## **OFFICIAL TRANSLATION OF**

Satzung über besondere Zugangsvoraussetzungen für die Studiengänge der Fakultät für Mathematik, Informatik und Naturwissenschaften (Amtliche Bekanntmachung Nr. 32 vom 15. Mai 2024)

THIS TRANSLATION IS FOR INFORMATION ONLY – ONLY THE GERMAN VERSION SHALL BE LEGALLY VALID AND ENFORCEABLE!

Revised Bylaws Regarding the Special Conditions of Admission for Degree Programs in the Faculty of Mathematics, Informatics and Natural Sciences

### Dated 17 April 2024

On 30 April 2024 in accordance with Section 108 subsection 1 of the Hamburg higher education act (Hamburgisches Hochschulgesetz—HmbHG) dated 18 July 2001 (HmbGVBI p. 171), last amended on 11 June 2023 (HmbGVBI. p. 250, 254), the University of Hamburg Executive Board ratified the Bylaws Regarding the Special Conditions of Admission for Degree Programs in the Faculty of Mathematics, Informatics and Natural Sciences adopted by the Faculty Council of the Faculty of Mathematics, Informatics and Natural Sciences on 17 April 2024 pursuant to Section 91 subsection 2 number 1 HmbHG.

# Section 1 Special conditions of admission

# A. Bachelor's degree programs

[...]

# B. Master's degree programs

#### 1. Master of Science in Atmospheric Science

The following special conditions of admission apply to the Master of Science in Atmospheric Science:

1.1 Applicants must demonstrate successful completion of the Bachelor of Science in Meteorology from the Faculty of Mathematics, Informatics and Natural Sciences, of a comparable degree program, or of another natural science, mathematics, or technical engineering degree program, provided that applicants can substantiate at least 60 ECTS credits of completed coursework in courses comparable to the curriculum of the Bachelor of Science in Meteorology.

1.2 Sufficient proficiency in English is required for the Master of Science in Atmospheric Science in order to reasonably understand the technical language and specialist literature.

Adequate language proficiency may be demonstrated by any of the following:

- a) Common European Framework of Reference (CEFR) B2
- b) International English Language Testing System (IELTS) Academic Test with a score of at least 5.0
- c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points
- d) Cambridge First Certificate in English (FCE), Cambridge Certificate of Advanced English (CAE), Cambridge Certificate of Proficiency in English (CPE)
- e) Seven years of English instruction at a German school

or equivalent proof. Comparability of proof is determined by the selection committee.

[...]

#### 4. Master of Science in Business Mathematics

The following special conditions of admission apply to the Master of Science in Business Mathematics:

- 4.1 Applicants must demonstrate successful completion of the Bachelor of Science in Business Mathematics, the Bachelor of Science in Mathematics (with business administration or economics as a supplementary subject), the Bachelor of Science in Business Administration, the Bachelor of Science in Economics from the University of Hamburg, a comparable degree program from another higher education institution, or another mathematics or economics bachelor's degree program. In any event, applicants must substantiate at least 60 ECTS credits of completed coursework in mathematics courses and at least 20 ECTS credits of completed coursework in economics courses.
- 4.2 Applicants must have adequate English-language skills. Adequate language proficiency may be demonstrated by any of the following:
  - a) Proof of proficiency in English at a B2 level in the Common European Framework of Reference for Languages through a course at an accredited institution
  - b) International English Language Testing System (IELTS) Academic Test with a score of at least 5.0
  - c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points
  - d) Cambridge Certificate of Advanced English (CAE), Cambridge Certificate of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE)
  - e) A higher education degree in an English-language degree program
  - f) A higher education entrance qualification for English-language higher education institutions
  - g) A six-month stay in an English-speaking country
  - h) Seven years of English instruction at a German school

[...]

