

# **MSc Bioinformatics**

Self-disclosure form: Admission requirements and selection criteria

Application number:	
Surname/Family name:	
First name/Given name:	
Date of birth:	
Bachelor degree:	
Bachelor University (name and place):	

# **1.** Admission requirements

# **1.1 Mathematics / Statistics**

25 credit points in mathematics and statistics are required for admission. Out of these, at least 10 credit points need to be in Linear Algebra or Analysis (Calculus) and at least 10 credit points in Statistics. Please indicate the relevant courses in the forms below. Here is an example:

Course title <sup>1</sup> :	Institution <sup>2</sup> :	Credit points <sup>3</sup>
Lineare Algebra I	Freie Universität Berlin, Institut für Mathematik	10 ECTS

<sup>1</sup>Please indicate the title of the course, e.g. "Linear Algebra I", or "Introduction to Linear Algebra for computer scientists", or similarly. <sup>2</sup>Please indicate the institution that awarded the certificate for the course. If the course was completed at a university, please also indicate the respective department. <sup>3</sup>Please indicate the number of credits you received for the successful completion of the course and the unit that these credits are measured in, e.g. ECTS.

## Credit points in Linear Algebra or Analysis (a minimum of 10 credit points is required)

Course title	Institution	Credit points

#### Credit points in Statistics (a minimum of 10 points is required)

Course title	Institution	Credit points

Remaining credit points (if any; a minimum of 25 credit points in mathematics/statistics is required)

Course title	Institution	Credit points

## **1.2 Informatics / Bioinformatics**

25 credit points in informatics/bioinformatics are required for admission. Out of these, at least 10 credit points need to be in courses on imperative programming languages, such as C/C++, Java, or Python, and at least 10 credit points in the area of algorithms.

**Credit points in imperative programming** (a minimum of 10 points in C/C++, Java, or Python is required)

Course title	Institution	Credit points

**Credit points in algorithms** (a minimum of 10 points is required)

Course title	Institution	Credit points

Remaining credit points (if any; a minimum of 25 credit points in informatics/bioinformatics is required)

Course title	Institution	Credit points

## **1.3 Biology / Chemistry / Biochemistry**

25 credit points in biology/chemistry/biochemistry are required for admission. Out of these, at least 10 credit points need to be in the area of biochemistry, molecular biology and genetics.

Credit points in biochemistry, molecular biology and genetics (a minimum of 10 points is required)

Course title	Institution	Credit points

**Remaining credit points** (if any, a minimum of 25 credit points in biology/chemistry/biochemistry courses is required)

Course title	Institution	Credit points

# 2. Selection criteria

## 2.1 Specific training in informatics / bioinformatics

10 selection points are awarded for at least 20 credit points in the area of algorithmic bioinformatics.

#### (A) Credit points in algorithmic bioinformatics

Course title	Institution	Credit points

Additional 10 selection points are awarded for at least 15 credit points in other courses (not listed above under (A)) in the area of informatics / bioinformatics.

#### (B) Remaining credit points in informatics / bioinformatics

Course title	Institution	Credit points

## 2.2 Practical experience

10 selection points are awarded for proof of relevant practical experience in bioinformatics (outside university studies) amounting to at least 450 hours. Please indicate the relevant experience, the institution at which this experience was gained, and the total number of hours.

Experience	Institution	Hours