



Deutscher Akademischer Austauschdienst  
German Academic Exchange Service



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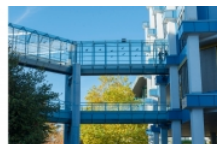
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# Master's degree



## Master of Science in Data Science

Trier University • Trier



## Overview

Degree	Master of Science in Data Science
Teaching language	<ul style="list-style-type: none"><li>English</li></ul>
Languages	English
Programme duration	4 semesters
Beginning	Winter and summer semester
More information on beginning of studies	<p>It is recommended to start the programme in the winter semester. The lecture period starts on 24 October 2022.</p> <p><a href="http://www.calendar.uni-trier.de">www.calendar.uni-trier.de</a></p>
Application deadline	<p>Non-EU citizens:</p> <ul style="list-style-type: none"><li>31 May 2022 for the 2022/23 winter semester</li></ul> <p>EU citizens:</p> <ul style="list-style-type: none"><li>15 July 2022 for the 2022/23 winter semester</li><li>15 January 2023 for the 2023 summer semester</li></ul> <p>Applicants with German university admission qualifications:</p> <ul style="list-style-type: none"><li>15 September 2022 for the 2022/2023 winter semester</li><li>15 March 2023 for the 2023 summer semester</li></ul>
Tuition fees per semester in EUR	None
Combined Master's degree / PhD programme	No
Joint degree / double degree programme	No

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**Description/content**

Data science is becoming a key concept/competency for large private businesses, public institutions, and research. While it is not easy to define data science in a few words, data science deals with the methods and tools needed to analyse (large amounts of) data and draw actionable conclusions from the results gained in the process. These methods and tools (covering big data and their analysis, data modelling, machine learning, and simulation methods) are located at the intersection of three subjects: computer sciences, mathematics, and statistics. Consequently, this new Master's programme at Trier University is jointly taught by lecturers from the fields of computer sciences, mathematics, and statistics (whereas other data science programmes typically only cover one or two of these fields). This ensures that graduates will have a broad knowledge of the discipline and will be able to approach actual problems from different angles. They will also be trained to be life-long learners, able to rapidly adapt to changing demands in their working environments.

In the first semester of this multidisciplinary programme, propaedeutics courses make sure that students coming from different study backgrounds will be able to successfully follow the programme. State-of-the-art e-learning concepts (e.g., flipped classrooms, electronic tutorials, etc.) engage students and offer additional flexibility regarding learning periods. A small research project is a compulsory part of the programme. During this project, students will apply their acquired knowledge to real world problems and learn to approach these problems with scientific methods. The project also serves to strengthen the students' soft skills.

A broad choice of courses (including other subjects like economics, environmental sciences, etc.) enables students to tailor their course of study to their specific needs and targeted working environments.

Students will be able to earn a double Master's degree in combination with computer sciences, business informatics, applied mathematics, business mathematics, or applied statistics.

The MSc in Data Science also serves as a solid foundation for future PhD students in the related fields.

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## Course Details

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**Course organisation**

The Master's programme covers the following module types:

Compulsory modules:

Introductory courses (e.g. Big Data Analytics, Data and Web Mining, Numerical Optimisation for Data Science, Statistical Methods of Data Science) as well as propaedeutics courses

Elective modules within the following specialisation tracks:

Algorithmic Optimisation, Applied Statistics, Data and Knowledge Systems, Financial Economics, Geoinformatics, Simulation Studies

Research case studies

Master's thesis

**Types of assessment**

The methods of assessment range from written exams through oral exams and term papers to the presentation of scientific posters. For details, please consult the current examination regulations.

**A Diploma supplement will be issued**

Yes

**International elements**

- International guest lecturers
- International comparisons and thematic reference to the international context

Description of other international elements	International student body
Course-specific, integrated German language courses	No
Course-specific, integrated English language courses	No