### 6. Master of Science in Data Science and Artificial Intelligence

The following special conditions of admission apply to the Master of Data Science and Artificial Intelligence:

- 6.1 A Bachelor of Science either in
  - a) Informatics
  - b) Computing in Science

     in the Faculty of Mathematics, Informatics and Natural Sciences at the
     University of Hamburg, or

- c) a comparable degree program, provided applicants can substantiate at least 24 ECTS credits of completed coursework in mathematics, including at least a total of 6 ECTS credits in stochastics, as well as 60 ECTS credits in informatics, including knowledge of algorithms and data structures or theoretical informatics of at least 6 ECTS credits comparable with the curriculum of the Bachelor of Science in Informatics at the Faculty of Mathematics, Informatics and Natural Sciences at the University of Hamburg
- 6.2 Sufficient proficiency in English is required in order to reasonably understand course instruction and specialist literature. English language skills may be demonstrated by any of the following:
  - a) Proof of proficiency in English at a B2 level in the Common European Framework of Reference for Languages through a course at an accredited institution
  - b) International English Language Testing System (IELTS) Academic Test with a score of at least 5.5
  - c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points
  - d) Cambridge Certificate of Advanced English (CAE), Cambridge Certificate of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE)
  - e) A higher education degree in an English-language degree program
  - f) A higher education entrance qualification for English-language higher education institutions
  - g) A six-month stay in an English-speaking country
  - h) Seven years of English instruction at a German school

or equivalent proof. Comparability of proof is determined by the selection committee for the Master of Science in Data Science and Artificial Intelligence.

[...]

#### 8. Master of Science in Geophysics

The following special conditions of admission apply to the Master of Science in Geophysics:

8.1 Applicants must demonstrate successful completion of the Bachelor of Science in Geophysics and Oceanography from the Faculty of Mathematics, Informatics and Natural Sciences, a comparable degree program, or another mathematics and physics-

based bachelor's degree program, provided that applicants can substantiate at least 90 ECTS credits of completed coursework in courses that are comparable to the curriculum of the Bachelor of Science in Geophysics and Oceanography. Of these 90 ECTS credits, at least 45 must come from mathematics and physics courses. In addition, applicants must have also completed courses totaling at least 6 ECTS in programming. This is decided by the selection committee for the Master of Science in Geophysics.

8.2 Sufficient proficiency in English is required for the Master of Science in Geophysics in order to reasonably understand the technical language and specialist literature.

## 11. Master of Science in Integrated Climate System Sciences

The following special conditions of admission apply to the Master of Science in Integrated Climate System Sciences:

11.1 Applicants must demonstrate successful completion of the Bachelor of Science in Geophysics and Oceanography, the Bachelor of Science in Meteorology from the Faculty of Mathematics, Informatics and Natural Sciences at the University of Hamburg, or another natural science bachelor's degree program, provided that applicants can substantiate as a rule 60 ECTS credits of completed coursework in mathematics and physics courses.

11.2 Sufficient proficiency in English is required for the Master of Science in Integrated Climate System Sciences in order to reasonably understand course instruction and specialist literature. English proficiency may be demonstrated by any of the following:

- a) Common European Framework of Reference (CEFR) C1 with subscores of at least C1 in all 4 areas of proficiency (speaking, reading, writing, and listening)
- b) A bachelor of science degree from a English-speaking degree program
- c) International English Language Testing System (IELTS) Academic Test with a score of at least 6.5 (sub-scores of at least 6 points) or
- d) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 90 points (sub-scores of at least 20 points)

#### 12. Master of Science in Intelligent Adaptive Systems

The following special conditions of admission apply to the Master of Science in Intelligent Adaptive Systems:

12.1 A bachelor of science either in

- a) Informatics
- b) Information Systems
- c) Software Systems Development

- d) Human-computer interaction
- e) Computing in Science

from the Faculty of Mathematics, Informatics and Natural Sciences at the University of Hamburg, a degree from another bachelor's degree program at the University of Hamburg, or a comparable degree from another higher education institution, provided that at least 60 ECTS credits of coursework has been completed in informatics and is comparable to the curriculum of the Bachelor of Science in Informatics from the Faculty of Mathematics, Informatics and Natural Sciences at the University of Hamburg.

