

**Admissions and Selection Regulations**  
**issued by the Faculty of Life Sciences, Hamburg University of Applied**  
**Sciences (HAW Hamburg)**  
**for the Master of Science degree courses in Biomedical Engineering,**  
**Pharmaceutical Biotechnology and Renewable Energy Systems:**  
**Environmental and Process Engineering**

on 11 May 2017

*This is an English translation of the original German text of these Admissions and Selection Regulations. It is provided for informational purposes only and has no force independent of the original German text. The original German version as published on the above date shall be authoritative and definitive in all cases of dispute.*

*In the interests of non-discriminatory use of language, this English translation uses alternating female and male pronouns.*

On 11 May 2017, acting pursuant to Section 108 subsection 1 sentence 3 of the Hamburg Higher Education Act (HmbHG) issued on 18 July 2001, last amended 4 April 2017 (HmbGVBl., p. 99), the Executive Board of HAW Hamburg confirmed the following [German] text of the *Zugangs- und Auswahlordnung der Fakultät Life Sciences für die Masterstudiengänge Biomedical Engineering, Pharmaceutical Biotechnology, Renewable Energy Systems: Environmental and Process Engineering an der Hochschule für Angewandte Wissenschaften Hamburg (HAW Hamburg)*, adopted by the Faculty Council of the Faculty of Life Sciences on 27 April 2017 in accordance with Section 91 subsection 2 nos. 1 and 2 HmbHG:

## **1. Purpose of these Regulations**

These Admissions and Selection Regulations govern the process of admission to and selection of students for the consecutive Master of Science degree courses in Biomedical Engineering (from summer semester 2016 known as Biomedical Engineering: Signal Processing, Imaging and Control Systems), Pharmaceutical Biotechnology, and Renewable Energy Systems: Environmental and Process Engineering.

## **2. Requirements for entry to the above degree courses**

(1) Applicants for the above Master of Science degree courses must hold:

- a) a successfully completed Bachelor's degree in
  - 1) Biotechnology (for the consecutive Master of Science degree course in Pharmaceutical Biotechnology)
  - 2) medical technology/biomedical engineering (for the consecutive Master of Science degree course in Biomedical Engineering)
  - 3) environmental or process engineering or a related subject (for the consecutive Master of Science degree course in Renewable Energy Systems: Environmental and Process Engineering)

worth at least 210 credit points in accordance with the ECTS system, **or**

b) a successfully completed first degree in a science or engineering subject related to the subjects of the above Master of Science degree courses, worth at least 210 credit points

c) **and** (for holders of degrees under a) and b)) proof of adequate proficiency in the English

language (see Appendix, points 1 to 3).

A degree in a subject related to the Master of Science degree course in Biomedical Engineering: Signal Processing, Imaging and Control Systems shall be defined as a degree in a science or engineering subject which includes a preponderance of content in the areas of electrical engineering, signal processing and computer science, as in the Bachelor of Science degree course in Biomedical Engineering at HAW Hamburg.

(2) Applicants whose first (Bachelor's or equivalent) degrees were of 6 semesters in duration or worth 180 credit points shall be required to attain the credit points they need to take them up to the level of 210 credit points which is necessary for formal admission to these Master of Science degree courses. Such applicants whose application is successful shall be provisionally admitted to the degree course on condition that they demonstrably attain the credit points required. The Academic Advisor for the course shall determine, in consultation with the Examinations Committee, the Bachelor's modules and, where applicable, periods of practical experience required of such students once they have commenced the Master's degree course. These students must have completed all required examinations and periods of practical experience under this Regulation before they commence work on their Master thesis.

(3) Applicants whose first degree was completed outside the EU are required to present proof of having taken the Graduate Record Examination (GRE), a standardised test used in admissions to graduate schools in the US.

