#### OFFICIAL TRANSLATION OF

# Satzung über besondere Zugangsvoraussetzungen für die Studiengänge der Fakultät für Mathematik, Informatik und Naturwissenschaften

Vom 17. Mai 2023 (Amtliche Bekanntmachung Nr. 50 vom 30. Mai 2023)

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

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

#### dated 17 May 2023

On 22 May 2023 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 17 June 2021 (HmbGVBI. p. 468), the University's Executive University 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 May 2023 pursuant to Section 91 subsection 2 number 1 HmbHG.

## Section 1 Special conditions of admission

[...]

#### 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 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 mathematics and physics-based degree program, provided that applicants can substantiate at least 90 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 as follows:

- (a) Common European Framework of Reference (CEFR) B2; or
- b) International English Language Testing System (IELTS) Academic Test with a score of at least 5.0 or
- c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points or
- d) Cambridge First Certificate in English (FCE), Cambridge Certificate of Advanced English (CAE), Cambridge Certificate of Proficiency in English (CPE) or
- e) Seven years of English instruction at a German school
- f) 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 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 Universität 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 as follows:
- a) Proof of proficiency in English at B2 level in the Common European Framework of Reference for Languages through a course at an accredited institution or
- b) International English Language Testing System (IELTS) Academic Test with a score of at least 5.0 or
- c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points or
- d) Cambridge Certificate of Advanced English (CAE), of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE) or
- e) A higher education degree in an English-speaking degree program or
- f) A higher education entrance qualification for English-language higher education institutions or
- g) A 6-month stay in an English-speaking country or
- h) Seven years of English instruction at a German school.

[...]

#### 7. Master of Science in Geophysics

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

7.1 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, demonstration of the programming skills indicated on page 6 of the Universität Hamburg Bylaws for Admission for Degree Programs in the Faculty of Mathematics, Informatics and Natural Sciences dated 30 May 2023, amounting to at least a total of 6 ECTS credits. This is decided by the selection committee for the Master of Science in Geophysics.

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

Adequate language proficiency may be demonstrated as follows:

- f) Common European Framework of Reference (CEFR) B2 or
- g) International English Language Testing System (IELTS) Academic Test with a score of at least 5.0 or
- h) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points or (i) Cambridge First Certificate in English (FCE), Certificate of Advanced English (CAE), of Proficiency in English (CPE), or
- j) Seven years of English instruction at a German school or
- k) Equivalent proof. Comparability of proof is determined by the selection committee.

[...]

#### 10. 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:

10.1 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 Universität 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.

10.2 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 with 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) or
- a) A bachelor of science from an English-language degree program or
- c) International English Language Testing System (IELTS) Academic Test with a score of at least 6.5 (sub-scores 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 (subscores of at least 20 points).

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

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

- 11.1 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 Universität Hamburg, a degree from another bachelor's degree program at Universität 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 Universität Hamburg.

Comparability of degree program is determined by the selection committee.

11.2 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 IBT) with a score of at least 90 points
- d) Cambridge Certificate of Advanced English (CAE)
- e) Cambridge Certificate of Proficiency in English (CPE)
- f) Equivalent proof

Comparability of proof is determined by the selection committee.

[...]

#### 15. 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:

- 15.1 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 Universität Hamburg:
- a) Mathematics (incl. physics and bioinformatics, if available) totaling at least 6 ETCS 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 ETCS credits
- 15.2 Applicants must have adequate English-language skills. Adequate language proficiency may be demonstrated as follows:
- a) Proof of proficiency in English at B2 level in the Common European Framework of Reference for Languages through a course at an accredited institution or
- b) International English Language Testing System (IELTS) Academic Test with a score of at least 5.0 or
- c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points or d) Cambridge Certificate of Advanced English (CAE), of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE) or
- e) A higher education degree in an English-speaking degree program or
- f) A higher education entrance qualification for English-language higher education institutions or
- g) A 6-month stay in an English-speaking country or
- h) Seven years of English instruction at a German school.

