# Relating to the Study regulations for the Master's Programme in Physics (applicable to all students who started after August 2013)

The students may select as elective area also non-physics modules. This option takes account of the fact that research in physics is becoming increasingly interdisciplinary. Modules from disciplines other than physics therefore enable students to gain trans-disciplinary competence and additional professional qualifications.

# The non-physics modules listed below are offered. For the listed modules, it is <u>not</u> required to ask the examination committee for explicit permission.

Please take into account that currently most of the listed courses are taught in German. For regulations regarding language courses, see point 7.

## 1. Mathematics

• Elementare Stochastik (Elementary Stochastics)

- Lineare Algebra II (Linear Algebra II)
- Einführung in die numerische Mathematik (Introduction to Numerical Mathematics)

Module descriptions can be found in the study regulations and examination regulations for the Bachelor programme in mathematics as amended from time to time.

- Visualisierung (Visualisation)
- Differentialgleichungen I (Differential Equations I)

• Numerik II: Gewöhnliche Differentialgleichungen (Numerics II: Ordinary Differential Equations)

• Numerik III: Partielle Differentialgleichungen (Numerics III: Partial Differential Equations)

Module descriptions can be found in the study regulations and examination regulations for the Master's programme in mathematics as amended from time to time.

### 2. Computer Science

- Informatik A (Computer Science A)
- Informatik B (Computer Science B)
- Softwarepraktikum (Software Practical Course)

Module descriptions can be found in the study regulations and examination regulations for the Bachelor programme in Education with Computer Science as the core subject, for the 60 and 30 credit points module offering in Computer Science within other programmes as amended from time to time.

• Grundlagen der Theoretischen Informatik (Fundamentals of Theoretical Information Technology)

Module descriptions can be found in the study regulations and examination regulations for the Bachelor programme in information technology as amended from time to time.

### 3. Chemistry

- Anorganische Chemie I (Inorganic Chemistry I, Chemistry of Metals)
- Anorganische Chemie II (Inorganic Chemistry II, Chemistry of Non-Metals)
- Anorganische Chemie III (Inorganic Chemistry III, Solid State Chemistry)
- Quantenchemie (Quantum Chemistry)
- Symmetrie in der Chemie (Symmetry in Chemistry)

Module descriptions can be found in the study regulations and examination regulations for the Bachelor programme in chemistry as amended from time to time.

• Organische Chemie I (Organic Chemistry I, Fundamentals))

• Organische Chemie IIa (Organic Chemistry IIa, Reaction Mechanisms of Organic Chemistry)

• Physikalische Chemie I (Physical Chemistry I, Chemical Thermodynamics)

Module descriptions can be found in the study regulations and examination regulations for the Bachelor programme in biochemistry as amended from time to time.

#### 4. Earth Sciences

• Geophysik (Geophysics)

• Die Erde Teil I (The Earth Part I)

Module descriptions can be found in the study regulations and examination regulations for the Bachelor programme in geological sciences as amended from time to time.

• Erdbeben und Struktur der Erde (Earthquakes and the earth's structure)

• Seismik I (Seismics I)

Module descriptions can be found in the study regulations and examination regulations for the Master's programme in geological sciences as amended from time to time.

### 5. Biology

Grundlagen der Biologie (Fundamentals of Biology)

Module descriptions can be found in the study regulations and examination regulations for the Bachelor programme in biology as amended from time to time.

### 6. Philosophy

• Basismodul Grundfragen der Philosophie (Introductory Module: Essential Questions of Philosophy)

• Einführung in die theoretische Philosophie (Introductory Module: Introduction to Theoretical Philosophy)

• Basismodul Einführung in die praktische Philosophie (Introductory Module: Introduction to Practical Philosophy)

Module descriptions can be found in the study regulations and examination regulations

for the Bachelor programme and the 60 and 30 credits module offering in philosophy, as amended from time to time.

#### 7. Language courses

For many students, German is not your mother tongue. These students may select basic and advanced German courses as elective moduls.

English courses are acceptable if they are at an advanced level providing special training in scientific or technical English, e.g. course on writing a scientific publication or theses in English.

Language courses need to be part of the study program of a Berlin university. It needs to be a graded course with the grading based on a written or explicit oral examination. Typically, a maximum of 10 credit points can be achieved by participation in language courses.

Language course can also be taken if they promote your education regarding the envisioned job profile. However, you need to contact the examination board for approval.

**Other modules not listed here**, either from the disciplines mentioned above or from other disciplines related to the main study discipline, may also be taken on application. The application must specify how the module relates to the overall qualification aimed at. The relevant examination board will decide on the application.

Without the examination board's approval, <u>non-physics modules can only be taken into account up to</u> <u>a maximum of 15 credit points</u>. Modules which are exclusively part of the Bachelor programme (in any discipline) may only be taken into account up to a maximum of 15 credit points in any case.