



INTERNATIONAL PROGRAMMES

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Data Science (MSc) • Philipps-Universität Marburg • Marburg	2

Master's degree



Overview

aster of Science in Data Science
English
ome of the courses on the long list of electives are possibly taught in German.
full-time
semesters
inter and summer semester
l details can be found at: https://www.uni-marburg.de/en/studying/admissions/deadlines.
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ne Master's programme in Data Science of the University of Marburg serves to deepen knowledge and provide specialisation for the acquisition of competencies in dealing with (big) data. Taking to account the new requirements in a digitalised society and the resulting changes in the rofessional world and the associated transdisciplinarity, you will acquire an expanded skill set and nowledge in the field of computer science and applied mathematics. Building on these, you will be ple to independently develop solutions to technical and scientific problems as well as to apply and itically assess scientific findings and deal with them responsibly in an application context. Order to achieve these goals, the Master's programme consists of specialisations in information chnology, such as machine learning, software development of scalable systems and big data chnology as well as applied mathematics. In addition, it is optionally possible to choose an area of oplication. In any case, you will become acquainted with concrete applications through the roject-oriented parts of the studies and strengthen your social and team working skills. Besides a
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problems from data science.

modelling and analysis, you will participate in at least one seminar, in which you practice working with relevant scientific literature. In the individual Master's thesis, you will work on research-related

Course Details

Course organisation

Following the Bologna guidelines on European university education, the course is structured so that 30 credit points (ECTS) should be achieved every semester. The different modules in the Master's programme add up to 120 ECTS:

Compulsory Elective Modules in Mathematics (18 ECTS points)

According to your own interests, you can deepen and broaden your knowledge and competences in applied mathematics by choosing from our long list of electives. This broadens your spectrum of mathematics skills and provides you with the foundation to critically investigate modern research questions and to apply modern methods.

Free Compulsory Elective Modules (24 to 48 ECTS points)

In this study area, you choose at least 24 ECTS points from our long list of electives in computer science according to your own interests, to deepen and broaden your knowledge and competences in this discipline. If the optional application area is not selected, the scope of free elective modules grows allowing you to further specialise in topics of the disciplines computer science as well as mathematics.

Application Area Modules (optional; 18 to 24 ECTS points if selected)

Optionally, you can select an application area (such as medical informatics, social sciences, geoinformatics or languages), which consists of fundamental modules from another subject area and relevant data-science modules. These modules are coordinated such that the most relevant data-science competences for the application in the domain of the subject area can be combined.

Practical and Seminar Modules (24 to 27 ECTS points)

This study area serves to deepen your practice-oriented scientific skills. These include competencies essential for data-science specialists to carry out a research project in group work, usually involving modelling and implementation in an extensive, data-centric software project. In one or two seminar modules, you can sharpen your profile as well as practice to compare and evaluate research results. In a dedicated module, you will learn and practice techniques of scientific work in data science in an individual project.

Master's Thesis (30 ECTS points)

The final phase of the course is the Master's thesis. Students apply the skills acquired during the taught part of the programme. You will work on your own research project under the guidance of an experienced professor.

A Diploma supplement will be issued	Yes
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

There is a semester fee, which includes the mandatory student union membership (required by state law) and a free travel pass for public transport in most of the state of Hessen as well as access to subsidised accommodation and meals. In the summer semester of 2024, the semester fee amounted to approx. 390 EUR.

https://www.uni-marburg.de/en/studying/life-at-umr/finance

Costs of living

Living costs depend on individual lifestyles and on regional prices. The Marburg foreigners' registration office ("Ausländerbehörde") requires international students to prove that they have at least 934 EUR per month at their disposal in order to cover their living costs.

https://www.uni-marburg.de/en/studying/life-at-umr/finance

Funding opportunities within the university

No

Requirements / Registration

Academic admission requirements

For this consecutive programme a BSc in Data Science, in Computer Science, in Mathematics, or a comparable university degree with a minimum GPA is required. In any case, intense knowledge in the disciplines computer science and mathematics must be documented, including in particular in the area of machine learning. At the time of application, students should have been awarded at least 144 ECTS points.

Detailed information on admission requirements: https://www.uni-marburg.de/en/studying/degree-programs/sciences/datasciencems

Language requirements

A precondition for successful application is a confident command of the English language (European language classification scheme C1 or better). The teaching language is English but the exams can be taken in English as well as in German. Therefore, it is also possible to apply with English comprehension skills (European language classification scheme B1 or better) in combination with confident command of the German language (DSH 2 or better).

Detailed information on equivalences: https://www.uni-marburg.de/en/studying/admissions/languagerequirements

Important: As proof for the English language skills at level C1 only language certificates from the Common European Framework of Reference for Languages are accepted for this study programme. School reports, university certificates or certificates from other higher education institutions are not accepted.

Application deadline

All details can be found at: https://www.uni-marburg.de/en/studying/admissions/deadlines.

Submit application to

Detailed information:

https://www.uni-marburg.de/en/studying/admissions/application-process/mastersapplication

Applications must be submitted through uni-assist:

https://my.uni-assist.de/

Services

Possibility of finding parttime employment

Within certain legal limits, job opportunities are available for international students. Fluent German is required for most jobs. Employment for international students must be approved by the foreigners' registration office. There are hardly any legal restrictions on taking academic assistant jobs at the university.

Further information on job opportunities and university career services https://www.uni-marburg.de/en/studying/life-at-umr/work-1

Accommodation

The market situation for accommodation is not easy in Marburg. However, the university assists international students in finding suitable and affordable accommodation. The student services office ("Studentenwerk Marburg") maintains student residence halls with a total of approx. 2,100 units. Apart from single rooms, there are two- to three-room flats for student families. Only students registered at Philipps-Universität Marburg are entitled to a place in a residence hall. The "Konrad Biesalski House", in which handicapped and non-handicapped students live together, offers round-the-clock assistance. A bus service and services such as physiotherapeutic exercises and massage baths are offered. Many students live in private accommodation or shared flats. The supply of flats in the centre of Marburg is limited, especially in the Old Town ("Oberstadt"). The situation on the outskirts of Marburg and in the immediate vicinity is better. There are good bus connections. Experience shows that demand for accommodation is highest at the beginning of each semester (April, October), so you should start looking for accommodation around the end of the previous semester (February, July) if possible.

https://www.uni-marburg.de/en/studying/life-at-umr/housing

Support for international students and doctoral candidates

- Welcome event
- Tutors

General services and support for international students and doctoral candidates

International student orientation (offered by the International Office) https://www.uni-marburg.de/en/international/from-abroad/welcome-and-orientation

Welcome event

https://www.uni-marburg.de/en/fb12/research-groups/psw/teaching/information-for-master-students

Study advisers

https://www.uni-marburg.de/en/fb12/department/representatives/study-advice

Contact

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Course website: https://www.uni-marburg.de/en/fb12/studying/degree-programs/m-sc-data-science

- f https://www.facebook.com/PhilippsUniversitaet
- https://twitter.com/uni_mr
- https://www.instagram.com/philippsunimarburg
- https://www.youtube.com/channel/UCCYYr5nvvA18hI-hpPhQtDA

International Programmes in Germany - Database

www.daad.de/international-programmes www.daad.de/sommerkurse

Editor

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GATE-Germany

Consortium for International Higher Education Marketing 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".

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