CREDIT TRANSFER FORM (Anrechnungsformular)

**Master – Biological Chemistry 066/863**

**Curriculum 2019 – T – BSc Chemistry and Chemical Technology JKU**

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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| Chemistry and Technology for Bachelor's of technology oriented chemistry programs (11.0 ECTS) | **Type** | **ECTS** | **Equivalent course** | **Type** | **ECTS** | **Mark** |
| Biocatalysis | VL | 1.5 |  |  |  |  |
| Advanced Biotechnology | VL | 1.5 |  |  |  |  |
| Advanced Instrumental Analysis | PR | 2.0 |  |  |  |  |
| Advanced Organic Chemistry 1 | VL | 3.0 |  |  |  |  |
| Interpretation of MS and IR Spectra | UE | 1.5 |  |  |  |  |
| Mass Spectrometry | VL | 1.5 |  |  |  |  |
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| Fundamentals of Biology for non Biological Chemists (USB Budweis) (23.00 ECTS) | **Type** | **ECTS** | **Equivalent course** | **Type** | **ECTS** | **Mark** |
| Biochemistry 2 (USB Budweis) | VL | 4.0 |  |  |  |  |
| Biochemistry Laboratory 2 (USB Budweis) | PR | 5.0 |  |  |  |  |
| Biological Chemistry Project 2 (USB Budweis) | KV | 1.0 |  |  |  |  |
| Methods in Molecular Biology (USB Budweis) | PR | 4.0 |  |  |  |  |
| Molecular Biology and Genetics (USB Budweis) | VL | 3.0 |  |  |  |  |
| Introduction to Bioinformatics (USB Budweis) | KV | 3.0 |  |  |  |  |
| Introduction to Genomics (USB Budweis) | VL | 3.0 |  |  |  |  |
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| Support Courses **(4.5 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 - alternative | VL | 3.0 |  |  |  |  |
| **Choice B:** Gender Studies Managing Equality TN - alternative | 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 | 3.0 |  |  |  |  |
| Safety Engineering | VL | 3.0 |  |  |  |  |
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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 |  |  |  |  |
| Genetics - the Molecular Approach (USB Budweis) | VL | 3.0 |  |  |  |  |
| Gene 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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| **Pool of specific elective courses (6.50 ECTS)** | **Type** | **ECTS** | **Equivalent course** | **Type** | **ECTS** | **Mark** |
| Current Topics in Biological Chemistry | VL | 1.5 |  |  |  |  |
| Bioanalytics II | VL | 3.0 |  |  |  |  |
| Bioanalytics I | VL | 3.0 |  |  |  |  |
| Modeling of biological macromolecules II | PR | 3.0 |  |  |  |  |
| Modeling of biological macromolecules I | PR | 3.0 |  |  |  |  |
| High Resolution Microscopy II - Scanning Probe Techniques | VL | 1.5 |  |  |  |  |
| High Resolution Microscopy I - Optical and Electron Microscopy Techniques | VL | 1.5 |  |  |  |  |
| Photovoltaics | VL | 3.0 |  |  |  |  |
| Physical Chemistry of Surfaces and Interfaces | VL | 1.5 |  |  |  |  |
| Bionics - biomimetic Materials and Polymers | VL | 1.5 |  |  |  |  |
| Physics and Chemistry of Organic Semiconductors | VL | 3.0 |  |  |  |  |
| Science and Technology of Organic Semiconductors | SE | 1.5 |  |  |  |  |
| Technical Biopolymers | VL | 1.5 |  |  |  |  |
| Chemometrics | VL | 3.0 |  |  |  |  |
| Inorganic Chemistry 3 | VL | 3.0 |  |  |  |  |
| Organic electronics | VL | 3.0 |  |  |  |  |
| Organic Semiconductors (Spectroscopy in organic semiconductors) | VL | 3.0 |  |  |  |  |
| Photochemistry 2 | VL | 1.5 |  |  |  |  |
| Physical and Theoretical Chemistry | VL | 3.0 |  |  |  |  |
| Structure and Properties of Biological Materials 2 | VL | 1.5 |  |  |  |  |
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**Chemical Specialisation (8.00 ECTS): select a subject**

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| **Chemical Specialisation: Advanced Chemistry (8.0 ECTS)** | **Type** | **ECTS** | **Equivalent course** | **Type** | **ECTS** | **Mark** |
| **Practical work in Advanced Chemistry** | --- | 2.0 | **(select A or B)** | --- | --- | --- |
| **Choice A:** Lab course in organic electronics | PR | 2.0 |  |  |  |  |
| **Choice B:** Practical Photochemistry | PR | 2.0 |  |  |  |  |
| Seminar on Bioinorganic and Biomimetic Systems | SE | 1.5 |  |  |  |  |
| Photochemistry 1 | VL | 1.5 |  |  |  |  |
| Stereochemistry | VL | 3.0 |  |  |  |  |
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| **Chemical Specialisation: Advanced Physical Chemistry and Biophysics (8.0 ECTS)** | **Type** | **ECTS** | **Equivalent course** | **Type** | **ECTS** | **Mark** |
| **Alternative lectures in Advanced Physical Chemistry and Biophysics** | **---** | **3.0** | **(select A or B)** | --- | --- | --- |
| **Choice A:** Biophysics III | VL | 3.0 |  |  |  |  |
| **Choice B:** Physical Chemistry II | VL | 3.0 |  |  |  |  |
| **Practical work in Advanced Physical Chemistry and Biophysics** | **---** | **2.0** | **(select C or D)** | --- | --- | --- |
| **Choice C:** Biophysics Laboratory II for Biological Chemistry | PR | 2.0 |  |  |  |  |
| **Choice D:** Practical Atomic Force Microscopy | PR | 2.0 |  |  |  |  |
| Seminar in Biophysical Chemistry | SE | 1.5 |  |  |  |  |
| Structure and Properties of Biological Materials 1 | VL | 1.5 |  |  |  |  |
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| **Chemical Specialisation: Biomolecular Spectroscopy and Structure (8.0 ECTS)** | **Type** | **ECTS** | **Equivalent course** | **Type** | **ECTS** | **Mark** |
| Advanced NMR 2 | KV | 1.5 |  |  |  |  |
| Protein Science | VL | 1.5 |  |  |  |  |
| Seminar in Structural and Computational Biochemistry | SE | 1.5 |  |  |  |  |
| Advanced NMR 1 | VL | 1.5 |  |  |  |  |
| Practical NMR | PR | 2.0 |  |  |  |  |
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**Biological Electives (USB Budweis) (25.0 ECTS): select two subjects, together 25 ECTS or more and at least 10 ECTS per a subject**

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| **Biological Elective: 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**  **(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 | 5.0 |  |  |  |  |
| Master's Examination | SE | 1.0 |  |  |  |  |
| Master's Thesis | SE | 21 |  |  |  |  |
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| Free Elective Subjects (JKU Linz and USB Budweis **(≥ 15.0 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 | excelent | 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 | |