Technomathematik M.Sc.

Application Information

**Application period:** 1 June - 15 July (winter semester), 1 December - 15 January (summer semester)

**Semester start:** October 1st (winter term) and April 1st (summer term)

**Language(s) of instruction:** English

Introduction

The Master’s program in Industrial Mathematics is provided by the Department of Mathematics of the University of Hamburg and the Hamburg University of Technology (Institute of Mathematics) and started in October 2014. It comprises courses in Mathematics, Computer Science and Engineering.

You are asked to attend courses from Applied Mathematics, Computer Science and Engineering Sciences, respectively. You have to attend compulsory courses in Applied Mathematics at the amount of 46 European Credit Transfer Points (ECTP) at the minimum. In addition, it is mandatory to complete at least one mathematical seminar and to collect at least 20 ECTP in Engineering Sciences or Computer Science combined. Furthermore, you can choose freely among courses from both universities for a total of 16 ECTP. Finally, in your Master’s Thesis (30 ECTP) you will be invited to join one of our research groups in Applied Mathematics. After receiving a Master’s degree, you may apply for admission to PhD studies.

Admission Requirements

University degree

You have to provide a Bachelor’s degree in Industrial Mathematics, Mathematics (with specification in Engineering), Engineering (with specification in Mathematics) or equivalent. You are eligible, if you can prove that you have gained at least 90 credit points in mathematical courses with engineering specification or engineering courses with mathematical specification, respectively. If you are unsure, whether your curriculum fits the requirements, please have a look at the module handbook of TUHH’s BSc Technomathematik.

If you have not received your degree certificate yet, you can submit this by the end of the first semester of your master’s program. Please see the “Documents to submit” section below for details.
Additional special admission requirements

Your proficiency in English will be considered as proven if at least one of the following applies to you:
(a) You have passed a test within CEFR/TELC at level B2
or
(b) You have passed the IELTS test with a score of at least 5.0
(c) You have passed the TOEFL test with 72 credits in the internetbased-test (TOEFL iBT)
(d) You have passed Cambridge FCE, CAE, or CPE
(e) You have a degree from an English-language Bachelor’s degree program
(f) You have a high school diploma accepted at English-language universities
(g) You have spent at least 6 months in an English speaking country
(h) You have learnt English at a German-language school for at least seven years.

For details of the legal basis for this regulation, please see the admission bylaws for your chosen degree program: www.uni-hamburg.de/zugang-master

Recognition of transcripts for degree programs completed at foreign higher education institutions

If you obtained your first degree abroad, your certificate will be reviewed during the application procedure in the faculty of your program. If your degree certificate is not in English or German, please include a copy of a certified English or German translation of this together with your application documents.

Application

Online Application

You will need to complete the online application available on Universität Hamburg’s application portal during the application period: www.uni-hamburg.de/online-application.
Please create a user account, enter your information online, and submit your application electronically. You will then need to print/save your online application and submit it together with the following documents to the postal address or email address indicated below.

Documents to submit

Please submit a PDF containing all documents. For documents not issued in English or German, an electronic copy of a certified English or German translation is required.

- Printout of your online application
- Degree certificate or provisional Transcript of Records
  If you are still studying when you apply and cannot yet provide a final certificate
containing your grades, please submit your current Transcript of Records confirming your provisional grade point average. You will then need to submit your degree certificate by the end of the first semester of your master’s program. You are eligible, if you can prove that you have gained at least 90 credit points in mathematical courses with engineering specification or engineering courses with mathematical specification, respectively.

- Current transcript of records with **grade point average**
- Copy of your **higher education entrance qualification** (i.e. High School diploma or equivalent). Copies in English or German are accepted. If your diploma is in another language, please enclose a copy of a certified translation.
- Curriculum vitae
- **Short personal statement** (no more than 15 lines): What do you like about Mathematics? What interests you most? What are you hoping to achieve in your course?
- Your **proficiency in English** will be considered as proven if at least one of the following applies to you:
  (a) You have passed a test within CEFR/TELC at level B2
  or
  (b) You have passed the IELTS test with a score of at least 5.0
  (c) You have passed the TOEFL test with 72 credits in the internetbased-test (TOEFL iBT)
  (d) You have passed Cambridge FCE, CAE, or CPE
  (e) You have a degree from an English-language Bachelor’s degree program
  (f) You have a high school diploma accepted at English-language universities
  (g) You have spent at least 6 months in an English speaking country
  (h) You have learnt English at a German-language school for at least seven years.

We recommend that you be able to follow courses and seminars in English as well as in German.

The copies of your documents need not to be certified. Copies in English or German are accepted. If your certificates are in another language, please enclose a copy of a certified translation.

**Application address**

bewerbung.math@uni-hamburg.de

Please note that your application can only be considered if your complete application documents reach the **application address** by the application deadline. This deadline is final; no extensions can be granted.

If you want to submit an **additional special application** (e.g., hardship application), you will need to send this special application directly via the online application form together with the required proofs as an upload by the application deadline. For more information on special applications, please see [www.uni-hamburg.de/sonderantrag](http://www.uni-hamburg.de/sonderantrag) and [www.uni-hamburg.de/info-master](http://www.uni-hamburg.de/info-master).
Selection criteria

If the number of applicants exceeds the number of places available, a selection procedure will be necessary:

a) grade of your Bachelor's degree and length of studies
b) relevant qualifications or work experience, in particular a Bachelor's degree in Industrial Mathematics
c) personal statement

For details of the legal basis for this regulation, please see the selection bylaws for your chosen master’s program: www.uni-hamburg.de/auswahl-master

Admission and enrollment

Once your application has been reviewed, an acceptance or rejection letter will be made available in your STiNE account under the Dokumente (Documents) tab. Please see the information at www.uni-hamburg.de/online-application. An enrollment deadline will be indicated in your acceptance letter - please submit the documents required for enrollment by this date. Detailed information about the enrollment process is provided at www.uni-hamburg.de/masterenrollment

FAQ

www.math.uni-hamburg.de/en/studium/master/msctechnomathematik/bewerbung.html

Contact

Do you have further questions? Please send us an E-Mail to studium.math@uni-hamburg.de

List of comparable degree programs

Mathematics M.Sc. (taught completely in English):
www.math.uni-hamburg.de/studium/master/msc-mathematics/bewerbung.html

You have to provide evidence of academic achievement with at least 90 Credit Points obtained through Mathematics subjects or subjects with a strong mathematical content in a Bachelor’s degree program in Mathematics or other related areas like Industrial Mathematics or Engineering Science (with specialization or complementary subjects in Mathematics). The admissions committee proves comparability of your studies after submitting application.
Mathematical Physics M.Sc. (taught completely in English):

www.math.uni-hamburg.de/en/studium/master/msc-mathematicalphysics/bewerbung.html

You have to provide evidence of academic achievement with at least 90 Credit Points obtained through Mathematics and Physics subjects or subjects with a strong mathematical and physical content in a Bachelor’s degree program like Physics or Mathematics (with specialization or complementary subjects in Physics). The admissions committee proves comparability of your studies after submitting application.

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