(4) International applicants to the degree courses in Pharmaceutical Biotechnology and Renewable Energy Systems: Environmental and Process Engineering who completed their first degrees in a language of instruction other than German must provide proof of successful completion of an internationally recognised test of German language proficiency (see Appendix, point 4).

(5) International applicants to the degree course in Biomedical Engineering who completed their first degrees in a language of instruction other than German must provide proof of successful completion of an internationally recognised test of German language proficiency (see Appendix, point 4) if they are required to attain additional credit points or periods of practical experience in accordance with Section 2 subsection 2.

(6) Notwithstanding the provisions of subsections 1 a) or b), applications from students who are yet to complete their first degree shall be considered if most examinations have been successfully completed at the time of application and if the student's previous achievements, particularly examinations already taken, indicate that completion will be achieved by the end of the student's first semester on the Master's degree course. The applicant shall present confirmation from her current institution of the examinations she has completed to date and of those remaining to be completed. Should the student be accepted onto the Master's degree course, his admission shall be conditional upon his having presented proof of having completed his first degree by 31 August (if he commences his degree in a summer semester) or 28 February (if he commences his degree in a winter semester).

### **3. Selection of applicants**

(1) In each of the above-named Master of Science degree courses, applicants shall be awarded places via a points-based system as follows:

- a) The overall final grade of the applicant's Bachelor's or other first degree shall be awarded between 0 and 9 points

- b) Any particular knowledge or skills specifically related to the subject may be awarded between 0 and 5 points
- c) Any outstanding professional achievements of the candidate's may be awarded between 0 and 5 points

(2) Applicants shall be ranked in accordance with the number of points awarded them on the criteria listed at Section 3 subsection 1. Where more than one applicant has the same number of points, their positions in the ranking shall be determined by random draw.

(3) Points for the overall final grade achieved in the student's first degree (see subsection 1 a)) shall be awarded as follows:

---

a) 4.0 or greater	- 0 points
b) $\geq 3.7$ and $< 4.0$	- 1 point
c) $\geq 3.3$ and $< 3.7$	- 2 points
d) $\geq 3.0$ and $< 3.3$	- 3 points
e) $\geq 2.7$ and $< 3.0$	- 4 points
f) $\geq 2.3$ and $< 2.7$	- 5 points
g) $\geq 2.0$ and $< 2.3$	- 6 points
h) $\geq 1.7$ and $< 2.0$	- 7 points
i) $\geq 1.3$ and $< 1.7$	- 8 points
j) $\geq 1.0$ and $< 1.3$	- 9 points

#### **4 The Admissions Committee**

(1) The Admissions Committee shall comprise the following members:

- a) The Academic Advisor for the degree course
- b) The chair of the Examinations Committee,
- c) A further member of the academic staff concerned with delivering the degree course

At least one member of the Admissions Committee must hold the status of professor. The Head of the Department shall propose the members of the Admissions Committee for appointment by the Faculty Council.

(2) The Admissions Committee shall take decisions on the following matters:

- a) the recognition of a science or engineering degree course as 'related' to the degree course that is the subject of the application (refer to Section 2 subsection 1 sentence 1 point b) and sentence 2)
- b) the definition of 'outstanding professional achievements' of an applicant's (refer to Section 3 subsection 1 c)
- c) whether and which modules, examinations or periods of practical experience must be

completed during the admitted student's Master's degree course (refer to Section 2 subsection 2)

d) the equivalency or otherwise of certificates of proficiency in German and English in specific cases where equivalency is not formally established

(3) The Admissions Committee may take decisions by circulating the relevant documents to all members. The members are not required to meet in person, although they may choose to do so.

#### **5. Effective date**

These Regulations shall become effective on the day of their publication in the HAW Hamburg official gazette (*Hochschulanzeiger*) and shall be in effect from the commencement of the admissions procedure for winter semester 2017/2018.

