Functional Genomics (USB Budweis) | VL | 5.0 |  |  |  |  |
| Molecular Immunology (USB Budweis) | VL | 3.0 |  |  |  |  |
| Xenobiochemistry and Toxicology (USB Budweis) | KV | 5.0 |  |  |  |  |
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| Biological Elective: Molecular and Developmental Biology (USB Budweis) (min.10.0 ECTS) | **Type** | **ECTS** | **Equivalent course**  | **Type** | **ECTS** | **Mark** |
| Cell Regulation and Signaling (USB Budweis) | VL | 4.0 |  |  |  |  |
| Developmental and Comparative Biochemistry (USB Budweis) | VL | 3.0 |  |  |  |  |
| Molecular Phylogenetics (USB Budweis) | KV | 6.0 |  |  |  |  |
| Virology (USB Budweis) | VL | 3.0 |  |  |  |  |
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| Biological Elective: Structural Biology Techniques (USB Budweis)**(min. 10.0 ECTS)** | **Type** | **ECTS** | **Equivalent course**  | **Type** | **ECTS** | **Mark** |
| Cell Line Cultures in Vitro (USB Budweis) | KV | 3.0 |  |  |  |  |
| Electron Microscopy II (USB Budweis) | KV | 4.0 |  |  |  |  |
| Optical Methods in Biochemistry (USB Budweis) | KV | 3.0 |  |  |  |  |
| X-Ray Crystallography (USB Budweis) | KV | 4.0 |  |  |  |  |
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| **Master's Thesis Seminar Biological Chemistry (JKU Linz or USB Budweis)****(27.0 ECTS)** | **Type** | **ECTS** | **Equivalent course**  | **Type** | **ECTS** | **Mark** |
| Master's Thesis Seminar Biological Chemistry (JKU Linz or USB Budweis) | SE | 3.0 |  |  |  |  |
| Master's Examination | SE | 1.0 |  |  |  |  |
| Master's Thesis | SE | 25 |  |  |  |  |
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| Free Elective Subjects (JKU Linz and USB Budweis**(16,50 or 17,00 ECTS)** | **Type** | **ECTS** | **Equivalent course**  | **Type** | **ECTS** | **Mark** |
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| **OTHERS** | **Type** | **ECTS** | **Equivalent course**  | **Type** | **ECTS** | **Mark** |
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| **Total of ECTS – set** | **Total of ECTS - is** |
| **150** |  |

 **Grading Key:**

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| **Czech Republic** | **Austria** |
| **Grade** | **Verbal classification** | **Grade** | **Verbal classification** |
| 1 | excellent | 1 | sehr gut |
| 1- | excelent minus | 1 | sehr gut |
| 2 | very good | 2 | gut |
| 2- | very good minus | 3 | befriedigend |
| 3 | good | 4 | genügend |
| 4 | unsatisfactory | 5 | ungenügend |
| successful participation | mit Erfolg teilgenommen |
| unsuccessful participation | ohne Erfolg teilgenommen |