

OFFICIAL TRANSLATION OF

Neufassung der Satzung über besondere Zugangsvoraussetzungen für die Studiengänge der Fakultät für Mathematik, Informatik und Naturwissenschaften (Amtliche Bekanntmachung Nr. 20 vom 2. Mai 2019)

**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 27 February 2019

On 1 April 2019 in accordance with Section 108 subsection 1 of the Hamburg higher education act (Hamburgisches Hochschulgesetz, HmbHG) dated 18 July 2001 (HmbGVBl p. 171) and last amended on 29 May 2018 (HmbGVBl. p. 200), the Executive University Board ratified the Revised Bylaws Regarding the Special Conditions of Admission for Degree Programs in the Faculty of Mathematics, Informatics and Natural Sciences adopted by the faculty council from the Faculty of Mathematics, Informatics and Natural Sciences on 27 February 2019 in accordance with Section 91 subsection 2 no. 1 HmbHG.

Section 1
Special conditions of admission

A. Bachelor's degree programs

1. Bachelor of Science in Business Mathematics

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

Sufficient proficiency in English is required for the Bachelor of Science in Business Mathematics in order to reasonably understand course instruction and specialist literature (at least Level B1 of the Common European Framework of Reference for Languages (CEFR)). English proficiency may be demonstrated with any of the following:

- a) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 42 points or
- b) International English Language Testing System (IELTS) Academic Test with a score of at least 4.0 or
- c) A higher education entrance qualification for English-language higher education institutions or
- d) Comprehensive school transcripts of equivalent quality; Comprehensive school transcripts of equivalent quality also include higher education entrance qualifications from a German school, which evince at least three years of English instruction at school.

B. Master's degree programs

1. Master of Science in Bioinformatics

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

1.1 A bachelor's or comparable degree in a natural science, computer science, or medical-oriented subject, in which applicants have completed at least 5 ECTS credits in three of the following subjects:

- a) Chemistry
- b) Biochemistry and/or molecular biology
- c) Software development/programming
- d) Algorithms and data structures or information systems
- e) Methodological-oriented bioinformatics or cheminformatics

1.2 Applicants who have only completed 5 ECTS credits of coursework for the subjects specified in 1.1 letters a and b as part of a first higher education degree as set forth in 1.1 herein may take Module MBI-EIP "Introduction to Computer Science and

Programming” and upon its successful completion use it as a substitute for the coursework required under 1.1 letters c, d, or e.

This module concludes with a written examination. Applicants must take the first scheduled examination. If an applicant does not pass, the applicant will be given only one additional opportunity to retake the written examination. Section 16 subsections 1 and 2 of the Revised Examination Regulations of the Faculty of Mathematics, Informatics and Natural Sciences for Master of Science Degree Programs (MSc) dated 11 April and 4 July 2012 shall apply mutatis mutandis in the event an applicant withdraws from or fails to attend an examination on the date scheduled; in particular due to an illness.

Admission is conditioned on the successful completion of the module within four weeks after the start of the lecture period. If the module is not successfully completed within four weeks after the start of the lecture period, the applicant will not be admitted to the program.

1.3. Confirmation from the applicant that they have sufficient knowledge of English to follow classes in English, read specialist literature, and take attendant oral and written examinations in English, as circumstances require.

2. Master of Science in Biology

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

2.1 The Bachelor of Science in Biology from Universität Hamburg, a comparable degree program, or a bachelor’s degree from another degree program, provided that applicants can substantiate at least 60 ECTS credits of completed coursework in biosciences comparable to the curriculum of the Bachelor of Science in Biology.

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

- 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 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), Cambridge Certificate of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE) or

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

3. Master of Science in Chemistry

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

3.1 The Bachelor of Science in Chemistry from Universität Hamburg, or a comparable degree program from a higher education institution. Comparability is decided by the selection committee for the Master of Science in Chemistry.

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

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

4. Master of Science in Geography

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

4.1 The Bachelor of Science in Geography from Universität Hamburg, or a comparable degree program.

4.2 Confirmation from the applicant that they have sufficient knowledge of English to follow classes in English, read specialist literature, and take attendant oral and written examinations in English, as circumstances require.

5. Master of Science in Geophysics

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

5.1 The Bachelor of Science in Geophysics and Oceanography from the Faculty of Mathematics, Informatics and Natural Sciences, a comparable degree program, or a bachelor's degree from another mathematics and physics-based 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.

5.2 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:

- 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

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

6. Master of Science in Geosciences

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

6.1 The Bachelor of Science in the Geosciences from Universität Hamburg, or a comparable 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 the Geosciences.

6.2 Confirmation from the applicant that they have sufficient knowledge of English to follow classes in English, read specialist literature, and take attendant oral and written examinations in English, as circumstances require.