## Costs / Funding

Tuition fees per semester in EUR	None
Semester contribution	Trier University does not charge tuition fees. Students only have to pay a semester contribution of approx. 285 EUR for the first semester and 275 EUR from the second semester onwards. This includes a semester ticket covering public transport in Trier and the Trier region. The fee acts as a contribution that benefits Trier Student Services ("Studierendenwerk Trier") and the student union. It also enables students to buy meals at reduced prices at the university's canteens.
Costs of living	Students should expect expenses of approx. 800 to 900 EUR per month. For instance, monthly housing costs are approx. 200 to 250 EUR (for a basic dorm room with a shared bathroom), 230 to 300 EUR (for a single apartment in a dormitory) and 350 to 500 EUR (for a single apartment on the private market). A meal in the student cafeteria costs approx. 3 to 4.50 EUR.
Funding opportunities within the university	Yes
Description of the above-mentioned funding opportunities within the university	Trier University offers some funding opportunities for international students in the final stage of their degree programmes (maximum duration: six months). However, there are no funding opportunities within the university for the whole course of study or the first three semesters of the programme.

## Requirements / Registration

Academic admission requirements	<p>Applicants to the MSc in Data Science programme must fulfil the following requirements:</p> <p>Proof of a Bachelor's degree (acquisition of at least 180 ECTS from a domestic or foreign university) fulfilling one of the following criteria:</p> <ul style="list-style-type: none"> <li>a final grade of 2.0 or better (German grading system) in the field of computer sciences (computer sciences or business informatics), economics, or mathematics (applied mathematics or business mathematics)</li> </ul> <p>The examination board makes case-by-case decisions on applications with a final grade between 2.1 and 2.5 (German grading system) and/or a Bachelor's degree in fields not explicitly mentioned above. All applicants must include a letter of motivation with regard to the study programme with their application. Furthermore, applicants have to prove their English proficiency according to the current regulations of Trier University (information can be found on the university website). Detailed information for potential applicants can be found on the programme website and here: <a href="https://www.uni-trier.de/index.php?id=73312">https://www.uni-trier.de/index.php?id=73312</a>. Please consult this document and the programme</p>
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website first before sending e-mails to the contact person, as this will typically already answer most of your questions. Please refrain from sending e-mails regarding your eligibility for the programme to the contact person as the decision is made by the examination board. However, the document should give you a good idea about whether your profile fits the programme. You can find the current examination regulations on the programme website. Since the examination regulation is a legal document, it is only available in German.

#### Language requirements

Applicants must prove their English language proficiency at level C1 based on the Common European Framework through one of the following tests. The test must have been taken within the last three years:

- TOEFL (Code 9208): at least 215 points (computer-based) or 550 points (paper-based) or 80 points (Internet-based)
- Cambridge English: Advanced (CAE) / C1 Advanced
- IELTS (at least 6.0 points)
- UNICert III

Equivalent to one of the tests is proof of:

- Being a native speaker from Great Britain, Northern Ireland, Ireland, USA, Canada, Australia, New Zealand, or Malta
- Two years of full-time study in an English-taught programme in one of the above-mentioned English-speaking countries (undertaken within the past two years)
- At least five school years of English in secondary education and at least five points in English at "Abitur" level (only Germany and Luxembourg)

#### Application deadline

Non-EU citizens:

- 31 May 2022 for the 2022/23 winter semester

EU citizens:

- 15 July 2022 for the 2022/23 winter semester
- 15 January 2023 for the 2023 summer semester

Applicants with German university admission qualifications:

- 15 September 2022 for the 2022/2023 winter semester
- 15 March 2023 for the 2023 summer semester

#### Submit application to

Please apply directly via Trier University's online application portal (PORTA), which can be reached using the link provided below. You can switch the language to English using a button in the upper left-hand corner (showing a flag). Please keep in mind that you can only apply during the official application periods.

<https://porta-system.uni-trier.de/qisserver/pages/zul/applicant.faces>

## Services

#### Possibility of finding part-time employment

Students from the European Union, Iceland, Liechtenstein, Norway and Switzerland enjoy unrestricted access to the German labour market. International students from other countries are allowed to work 120 full days or 240 half days per year.

The Career Service of Trier University and the "Agentur für Arbeit" provide an online database for student jobs. Jobs offers can also be found on the website of the "Bundesagentur für Arbeit": <https://jobboerse.arbeitsagentur.de>.

Additionally, some temporary student jobs can be found on the university's bulletin boards. However, many job offers will require at least some knowledge of German.

