

Facts and Figures

Teaching Language	English
Period of Study	4 semesters
Start	1st October (start in winter semester recommended)
Application Deadline	15th April for international applicants; 15th June for EU / EEA applicants
Access Requirements	A bachelor's degree in Data Science, Computer Science, Statistics, Mathematics or a closely related degree program
Language Proficiency	English language proficiency CEFR C1 or English language proficiency CEFR B2 and German language proficiency equivalent to DSH level 2
Credit Points (ECTS)	120
Degree	Master of Science (M.Sc.)



in cooperation with



Why study Applied Data Science?

Interdisciplinary and application-oriented

Data scientists know how to extract knowledge from data. They combine skills in Mathematics, Computer Science, Statistics and specific knowledge in an application domain. In Göttingen, we place special emphasis on the interdisciplinary nature of Data Science. We want to equip you with both in-depth knowledge of the key mathematical, statistical and computer science methods for Data Science as well as to make sure you understand how to apply these methods in an application domain. You can choose between Computational Neuroscience, Bioinformatics, Medical Data Science and Digital Humanities, and we are working on expanding this list. In choosing an application domain you get the opportunity to study tailored to your individual and subject-specific inclinations as well as your professional ambitions.

Research- as well as industry-oriented

Our master's programme is research-oriented and should enable you to carry out scientific research projects autonomously. Moreover, we want to teach you how to communicate your insights and reflect on the ethical impacts of collecting and analysing large amounts of data as well as the consequences of automated data-driven decision-making. Beyond research, we also provide the opportunity for internships and interactions with industry partners thus strengthening your employability further.

Excellent career prospects

Data scientists are currently in high demand in almost all disciplines, both in research and industry. Possible employers can be found throughout all sectors, including the manufacturing industry, banks, insurance companies, the IT sector, consulting, public or industrial research institutes, the public health sector as well as colleges and universities. Excellent graduation also qualifies for PhD programmes.

Application Domains

In Göttingen, we place special emphasis on the interdisciplinary nature of Data Science and want to equip you with the knowledge and skills to use Data Science methods in an application domain. Currently, the following application domains can be chosen:

Computational Neuroscience

The application domain Computational Neuroscience is located at the interface between biological and artificial neuronal networks. Topics include the modelling and analysis of perceptual and decision-making processes in the brain, data science methods for neuroscience as well as computer vision and robotics. Computational Neuroscience is offered in cooperation with the Faculty of Physics and the Faculty of Biology and Psychology.

Bioinformatics

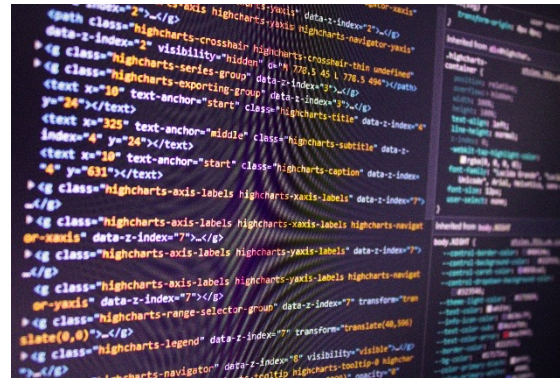
The application domain Bioinformatics covers the biological foundations (genetics and molecular biology) as well as algorithmic and statistical methods in bioinformatics. The application domain is offered in cooperation with the Faculty of Biology and Psychology.

Medical Data Science

The application domain Medical Data Science covers the application of data science methods in the fields of medicine and healthcare. It is offered in cooperation with the University Medical Centre Göttingen.

Digital Humanities

The application domain Digital Humanities deals with the application of Data Science methods to digital resources in the humanities and social sciences. It is offered in cooperation with the Institute for Digital Humanities.



Programme Structure

The master's programme Applied Data Science is a graduate programme that requires 120 ECTS to be successfully completed. The programme includes three areas of study: (1) a core curriculum, (2) the professionalisation section and (3) the master's thesis.

Core Curriculum (49 ECTS)

- Fundamentals of Data Science
- Statistical methods of Data Science
- Computer Science methods of Data Science

Professionalisation Section (41 ECTS)

- Application domain such as Computational Neuroscience, Bioinformatics, Medical Data Science and Digital Humanities
- Key competencies: Research lab rotation or industry internship and interdisciplinary skills
- Elective courses Data Science

Master's Thesis (30 ECTS)

- Elaborating a topic related to your application domain

Further Information

Homepage Applied Data Science

Details regarding the study programme as well as the access requirements and application process.

uni-goettingen.de/msc/datascience

International Office

uni-goettingen.de/international/students

Campus Institute Data Science:

uni-goettingen.de/en/cidas



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