7. Master of Science in Informatics

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

7.1 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, or a degree from a comparable degree program, provided that applicants can substantiate at least 18 ECTS credits of completed coursework in mathematics and 72 ECTS credits in informatics comparable to the curriculum of the Bachelor of Science in Informatics.

7.2 Confirmation from the applicant that they have sufficient knowledge of English to follow classes in English, read specialist literature, and take attendant oral and written examinations in English, as circumstances require.

8. 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:

8.1 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 a bachelor's degree from another mathematics, physics, and natural science degree program, provided that applicants can substantiate as a rule 90 ECTS credits of completed coursework in mathematics and physics courses.

8.2 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 or
- b) A bachelor of science degree from an English-speaking degree program or

- 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)

9. Master of Science in Intelligent Adaptive Systems

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

9.1 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.

9.2 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 or
- b) International English Language Testing System (IELTS) Academic Test with a score of at least 6.5 or
- c) Test of English as a Foreign Language (TOEFL) internet-based test with a score of at least 90 points or
- d) Cambridge Certificate of Advanced English (CAE) or
- e) Cambridge Certificate of Proficiency in English (CPE)

or equivalent proof

Comparability of proof is determined by the selection committee.

10. Master of Science in IT Management and Consulting

The following special conditions of admission apply to the Master of Science in IT Management and Consulting:

10.1 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 or a comparable degree from another higher education institution, provided that at least 60 ECTS credits of coursework has been completed in informatics.

10.2 Confirmation from the applicant that they have sufficient knowledge of English to follow classes in English, read specialist literature, and take attendant oral and written examinations in English, as circumstances require.

11. Master of Science in Cosmetic Science

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

11.1 The Bachelor of Science in Teacher Training in Vocational Education majoring in cosmetic science from Universität Hamburg, or a comparable degree for the subject from another higher education institution,

or

a bachelor's degree in chemistry, biochemistry, food chemistry, pharmacy or a comparable degree from a higher education institution.

11.2 In special cases, admission may be possible in divergence from the requirements set forth in 11.1 (where appropriate, subject to specific conditions), provided that an applicant has a natural-science or comparable bachelor's degree in addition to at least one year of practical experience or 60 ECTS credits in cosmetic science and/or chemistry (e.g., pertinent internships, professional experience, or work produced).

The selection committee for cosmetic science shall decide matters related to 11.1 and 11.2.

12. Master of Science in Food Chemistry

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

12.1 The Bachelor of Science in Food Chemistry 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 Food Chemistry.

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

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

13. 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:

13.1 A Bachelor of Science in Marine Ecosystem and Fisheries Sciences, or a bachelor's degree from another 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 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

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

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

14. Master of Science in Mathematical Physics

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

14.1 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 a bachelor's degree from another mathematics or physics 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 or the Bachelor of Science in Physics.

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

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

15. Master of Science in Mathematics

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

15.1 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 a bachelor's degree from another mathematics 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.

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

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

16. Master of Science in Meteorology

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

16.1 The Bachelor of Science in Meteorology from the Faculty of Mathematics, Informatics and Natural Sciences, a comparable degree program, or a bachelor's degree from another mathematics and physics-based 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 Meteorology.

16.2 Confirmation from the applicant that they have sufficient knowledge of English to follow classes in English, read specialist literature, and take attendant oral and written examinations in English, as circumstances require.

17. Master of Science in Molecular Life Sciences

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

17.1 The Bachelor of Science in Molecular Life Sciences from Universität 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.

17.2 In special cases, admission may be possible in divergence from the requirements set forth in 17.1 (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 Universität 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.

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

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

18. Master of Science in Molecular Plant Science

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

18.1 A Bachelor of Science either in

- a) Biology or
- b) Molecular Life Sciences

from the Faculty of Mathematics, Informatics and Natural Sciences at Universität Hamburg

or

Any other bachelor's degree, provided that applicants substantiate that at least 74 ECTS credits of foundational coursework in the natural sciences has been completed in the following disciplines:

- a) Mathematics (incl. physics and bioinformatics, if available) 6 ECTS credits
- b) Chemistry (general, inorganic, organic, and physical chemistry as well as biochemistry) 8 ECTS credits
- c) Biology 60 ECTS credits

Within these foundation courses, 30 ECTS credits must demonstrate knowledge of laboratory practice and skills in chemistry and biology acquired in laboratory internships. Corresponding credits earned in molecular biology may be used to make up for any credits lacking in mathematics and chemistry. These credits must be earned in addition to the 60 ECTS credits in biology. Furthermore, the final thesis must be an experimental project. This information must be evident from the documentation submitted. Where necessary, applicants may submit separate documentation detailing this information.