Comparability of the degree program is determined by the selection committee.

12.2 Sufficient proficiency in English is required for the Master of Science in Intelligent Adaptive Systems in order to reasonably understand course instruction and specialist literature. English language skills may be demonstrated by any of the following:

- a) Common European Framework of Reference (CEFR)/TELC B2
- b) International English Language Testing System (IELTS) Academic Test with a score of at least 6.5
- c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 90 points
- d) Cambridge Certificate of Advanced English (CAE)
- e) Cambridge Certificate of Proficiency in English (CPE)

or equivalent proof. Comparability of proof is determined by the selection committee.

[...]

### 16. Master of Science in Marine Ecosystem and Fisheries Science

The following special conditions of admission apply to the Master of Science in Marine Ecosystem and Fisheries Science:

16.1 Applicants must demonstrate successful completion of the Bachelor of Science in Marine Ecosystem and Fisheries Sciences or another bachelor's degree program, provided that applicants can substantiate at least 81 ECTS credits of completed coursework in natural science fundamentals from the following disciplines, which are comparable to the curriculum of the Bachelor of Science in Marine Ecosystem and Fisheries Science at the University of Hamburg:

- a) mathematics (incl. physics and bioinformatics, if available) totaling at least6 ECTS credits and
- b) chemistry (general, inorganic, organic, and physical chemistry as well as biochemistry) totaling at least 6 ECTS credits and

- c) statistics totaling 9 ECTS credits and
- d) biology (including biological oceanography and fisheries science) totaling at least 60 ECTS credits

16.2 Applicants must have adequate English-language skills. Adequate language proficiency may be demonstrated by any of the following:

- a) Proof of proficiency in English at a B2 level in the Common European Framework of Reference for Languages through a course at an accredited institution
- International English Language Testing System (IELTS) Academic Test with a score of at least 5.0
- c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points
- d) Cambridge Certificate of Advanced English (CAE), Cambridge Certificate of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE)
- e) A higher education degree in an English-language degree program
- f) A higher education entrance qualification for English-language higher education institutions
- g) A six-month stay in an English-speaking country
- h) Seven years of English instruction at a German school

#### 17. Master of Science in Mathematical Physics

The following special conditions of admission apply to the Master of Science in Mathematical Physics:

17.1 Applicants must demonstrate successful completion of the Bachelor of Science in Mathematics (with physics as a supplementary subject), the Bachelor of Science in Physics from the University of Hamburg, a comparable degree program from another higher education institution, or another mathematics or physics bachelor's degree program, provided that applicants can substantiate at least 90 ECTS credits of completed coursework in mathematics and physics modules comparable to the curriculum of the Bachelor of Science in Mathematics (with physics as a supplementary subject) or the Bachelor of Science in Physics at the University of Hamburg.

Comparability is established where the content of completed coursework represents 24 ECTS credits in Mathematics for Students of Physics, an additional 8 ECTS credits in advanced mathematics modules, and coursework amounting to 16 ECTS credits in theoretical physics modules (particularly quantum mechanics).

- 17.2 Applicants must have adequate English-language skills. Adequate language proficiency may be demonstrated by any of the following:
  - a) Proof of proficiency in English at a B2 level in the Common European Framework of Reference for Languages through a course at an accredited institution
  - b) International English Language Testing System (IELTS) Academic Test with a score of at least 5.0
  - c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points
  - d) A higher education degree in an English-language degree program
  - e) A higher education entrance qualification for English-language higher education institutions
  - f) A six-month stay in an English-speaking country
  - g) Seven years of English instruction at a German school

#### 18. Master of Science in Mathematics

The following special conditions of admission apply to the Master of Science in Mathematics:

18.1 Applicants must demonstrate successful completion of the Bachelor of Science in Mathematics, the Bachelor of Science in Business Mathematics from the University of Hamburg, a comparable degree program from another higher education institution, or another mathematics bachelor's degree program, provided that applicants can substantiate at least 90 ECTS credits of completed coursework in courses that are comparable to the curriculum of the Bachelor of Science in Mathematics.

