

Self-disclosure for M.Sc. Data Science at TU Dortmund University

Dear prospective applicants,

before applying, please read and complete this document carefully to check whether you meet the admission requirements. This self-check is for your guidance only; we will verify all information using your transcript of records.

Surname/Family name:	
First name/Given name:	
Bachelor degree (e.g., Mathematics):	
Bachelor University (name and place):	

Admission requirements

In order to be eligible for our Master program, you must meet **four admission criteria**. If you meet all four criteria, you are entitled to admission. Due to cross-semester admission, admissions are usually valid for three subsequent semesters.

Criterion 1: Subject area of your Bachelor's degree

The standard qualifying degree is a B.Sc. in Data Science from TU Dortmund University. Degrees from other universities may qualify if their content is comparable to our B.Sc. in Data Science, particularly in or closely related to Computer Science, Mathematics, or Statistics.

If your degree is not already in ECTS, you must first convert your credits as follows:

- Average credits per semester = total degree credits ÷ number of semesters.
- Conversion factor = $30 \div \text{average credits per semester}$ (please round the factor reasonable).
- ECTS = credits × conversion factor.

Example: Average = 20 credits/semester → factor = $30/20 = 1.5$ → ECTS = credits × 1.5.

The tables below list the required ECTS per subject area. The course fields listed under each area define which courses count toward that area. You do not need to have taken courses in every listed field – any course from the listed fields contributes to the ECTS total. Rules:

- Only courses from your primary degree program are considered.
- Additional qualifications (e.g., online courses, professional experience) are not accepted.
- Each course may be counted once only.

If the required credit total is not met, you do not fulfill this criterion.

1. 8 ECTS in Computer Science courses. Possible fields for those courses are “Programming”, “Algorithms”, “Data Structures”, “Object-Oriented Programming” and “Software Engineering”.

Course title	ECTS

2. 16 ECTS in mathematics courses. Possible fields for those courses are "Calculus", "Linear Algebra", "Differential Equations", "Discrete Mathematics" and "Numerics".

Course title	ECTS

3. A minimum of 8 ECTS in courses dedicated exclusively to statistics (introductory or advanced) or probability theory. Qualifying course fields: Descriptive statistics, inferential statistics, probability theory, statistical methods, regression analysis. Courses that combine statistics with a different subject (e.g., "Numerical and Statistical Methods") do not count.

Course title	ECTS

4. The sum of courses in 1., 2. and 3. must be at least 44 ECTS.
If your sum of courses is less, than you are not eligible.

Sum of ECTS

5. In addition, list courses you have taken in machine learning, statistical learning, artificial intelligence, or related fields. These courses do not count toward admission but help us plan your study start.

Course title	ECTS

Criterion 2: Language requirements

Our Master's program is taught entirely in English. Therefore, you must provide proof of sufficient English language skills to participate. A minimum level of B2 is required. We accept the following proof:

1. German secondary education (only if you completed your Abitur in Germany). Continuous English instruction from grade 5 or 7 (depending on the state) through to the Abitur.
2. An internationally recognized language certificate. Please check the table linked below for accepted your certificates. Your certificate must have been issued within the last 2 years.

[https://international.tu-dortmund.de/storages/international/r/Downloads/Zulassung/uni-assist Referenzrahmen fuer englische Sprachnachweise SoSe 2024.pdf](https://international.tu-dortmund.de/storages/international/r/Downloads/Zulassung/uni-assist%20Referenzrahmen%20fuer%20englische%20Sprachnachweise%20SoSe%202024.pdf)

3. Degree taught in English. A degree from a university in an English-speaking country, or a degree from a study program taught entirely in English (Medium of Instruction certificate).

Criterion 3: Participation in the self-assessment test

Before submitting your application, you are required to complete the online self-assessment test. The test helps you assess your level of subject knowledge and gives you feedback on whether it is sufficient for our Master's program.

The test is not graded. Your score does not affect your application and does not need to be submitted. A sample solution is linked on the last page of the test. You are encouraged to use it to check your answers.

I confirm that I have completed the online self-assessment test.

Place and Date

Signature

Criterion 4: Special functional qualification

You must demonstrate that you have the skills and knowledge required for the Master's in Data Science. This is the formal requirement known as special functional qualification in our examination regulations. If you hold a B.Sc. in Data Science from TU Dortmund University: The qualification is granted automatically. No further action is required.

If you hold a degree from another university: You must demonstrate this qualification by completing the data analysis project from our website (there will be a new task every semester, make sure to download the current one). You must independently prepare a report based on the given task and submit it with your application. The qualification is granted if the report demonstrates sufficient knowledge and skills for the program.

Important: Only the data analysis project provided on our website may be submitted. Submitting any other project (e.g., your bachelor's thesis) will result in immediate rejection of your application.

Use of AI tools is permitted. However, from our experience, uncritical use of AI typically results in reports that do not meet our requirements and will be rejected.

I confirm that I have submitted the required report. I confirm that the report is my own independent work, completed without unauthorized aids. I understand that admission may be revoked in case of misconduct.

Place and Date

Signature