



Data Science and Artificial Intelligence M.Sc.

Application Information

Application period: 15 February – 31 March (winter term)

Semester start: October 1st (winter term)

Language(s) of instruction: English

Introduction

Welcome to the application process for the Master program "Data Science and Artificial Intelligence" (DSAI) of University of Hamburg (UHH). Thank you for choosing our program.

The convergence of data science and artificial intelligence represents a pivotal advancement in technology with far-reaching implications across industries. At its core, data science harnesses the power of data to extract insights, patterns, and trends, enabling informed decision-making. Meanwhile, artificial intelligence empowers machines to mimic human intelligence, enabling automation, prediction, and problem-solving. Combined together, these two fields have already revolutionized fields such as healthcare, finance, and marketing.

However, several challenges in data science and artificial intelligence remain to be solved.

Extracting meaningful insights from vast and complex datasets requires advanced analytical skills, computational proficiency, and domain expertise. Using artificial intelligence technologies also involve studying their design through an ethical lens to guarantee privacy protection and bias mitigation. Addressing these challenges requires a multidisciplinary approach, combining expertise in statistics, computer science, mathematics, and domain-specific knowledge. Our Master of Science in Data Science and Artificial Intelligence equips students with the necessary skills and knowledge to navigate these challenges, empowering them to drive innovation, solve complex problems, and make a meaningful impact in an increasingly data-driven world.

Please follow closely the next steps for a successful application!

Admission Requirements

Despite offering the program to a wide range of students, applicants should have a strong background in computer science or a related field since programming and mathematical knowledge is assumed. Moreover, applicants need to have very good command over the English language in order to follow lectures and exams.

We can only consider your application if the following three conditions are met. Otherwise, your application will be automatically rejected, without exception.



1. You meet the minimum requirements.
2. Your application contains all required documents.
3. You submit your application during the application period on the STiNE portal. The Application period opens February 15th and closes March 31th 11:59 pm C.E.T.

Minimum Requirements

The following requirements must be met by all applicants. Applications that do not fulfill these requirements, or lack evidence in this respect, will be directly rejected.

Note that fulfilling the requirements does not automatically lead to admission, since the number of applications generally exceeds the number of available places.

(1) EITHER

(1a) A Bachelor's degree from the Faculty of Informatics, Mathematics, Natural Sciences, from the University of Hamburg in Informatik (Informatics) or Computing in Science

OR

(1b) a Bachelor's degree in a computer science related field insofar as the following minimum ECTS credit points were obtained:

- 24 ECTS credit points in mathematics, from which 6 ECTS credit points were obtained in the field of stochastics (probability, statistics);
- 60 ECTS credit points in computer science, which correspond to the curriculum of the Bachelor's degree program in Informatik (Informatics) at the Faculty of Informatics, Mathematics, Natural Sciences, University of Hamburg.

Notes:

In the case (1b), please provide detailed evidence for the fulfillment of requirements regarding ECTS credit points. See the documents section below for more details.

If you have not yet completed a Bachelor's degree program that meets the requirements listed above, you may be admitted under the following conditions (attested by official documents):

- i. The remaining requirements for your degree do not exceed a single semester's content (30 ECTS or equivalent).
- ii. You already fulfill the minimum requirement regarding ECTS credit points as listed in (1b) above.
- iii. You are already registered as having started your Bachelor thesis or final project (if applicable).



(2) English language proficiency, justified by either one of the following:

- Attestation of a C1 English level provided by a course in your university or equivalent institution.
- International English Language Testing System (IELTS) certificate with a grade of at least 6.5
- Test of English as a Foreign Language (TOEFL) certificate with a grade of at least 90
- Cambridge Certificate of Advanced English (CAE)
- Proficiency in English (CPE)
- Seven years of English courses in a German-speaking school

Note: A degree taught in English will generally not be accepted as proof of English language proficiency.

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 the documents you upload.

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

Note: All documents must be in English or in German. If your original documents are in a different language, please provide the original along with a certified translation to either English or German. Scanned documents must be in a high enough quality to be readable. Low-quality scans may lead to rejection if the selection committee cannot properly read their contents. Scans and other PDF files should be uploaded in the correct orientation.