- 18.2 Applicants must have adequate English-language skills. Adequate language proficiency may be demonstrated by any of the following:
  - a) Proof of proficiency in English at a B2 level in the Common European Framework of Reference for Languages through a course at an accredited institution
  - b) International English Language Testing System (IELTS) Academic Test with a score of at least 5.0
  - c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points
  - d) Cambridge Certificate of Advanced English (CAE), Cambridge Certificate of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE)
  - e) A higher education degree in an English-language degree program

- f) A higher education entrance qualification for English-language higher education institutions
- g) A six-month stay in an English-speaking country
- h) Seven years of English instruction at a German school

#### 19. Master of Science in Molecular Life Sciences

The following special conditions of admission apply to the Master of Science in Molecular Life Sciences:

19.1 Applicants must demonstrate successful completion of the Bachelor of Science in Molecular Life Sciences from the University of Hamburg, a comparable degree program from a higher education institution, or a bachelor's degree from another degree program, provided that applicants can substantiate at least 90 ECTS credits of completed coursework, which is comparable to the curriculum of the Bachelor of Science in Molecular Life Sciences.

19.2 In special cases, admission may be possible in divergence from the requirements set forth in 19.1 (where appropriate, subject to specific conditions) if an applicant can furnish a bachelor's degree and substantiate that at least 70 ECTS credits are comparable to the curriculum of the Bachelor of Science in Molecular Life Sciences at the University of Hamburg as well as practical experience especially related to the degree program (e.g., pertinent internships, professional experience, or work produced). The selection committee for the Master of Science in Molecular Life Sciences shall render a decision in such a case.

19.3 Applicants must have adequate English-language skills. Adequate language proficiency may be demonstrated by any of the following:

- a) Proof of proficiency in English at a B2 level in the Common European Framework of Reference for Languages through a course at an accredited institution
- b) International English Language Testing System (IELTS) Academic Test with a score of at least 5.0
- c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points
- d) Cambridge Certificate of Advanced English (CAE), Cambridge Certificate of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE)
- e) A higher education degree in an English-language degree program
- f) A higher education entrance qualification for English-language higher education institutions

- g) A six-month stay in an English-speaking country
- h) Seven years of English instruction at a German school

#### 20. Master of Science in Molecular Plant Science

The following special conditions of admission apply to the Master of Science in Molecular Plant Science:

#### 20.1 A Bachelor of Science in

- a) Biology
- b) Molecular Life Sciences
- c) Biochemistry

from a university within the Federal Republic of Germany

or

successful completion of another bachelor's degree program, where the following coursework can be demonstrated to the extent and discipline indicated:

- 1. Biology and biochemistry: 70 ECTS credits with 20 ECTS credits completed in university laboratory internships (in molecular biology or/and biochemistry)
- 2. A scientific experimental research project in the field of molecular biology as a final thesis of at least 6 ECTS credits

This information must be evident from the documentation submitted. Where necessary, applicants may submit separate documentation detailing this information. Coursework from other degree programs may be submitted to obtain the required amount of coursework. This also applies for university coursework completed in addition to the bachelor's degree program.

- 20.2 Applicants must have adequate English-language skills. Adequate language proficiency may be demonstrated by any of the following:
  - a) Proof of proficiency in English at a B2 level in the Common European Framework of Reference for Languages through a course at an accredited institution
  - b) International English Language Testing System (IELTS) Academic Test with a score of at least 5.0
  - c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points

- d) Cambridge Certificate of Advanced English (CAE), Cambridge Certificate of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE)
- e) A higher education degree in an English-language degree program
- f) A higher education entrance qualification for English-language higher education institutions
- g) A six-month stay in an English-speaking country
- h) Seven years of English instruction at a German school

[...]