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

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

19. Master of Science in Nanosciences

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

19.1 The Bachelor of Science in Nanosciences from Universität Hamburg, or a comparable degree program from another higher education institution,
or

The Bachelor of Science in Physics from Universität Hamburg, or a comparable degree program from another higher education institution in which the basic principles of chemistry and advanced knowledge of physical chemistry and/or nanochemistry have been covered,
or

The Bachelor of Science in Chemistry from Universität Hamburg, or a comparable degree program from another university in which the fundamentals of physics and advanced knowledge of nanostructure physics and/or solid state physics have been covered.

Comparability is determined by the selection committee for the Master of Science in Nanosciences.

19.2 Confirmation from the applicant that they have sufficient knowledge of English to follow classes in English, read specialist literature, and take attendant oral and written examinations in English, as circumstances require.

20. Master of Science in Ocean and Climate Physics

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

20.1 The Bachelor of Science in Geophysics and Oceanography from Universität Hamburg, a comparable degree program from another higher education institution, or a bachelor's degree from another mathematics or physics-based 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.

20.2 Confirmation from the applicant that they have sufficient knowledge of English to follow classes in English, read specialist literature, and take attendant oral and written examinations in English, as circumstances require.

21. Master of Science in Physics

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

21.1 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.

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

- 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 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), Cambridge Certificate of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE) or
- e) A higher education degree in an English-language degree program or
- f) A higher education entrance qualification for English-language higher education institutions or
- g) A six-month stay in an English-speaking country or

- h) Seven years of English instruction at a German school
- i) or equivalent proof

22. Master of Science in Physics

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

22.1 The Bachelor of Science in Physics from Universität Hamburg, a comparable degree program from another higher education institution, or a bachelor's degree from another mathematics and physics-based 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 Physics. Comparability is determined by the selection committee for the Master of Science in Physics.

22.2 Confirmation from the applicant that they have sufficient knowledge of English to follow classes in English, read specialist literature, and take attendant oral and written examinations in English, as circumstances require.

23. Master of Science in Industrial Mathematics

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

23.1 A Bachelor of Science in one of the following degree programs: Mathematics (with technology, physics, or informatics as a supplementary subject) from Universität Hamburg, Industrial Mathematics from Hamburg University of Technology, or a comparable degree program from another higher education institution.

23.2 A bachelor's degree in engineering (with mathematics as an area of concentration) from Hamburg University of Technology, or a comparable degree program from another higher education institution.

23.3 Another bachelor's degree in mathematics or technology, 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 Industrial Mathematics, the Bachelor of Science in Mathematics, or the Bachelor of Science in Engineering with an area of concentration in mathematics.

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

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

24. Master of Science in Information Systems

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

24.1 The Bachelor of Science in Information Systems from Universität Hamburg, a comparable degree program, or a bachelor's degree from another degree program, provided that applicants can substantiate at least 30 ECTS credits of completed coursework in both economics and informatics courses comparable to the curriculum of the Bachelor of Science in Information Systems.

24.2 Confirmation from the applicant that they have sufficient knowledge of English to follow classes in English, read specialist literature, and take attendant oral and written examinations in English, as circumstances require.

25. Master of Science in Business Mathematics

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

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 a bachelor's degree from another mathematics or

economics 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.

26. Master of Science in Wood Science

The following special conditions of admission apply to the Master of Science in Wood Science (commencing in Winter Semester 2019/2020):

26.1. A Bachelor of Science in

- a) Bio-Resource Management from the Faculty of Mathematics, Informatics and Natural Sciences at Universität Hamburg, or
- b) Any other bachelor's degree, provided that applicants can substantiate that at least 75 ECTS credits are equivalent to the courses in the Bachelor of Science in Bio-Resource Management.
- c) In special cases, admission may be possible in divergence from the requisite degrees set forth in 26.1 letters a and b, provided that 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 one 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 a 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), Cambridge Certificate of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE) or
- e) A higher education degree in an English-language degree program or
- f) A higher education entrance qualification for English-language higher education institutions or
- g) A six-month stay in an English-speaking country or
- h) Seven years of English instruction at a German school

Section 2

Compensation for disadvantage

Upon the submission of an application, appropriate compensation for disadvantage shall be granted, provided that 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, which 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 the applicant will seasonably receive their degree by the end of the first semester of the master's degree program. Admission to the program may be permitted on the condition that the degree has been awarded by the end of the re-enrollment period for the second semester of the master's degree program.

Section 4

Effective date

These revised bylaws shall become effective on the day following official publication by Universität Hamburg.

Hamburg, 2 Mai 2019

Universität Hamburg