#### Accommodation

Accommodation is available in student halls of residence through the Student Services Office (Studierendenwerk Trier: <http://www.studiwerk.de>) or on the private market (e.g. <http://www.hunderttausend.de>). Monthly housing costs are approx. 200 to 250 EUR (for a basic dorm room with a shared bathroom) and 350 to 500 EUR (for a single apartment on the private market).

#### Career advisory service

Trier University's career service offers a broad range of advisory services, seminars and events to assist students with planning their career: [www.career-service.uni-trier.de](http://www.career-service.uni-trier.de)

Additionally, Trier University's International Office offers a programme specifically targeted at international students: [www.career-international.de](http://www.career-international.de)

#### Specific specialist or non-specialist support for international students and doctoral candidates

- Specialist counselling
- Cultural and linguistic preparation
- Welcome event
- Buddy programme
- Accompanying programme
- Visa matters



## Welcome to Trier University!

Get an impression of Trier University and vibrant student life in the beautiful city of Trier!

» more:

<https://www.youtube.com/watch?v=WKNKaPAegBw>

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# Trier University

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© Trier University, Sheila Werner

Trier University was founded in 1473, and it reopened in 1970 as a modern campus university. Built on a high plateau overlooking the Moselle River and surrounded by lush green nature, it is said to be one of Germany's most beautiful campuses. Faculty and departmental buildings are connected by bridges and grouped around the forum and the central library.

Trier University has a strong focus on the humanities, social sciences, and economics, but it is also steadily strengthening its environmental science programmes. There are six faculties that together cover more than 30 subject areas. Many research projects are interdisciplinary in nature and embedded in global networks.

With its roughly 1,200 employees and 12,000 students (including more than 11% international students), Trier University embraces contrast: young yet true to tradition, internationally oriented yet regionally rooted, and at the geographic edge of Germany but in the heart of Europe.

<http://www.uni-trier.de>



## University location

Trier is situated in the western part of the federal state of Rhineland-Palatinate in the Moselle Valley. The city is proud of its rich history, which is reflected in its museums and its many historical sites. Thanks to its landmarks, the Porta Nigra, the Trier Cathedral, and other significant architectural monuments, Germany's oldest city was declared a UNESCO World Cultural Heritage Site.

Today's cityscape is a fusion of history and modern lifestyle, not least characterised by a vibrant student life. With bars, cafés, and a colourful range of cultural offerings and festivals, Trier is a tourist attraction with international appeal and a beautiful place for the city's 110,000 residents to live.

The economy of the city is characterised by a few major enterprises and many medium-sized businesses. Trier is in the heart of Europe, as evidenced by its proximity to Luxembourg, which is an important financial centre and the site of several EU institutions, as well as its proximity to France and Belgium. Nine twin towns and cities across Europe, Asia, and the USA attest to Trier's international orientation.

<http://www.trier.de>

# Contact

## Trier University

Faculty IV - Computer Sciences, Economics (Economic and Social Statistics), Mathematics

Dr Florian Ertz

Universitätsring 15  
54296 Trier

✉ [datascience@uni-trier.de](mailto:datascience@uni-trier.de)

🌐 Course website: <http://www.datascience.uni-trier.de>

📘 <https://www.facebook.com/uni.trier>

🐦 <https://twitter.com/TrierUni>

📷 [https://www.instagram.com/uni\\_trier/](https://www.instagram.com/uni_trier/)

Last update 17.05.2022 23:55:22



# International Programmes in Germany - Database

[www.daad.de/international-programmes](http://www.daad.de/international-programmes)  
[www.daad.de/sommerkurse](http://www.daad.de/sommerkurse)

## Editor

DAAD - Deutscher Akademischer Austauschdienst e.V.  
German Academic Exchange Service  
Section K23 – Information on Studying in Germany  
(responsible: Esther Kirk)  
Kennedyallee 50  
D-53175 Bonn  
[www.daad.de](http://www.daad.de)

## GATE-Germany

Consortium for International Higher Education Marketing  
[www.gate-germany.de](http://www.gate-germany.de)

## Disclaimer

The data used for this database was collected and analysed in good faith and with due diligence. The DAAD and the Content5 AG accept no liability for the correctness of the data contained in the "International Programmes in Germany" and "Language and Short Courses in Germany".

The publication is funded by the German Federal Ministry of Education and Research and by contributions of the participating German institutions of higher education.



Federal Ministry  
of Education  
and Research