**Hochschule für Angewandte Wissenschaften Hamburg  
Hamburg, 11 May 2017**

## Appendix

### **Acceptability criteria for certificates of language proficiency pursuant to Section 2 subsections 1, 4 and 5 of the**

#### **Admissions and Selection Regulations**

**issued by the Faculty of Life Sciences, Hamburg University of Applied Sciences  
(HAW Hamburg)**

**for the Master of Science degree courses in Biomedical Engineering,  
Pharmaceutical Biotechnology and Renewable Energy Systems: Environmental and  
Process Engineering**

### **1. The following certificates of English language proficiency shall be deemed to meet the standard required for admission to the above-named degree courses:**

1.1. the applicant's *Zeugnis der allgemeinen Hochschulreife* (colloquially *Abitur*, completed in Germany), showing the following grades in the subject of English:

1.1.1 *befriedigend* (8 points or above) for applicants to the Biomedical Engineering and Renewable Energy Systems: Environmental and Process Engineering degree courses

1.1.2 *ausreichend* (5 points or above) for applicants to the Pharmaceutical Biotechnology degree course

OR

1.2 the applicant's *Zeugnis der Fachhochschulreife* (colloquially *Fachabitur*, completed in Germany), showing the following grades in the subject of English:

1.2.1 *gut* (11 points or above) for applicants to the Biomedical Engineering degree course

1.2.2 *befriedigend* (8 points or above) for applicants to the Renewable Energy Systems: Environmental and Process Engineering degree course

1.2.3 *ausreichend* (5 points or above) for applicants to the Pharmaceutical Biotechnology degree course

OR

1.3 a certificate of having passed one of the internationally recognised tests of English language proficiency listed under 2. below

OR

1.4 one of the types of confirmation, listed under 3. below, of achievements equivalent to those listed under 1.1, 1.2 or 1.3 above

Should the applicant's *Zeugnis der allgemeinen Hochschulreife* or *Zeugnis der Fachhochschulreife* (refer to 1.1 and 1.2 above) contain no final grade in the subject of English, the equivalent grade shall be calculated by forming the average (expressed in points) of the partial grades in the subject of English that are listed in the document.

## **2. Recognised tests of proficiency in English**

- 2.1. TOEFL (Test of English as a Foreign Language); minimum score: 87 (internet-based)
- 2.2. IELTS (International English Language Testing System – Academic Training); minimum score: band 5.5
- 2.3. CAE (Cambridge Certificate in Advanced English); minimum grade: C
- 2.4. CPE (Cambridge Certificate in Proficiency in English); minimum grade: C
- 2.5. FCE (Cambridge First Certificate); minimum grade: C

## **3. Minimum criteria for other achievements equivalent to those listed under 1.1, 1.2 and 1.3 above:**

- 3.1. A formal degree certificate or transcript issued by a university or other higher education institution confirming the applicant has studied successfully for at least two years in an English-speaking country; OR
- 3.2. a formal degree certificate or transcript issued by a university or other higher education institution confirming the applicant has studied successfully for at least two years on a degree course whose language of instruction was English; OR
- 3.3. a formal degree certificate or transcript issued by a university or other higher education institution confirming the applicant has studied successfully for at least two years on a degree course whose principal component was English language or literature; OR
- 3.4. proof of the applicant's having, after completing her first degree, successfully undertaken work experience or an internship lasting at least six months in an organisation outside Germany where the working language was English; OR
- 3.5. proof of the applicant's having successfully undertaken work experience or an internship lasting at least six months in an English-speaking country

The following countries shall be defined as 'English-speaking': the United Kingdom; Ireland; Malta; the United States of America; Australia; New Zealand; Jamaica; Belize; Canada (Anglophone regions only).

## **4. Recognised certificates of proficiency in German (refer to Section 2, subsections 4 and 5, Admissions and Selection Regulations)**

A recognised certificate of proficiency in German shall be deemed, for the purposes of admission to the above-named degree courses, to be a certificate of passing a test administered by a recognised German language institute at level A2 (Common European Framework of Reference for Languages) or above.