



M.Sc. Data Science

Preliminary checklist for applicants

Dear potential applicant,

before you apply for the M.Sc. Data Science programme, we would like to ask you to check for yourself whether you fulfil our admission requirements along this preliminary checklist. In short, for a successful application you need the following:

1. **Bachelor's degree** (180 ECTS points) in certain fields (see details below)
2. Sufficient **English language skills** (see details below)
3. **Letter of motivation**
- (4. List of **visited courses** for bachelor's degrees not explicitly mentioned below)

**PLEASE DO NOT APPLY IF YOU DO NOT FULFIL THE FOLLOWING
ADMISSION REQUIREMENTS, BECAUSE IN THAT CASE, YOUR APPLICATION
IS LIKELY TO BE REJECTED!**

An eligible applicant must have

- earned a **bachelor's degree** (180 ECTS points) from a German or foreign university in **applied mathematics, business informatics, business mathematics, economics, or informatics** with an average **grade of 2.0 or better** (according to the German grade system*)

or

- earned a **bachelor's degree** (180 ECTS points) from a German or foreign university in **applied mathematics, business informatics, business mathematics, economics, or informatics** (or a **closely-related subject**) with an **average grade of 2.1 through 2.5 (or better)** (according to the German grade system*), where **here (i.e. with an average grade worse than 2.0 but better than 2.6 and/or a bachelor's degree in a subject not explicitly listed)** the examination board decides on the relatedness of the subject and admission of the applicant on a case-by-case basis.

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Furthermore, an eligible applicant must prove her/his

➤ **English language skills** according to § 4 Absatz 2 of the immatriculation order of Trier University in the currently valid version. As of 17 July 2017 this means at least one of the following qualifications, where the related **tests** were **passed during the last three years**:

- Cambridge Certificate in Advanced English
- Test of English as a Foreign Language (TOEFL) with a score of at least
80 in the internet-based test, or
215 in the computer-based test, or
550 in the paper-based test
- International English Language Testing System (IELTS) with a score of at least 6.0
- UNiCert III
- C1 certificate according to CEF (Common European Framework)

Exempt from such a proof are applicants

- whose mother tongue is English, or
- who had at least 6 years of school English in a secondary school, or
- who got a grade of at least 5 points in their A levels (German school grading system: 0 – 15 points, from worst to best), or
- who finished studying for two years in an English-speaking country within the last two years.

➤ Every applicant has to include a **letter of motivation** to her/his application. This letter should not be longer than **one DIN A4 page** and explain **why** the applicant chose **Data Science**, **why** the applicant chose **Trier University** and **why** the applicant is **suited for the programme**.

If, in your opinion, our admission requirements are fulfilled by you, please do not forget to add your calculation of the average grade of your bachelor's degree to your application. If you earned a bachelor's degree that is not part of the five subjects explicitly mentioned above but related to them, please make sure to provide us with an English overview of the **relevant courses**** you took **and their respective syllabi**, linking your previous studies to the M.Sc. Data Science. **As a guideline, such applicants should have earned at least 50 ECTS points in courses relevant for Data Science (for details see below)**. Please be aware that applications lacking a calculation of the average grade of the bachelor's degree (and, **where needed**, an English course overview) will not be accepted.

Detailed information about the M.Sc. Data Science can be found on our website: www.datascience.uni-trier.de.

For **questions regarding the M.Sc. Data Science programme and the related admission requirements**, please contact Dr. Florian Ertz (Economic and Social Statistics Department) using the following e-mail address: datascience@uni-trier.de.

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For **questions regarding the actual application procedure and application documents**, please contact the right person at the registrar's office, see details below.

Foreign students (last name beginning with A-Go):

Ms. Anja Schumacher, e-mail address: schumacher@uni-trier.de

Foreign students (last name beginning with Gr-O):

Ms. Patrycja Chudzinska, e-mail address: chudzinska@uni-trier.de

Foreign students (last name beginning with P-Z):

Ms. Monika Genannt, e-mail address: genannt@uni-trier.de

German students, please see the list of contacts on the following website: <https://www.uni-trier.de/index.php?id=64264>.

* **Formula** for the translation of a foreign grade point average (GPA) into a grade according to the German grade system:

$$[(G \text{ max} - \text{GPA}) / (G \text{ max} - G \text{ min})] \times 3 + 1$$

G max – maximum grade according to the national grade system or to the official grade system of the home university

G min – minimum passing grade according to the national grade system or to the official grade system of the home university

GPA – grade point average of the degree

The result of the formula is then cut off after the first decimal place (e.g. 1.78 will be 1.7).

Example of grade translation:

1) *The applicant comes from Belarus and her GPA of the bachelor's degree is 8.49.*

The maximum grade in Belarus is 10, the minimum passing grade is 1.

$$[(10 - 8.49) / (10 - 1)] \times 3 + 1 = (1.51 / 9) \times 3 + 1 = 0,1677 \times 3 + 1 \approx 0.5031 + 1 \approx 1.5$$

The grade of her bachelor's degree according to the German grade system is 1.5.

** **Examples** of relevant courses linked to the M.Sc. Data Science, where course names are typical for courses taught at German universities:

Informatics:

Algorithms & Data Structures, Introduction to Programming, Object-oriented Programming, Databases, Automata Theory and Formal Languages, Discrete Structures and Logic, Theory of Computation, Software Engineering, Computer Networks

Mathematics:

Calculus, Real and Complex Analysis, Linear Algebra, Numerical Mathematics, Linear Programming, Differential Equations, Mathematical Modeling, Stochastics

Statistics:

Descriptive Statistics, Inferential Statistics, Probability Theory, Econometrics, Empirical Economics, Empirical Sociology