## 23. Master of Science in Physics

The following special conditions of admission apply to the Master of Science in Physics:

- 23.1 Successful completion of the Bachelor of Science in Physics from the University of Hamburg or a comparable degree from a higher education institution. Comparability is determined by the selection committee for the Master of Science in Physics.
- 23.2 Applicants must have adequate English-language skills. Adequate language proficiency may be demonstrated by any of the following:
  - a) Proof of proficiency in English at a B2 level in the Common European Framework of Reference for Languages through a course at an accredited institution
  - b) International English Language Testing System (IELTS) Academic Test with a score of at least 5.0
  - c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points
  - d) Cambridge Certificate of Advanced English (CAE), Cambridge Certificate of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE)
  - e) A higher education degree in an English-language degree program
  - f) A higher education entrance qualification for English-language higher education institutions
  - g) A six-month stay in an English-speaking country or
  - h) Seven years of English instruction at a German school
  - i) Equivalent proof

[...]

#### 27. Master of Science in Wood Science

The following special conditions of admission apply to the Master of Science in Wood Science:

27.1 Applicants must demonstrate successful completion of the Bachelor of Science in Bio-Resource Management from the Faculty of Mathematics, Informatics and Natural Sciences at the University of Hamburg, or another natural science bachelor's degree program, provided that applicants can substantiate as a rule 75 ECTS credits of completed coursework equivalent to the courses in the Bachelor of Science in Bio-Resource Management.

In special cases, admission may be possible in divergence from the requisite degrees set forth in 27.1 letters a and b, provided an applicant has a bachelor's degree and can substantiate supplemental related practical experience (e.g., pertinent internships, professional experience, or work produced). Admission may be subject to specific conditions.

The master's degree program selection committee is responsible for deciding matters related to admission in special cases pursuant to sentence 1 and for establishing conditions pursuant to sentence 2.

27.2 Applicants must have adequate English-language skills. Adequate English-language proficiency can be demonstrated by any of the following:

- a) Proof of proficiency in English at a B2 level in the Common European Framework of Reference for Languages through a course at an accredited institution
- b) International English Language Testing System (IELTS) Academic Test with a score of at least 5.0
- c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points
- d) Cambridge Certificate of Advanced English (CAE), Cambridge Certificate of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE)
- e) A higher education degree in an English-language degree program
- f) A higher education entrance qualification for English-language higher education institutions
- g) A six-month stay in an English-speaking country
- h) Seven years of English instruction at a German school

# Section 2 Reasonable accommodations

Reasonable accommodations will be granted on application, provided an applicant can credibly demonstrate they have been placed at a disadvantage compared to other applicants due to an inability to substantiate the admission requirements in the designated manner or within the designated period of time on account of a disability. The disability representative pursuant to Section 88 subsection 3 HmbHG must be consulted.

# Section 3 Extended submission deadlines

An applicant with outstanding examinations that must be completed to acquire their first higher education degree, may nevertheless apply for admission to a master's degree program pursuant to the provisions set forth in Section 39 subsection 2 HmbHG if, based on the course of studies and in particular on an applicant's examination performance to date, it can be reasonably expected that the applicant will receive their degree by the end of the first semester of the master's degree program.

In master's degree programs for which early deadlines for international master's degree programs do not apply, this is generally to be expected if no more than 30 ECTS credits are missing toward the first professional degree. The other ECTS credits must be subsequently completed and evidence provided. The Master of Science in Biology requires at least 150 ECTS credits have been earned and demonstrated in the course of the bachelor's degree program. Only completed modules will be counted toward this total. Admission to the program may be permitted on the condition that the degree will have been awarded by the end of the reenrollment period for the second semester of the master's degree program.

# Section 4 Effective date

These revised bylaws become effective on the day following official publication by the University of Hamburg.

Hamburg, 15 May 2024 University of Hamburg