Important: Documents not listed here are not required and will be ignored. This includes motivational letters and irrelevant recommendation letters. Please consult the FAQ before submitting your documents.

1. The filled-in cover form listing personal information, information on your Bachelor's degree and required modules information regarding internships, projects, etc. Please follow the detailed instructions given here: <https://www.inf.uni-hamburg.de/en/studies/master/dsai/boxes/application/cover-form>
2. A brief Curriculum Vitae.
3. Proof of English language proficiency (see above).
4. Your transcript of records, as provided by your university if in English or German, or translated to English or German if not. Relevant courses regarding the minimum requirements should be highlighted in the transcript.
5. Bachelor degree certificate, as provided by your university. Alternatively, if you have not finished your degree yet: official evidence that the remaining requirements for your degree do not exceed a single semester's content (30 ECTS or equivalent), that the minimum requirements with respect to Computer Science and Mathematics courses are already met, and that you are already registered for the Bachelor's thesis/final project (if applicable).
6. A diploma Supplement or a description of your Bachelor degree, preferably provided by your university. This document must contain;
 - Your degree's grading system and computational rules, if the grade is not stated in your transcript. You must at least provide the minimal, minimal passing and maximal grades.
 - The standard duration of required for completion of your degree (in semesters or years).
 - The total number of credit hours or ECTS credit points required for completion of your degree.
 - The description of how many weeks of in-class (=contact hours) time with a lecturer present you have per semester.
 - Your final grade, as officially provided by your university, if it is not already evident in your transcript. If you are still missing one semester to complete your degree, the preliminary final grade estimate must be computed by your university and provided in an official document.



[Optional] Evidence of relevant elective modules, research, professional experience, internships, open-source projects. Please only include evidence of experience that is strictly relevant to the DSAI Master. Please do not include more than 5 items. More general experience should be included in your CV.

Selection Criteria

If the number of applications that fulfill the minimum admission requirements exceeds the number of places available for the Master's degree program in Data Science and Artificial Intelligence for the selection procedure, the selection will be made based on the following criteria:

(1) The final grade of your Bachelor's degree (or official preliminary final grade estimate if Bachelor's degree is not yet completed).

(2) **EITHER**

(2a) The content of your Bachelor's degree, as compared to the equivalent Bachelor's degree program in Informatics from the MIN Faculty of University of Hamburg.

OR

(2b) The content of your Bachelor's degree, as compared to the equivalent Bachelor's degree program Computing in Science from the MIN Faculty of University of Hamburg.

(3) Your selection of modules during your Bachelor's degree, as relevant to the DSAI Master. This includes elective modules (including projects, seminars, etc.), as well as relevant internships, professional experience or proven open source projects.

Notes:

Each criterion will be assigned a numerical grade on a common scale and weighted as follows:

- Criterion (1) (grade) is weighted by 30%.
- Criterion (2) (B.Sc. content) is weighted by 40%.
- Criterion (3) (module selection) is weighted by 30%.

The grade for criterion (2) will be the best out of the note for (2a) and for (2b).

In other words, the content of your Bachelor's degree will be compared to either of the Bachelor's degree programs in Informatics or Computing in Science from the University of Hamburg, whichever will result in a better grade.

The grading of criteria and the selection decision are made by a selection committee consisting of three lecturers from the Master's degree program in Data Science and Artificial Intelligence, two of whom are qualified examiners.



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

The DSAI Team is part of the Department of Informatics, University of Hamburg. The DSAI Team is responsible for the application process, selection process, program coordination, curriculum, questions about the Master program Data Science and Artificial Intelligence, counseling of students and applicants. The DSAI Team running the program contains the selection committee, consisting of three lecturers from the Master's degree program in Data Science and Artificial Intelligence, two of whom are qualified examiners. The current academic advisor is Prof. Dr-Ing. Timo Gerkmann.

For any question related to the Master program Data Science and Artificial Intelligence, regarding curriculum, application and admission procedure, or the website, please send us an e-mail at the following address:

dsai-info.inf@uni-hamburg.de .

Please be aware that we receive many inquiries and it might take us a few days to answer, especially during the application period.

Last updated: January 2026