# Technomathematik M.Sc.

## Application Information

<table>
<thead>
<tr>
<th>Application period:</th>
<th>1 June - 15 July (winter term) and 1 December - 15 January (summer term)</th>
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<td>Semester start:</td>
<td>October 1st (winter term) and April 1st (summer term)</td>
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<td>Language(s) of instruction:</td>
<td>English</td>
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## 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

(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 Certificate of Advanced English (CAE), of Proficiency in English (CPE), Higher Business English Certificate (BEC), First Certificate in English (FCE)

(e) You have a degree from a Bachelor degree program taught in english language

(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 participated in English classes at a German-speaking 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 the certificate 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, upload the required documents to your online application and submit your application online. The application procedure for the master program is an online procedure. This means that you do not need to submit any documents in paper form or via email to Universität Hamburg. Instead, you have to upload the documents. Selection is based on the information you provide online and
If you want to submit an additional special application (e.g. hardship application), you will need to send this special application separately via the online application portal 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 and www.uni-hamburg.de/info-master.

Documents to submit

For documents not issued in English or German, a electronic copy of a certified English or German translation is required.

- 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 proof of the conversion of your final grade or your current grade average into the German grading system
  If you do not have proof for this, we recommend that you provide your current overall grade, as well as the highest and lowest grades that are considered passing grades at your university. You can also request this conversion at www.uni-assist.de if necessary. Grade conversions from the Zentralstelle für ausländisches Bildungswesen (Central Office for Foreign Education), the Zeugnisanerkennungsstellen (Certificate Recognition Offices) of the German federal states and APS certificates from the Akademische Prüfstellen (Academic Examination Offices) of China, Vietnam and Mongolia can also be submitted.

- Curriculum vitae

- Short letter of motivation (no more than 15 lines): What do you like about Mathematics? What interests you most? What are you hoping to achieve in your course?

- Proof of knowledge of the English language (see Admission requirements)

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.
Selection criteria

If the number of applicants exceeds the number of places available, a selection procedure will be necessary. The following selection criteria are used to calculate a selection rating:

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. The enrollment process is an online process. Detailed information about the enrollment process is provided at www.uni-hamburg.de/masterenrollment.


Contact

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

Last updated: May 2024