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

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

16.1 Successful completion of the Bachelor of Science in Mathematics (with physics as a supplementary subject), the Bachelor of Science in Physics from Universität 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 Universität 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). 16.2 Applicants must have adequate English-language skills. Adequate language proficiency may be demonstrated as follows:

- a) Proof of proficiency in English at B2 level in the Common European Framework of Reference for Languages through a course at an accredited institution or
- b) International English Language Testing System (IELTS) Academic Test with a score of at least 5.0 or
- c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points or d) Cambridge Certificate of Advanced English (CAE), of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE) or
- e) A higher education degree in an English-speaking degree program or
- f) A higher education entrance qualification for English-language higher education institutions or
- g) A 6-month stay in an English-speaking country or
- h) Seven years of English instruction at a German school.

#### 17. Master of Science in Mathematics

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

17.1 Successful completion of the Bachelor of Science in Mathematics, the Bachelor of Science in Business Mathematics from Universität 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.

17.2 Applicants must have adequate English-language skills. Adequate language proficiency may be demonstrated as follows:

- a) Proof of proficiency in English at B2 level in the Common European Framework of Reference for Languages through a course at an accredited institution or
- b) International English Language Testing System (IELTS) Academic Test with a score of at least 5.0 or
- c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points or d) Cambridge Certificate of Advanced English (CAE), of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE) or
- e) A higher education degree in an English-speaking degree program or
- f) A higher education entrance qualification for English-language higher education institutions or
- g) A 6-month stay in an English-speaking country or
- h) Seven years of English instruction at a German school.

[...]

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

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

- 19.1 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 of which 20 ECTS credits 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.

- 19.2 Applicants must have adequate English-language skills. Adequate language proficiency may be demonstrated as follows:
- a) Proof of proficiency in English at B2 level in the Common European Framework of Reference for Languages through a course at an accredited institution or
- b) International English Language Testing System (IELTS) Academic Test with a score of at least 5.0 or
- c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points or d) Cambridge Certificate of Advanced English (CAE), of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE) or
- e) A higher education degree in an English-speaking degree program or
- f) A higher education entrance qualification for English-language higher education institutions or
- g) A 6-month stay in an English-speaking country or
- h) Seven years of English instruction at a German school.

[...]

#### 22. Master of Science in Physics

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

- 22.1 Successful completion of the Bachelor of Science in Physics from Universität Hamburg or a comparable degree from a higher education institution. Comparability is determined by the selection committee for the Master of Science in Physics.
- 22.2 Applicants must have adequate English-language skills. Adequate language proficiency may be demonstrated as follows:
- a) Proof of proficiency in English at B2 level in the Common European Framework of Reference for Languages through a course at an accredited institution or
- b) International English Language Testing System (IELTS) Academic Test with a score of at least 5.0 or
- c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 72 points or
- d) Cambridge Certificate of Advanced English (CAE), of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE) or

- e) A higher education degree in an English-speaking degree program or
- f) A higher education entrance qualification for English-language higher education institutions or
- g) A 6-month stay in an English-speaking country or
- h) Seven years of English instruction at a German school
- i) Equivalent proof.

#### 26. Master of Science in Wood Science

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

#### 26.1. A bachelor of science in

- a) Bio-resource management from the Faculty of Mathematics, Informatics and Natural Sciences at Universität Hamburg
- b) Any other degree program, provided that at least 75 ECTS credits of coursework has been proven equivalent to the Bachelor of Science in Bio-Resource Management.
- c) In special cases, admission may be possible in divergence from the degrees required in 26.1 letter a and 26.1 letter b above, provided that an applicant has a bachelor's degree and can additionally substantiate particular work related to the degree program (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.

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

- g) A 6-month stay in an English-speaking country or
- 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

If an applicant still has outstanding examinations that must be completed in order to acquire their first higher education degree, they 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 expected that the applicant will reasonably 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 Universität Hamburg.

Hamburg, 30 May 2023
Universität Hamburg