



Deutscher Akademischer Austauschdienst
German Academic Exchange Service

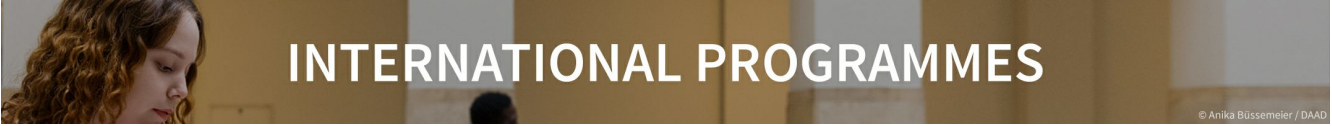


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Master's degree



Data Science

Chemnitz University of Technology • Chemnitz



Overview

Degree	Master of Data Science
Teaching language	<ul style="list-style-type: none">• German• English
Languages	The teaching language is often English, and it is typical to write the MSc thesis in English.
Programme duration	4 semesters
Beginning	Winter and summer semester
Application deadline	15 July for the following winter semester 15 January for the following summer semester All documents have to be submitted by the deadline via uni-assist . Please start your application as early as possible. International applicants are very welcome!
Tuition fees per semester in EUR	None
Combined Master's degree / PhD programme	No
Joint degree / double degree programme	No
Description/content	The term "data science" describes a field of increasing importance involving the extraction of information from very large and unstructured data. Its applications include but are not limited to the following: <ul style="list-style-type: none">• in economics for using customer data to anticipate behaviour or predict market share or product life cycles• in engineering, a field in which autonomous driving and image processing are of increasing importance• in the humanities, a field in which translation and natural language processing have shown promising results and created new exciting fields such as digital humanities• in social network analysis

- in medicine for cures that are designed for all kinds of diseases and treatments
- for modelling infectious diseases
- urban modelling

The availability of cheap computing power and the exponential increase in available data have fuelled the design of new algorithms within data science and machine learning that heavily rely on elegant mathematics and sophisticated computer science methodology.

The need for well-educated data scientists is clear. Our students work with many well-known companies throughout Germany and industrial cooperation is already a big part of the degree through jobs, seminars and thesis work.

Course Details

Course organisation	<p>The programme has several introductory courses such as the following:</p> <ul style="list-style-type: none"> • Introduction to Data Science • Machine Learning • Data Modelling seminar with industrial partners (Companies include Porsche, Siemens, and more.) <p>These courses are complemented with courses such as the following:</p> <ul style="list-style-type: none"> • Foundations of Big Data Analytics • Matrix Methods in Data Science • Optimisation for Machine Learning • Statistical Data Science • Deep Reinforcement Learning <p>Additional courses from mathematics and computer science are also possible as well as lectures from economics and electrical engineering, which allow for seeing the data science algorithms within applications.</p>
A Diploma supplement will be issued	Yes
International elements	<ul style="list-style-type: none"> • International guest lecturers • Specialist literature in other languages • Projects with partners in Germany and abroad • International comparisons and thematic reference to the international context
Description of other international elements	Our students regularly participate in the International Data Mining Cup and earn top positions. Most of them are working students in local data science businesses.
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	All students have to pay a semester contribution of approx. 296 EUR. This fee also covers the semester ticket, which permits you to use buses and trams in Chemnitz as well as regional trains throughout Germany during the semester. International students will receive the bank account details after admission with which they can transfer the semester contribution. However, the fee can also be paid after arrival in Chemnitz (by German bank card or transfer).
Costs of living	Approx. 934 EUR per month to cover personal expenses
Funding opportunities within the university	Yes
Description of the above-mentioned funding opportunities within the university	Incoming students can apply for different funding opportunities via the International Office of Chemnitz University of Technology: https://www.tu-chemnitz.de/international/incoming/stipendien/index.php.en

Requirements / Registration

Academic admission requirements	<p>Our programme has a strong focus on an excellent mathematical education, and as such, we automatically admit graduates with degrees in one of the following:</p> <ul style="list-style-type: none"> • mathematics • computer science • physics • electrical engineering <p>Applicants who have graduated with a degree in one of the aforementioned degrees will be accepted if they have gained a sufficient amount of maths-related ECTS points (roughly 27). People with other backgrounds and enough mathematical credit points are typically also admitted, but their applications are checked on an individual basis. Additionally, the course requires German on the level of telc C1 Hochschule or equivalent, which is crucial for people needing further mathematical modules that are supplemented from the maths curriculum. Almost all data science lectures are given in English.</p>
Language requirements	<p>German C1 or equivalent is required. The following certificates are accepted:</p> <ul style="list-style-type: none"> • DSH-2, DSH-3 • TestDaF: level 4 on all four examination parts • telc Deutsch C1 Hochschule • Goethe Institute – ZOP • Goethe Institute – KDS • Goethe Institute – GDS • DSD II • Goethe Institute C2 <p>Students need good knowledge of the English language, but a certificate is not required.</p>
Application deadline	<p>15 July for the following winter semester 15 January for the following summer semester</p> <p>All documents have to be submitted by the deadline via uni-assist. Please start your application as early as possible.</p>

International applicants are very welcome!

Submit application to

Applications may be submitted online at <https://www.uni-assist.de/en>.

It is not necessary to send certified copies. Please note that uni-assist must receive all application documents by the application deadline.

Services

Possibility of finding part-time employment

Students can find offers for part-time jobs, work placements etc. on the job portal offered by the Career Service of Chemnitz University of Technology: <https://www.tu-chemnitz.de/career-service/jobboerse/>

Accommodation

The "Studentenwerk" Chemnitz-Zwickau runs several student residences. International students can apply for a single room in one of the residences. The prices depend on the size and furnishings of the room and vary between 250 EUR and 320 EUR: <https://www.swcz.de/en/student-housing/our-halls-of-residence/>

Career advisory service

The Career Service of Chemnitz University of Technology supports students during their studies as well as graduates entering their professional life. The Career Service provides a platform for companies and institutions to present themselves: <https://www.tu-chemnitz.de/career-service/index.php.en>

Support for international students and doctoral candidates

- Buddy programme
- Welcome event



Data Science MSc

Video about the programme

» more:
https://www.youtube.com/watch?v=5jn_wk-vQew



Campus

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Come study in the **European Capital of Culture 2025!**

Approximately **9,000 students** from about **90 countries** study at Chemnitz University of Technology in eight faculties and at the Centre for Teacher Education. International students are supported by the International Office.

Due to the reasonably priced dormitory rooms directly on campus, the distances between accommodation, lecture buildings, cafeteria and student clubs are short. So if you feel like studying at a cosmopolitan university, apply to study in Chemnitz.

Chemnitz University of Technology is a **cosmopolitan university** with strong regional, national and international networks. It is also home to about **2,300 academic and administrative employees**. It is thus the third largest university in Saxony. In terms of the proportion of foreign students, Chemnitz University of Technology occupies a top position among state universities nationwide. Chemnitz, the **European Capital of Culture 2025**, can point to many years of positive development in gross domestic product and a high proportion of highly qualified employees. It also owes this to its university, as Chemnitz University of Technology is the **intellectual heart of the city** and has developed into an **internationally visible research location for future value creation processes and sustainable future security**

The university combines **engineering and natural sciences** as well as **mathematics with humanities, social sciences and economics**. At the junctures, **unique degree programmes** are created alongside pioneering research projects. These include, for example, sensor technology and cognitive psychology, computer science for humanities and social scientists, and the degree programme MINT: Mathematics, Computer Science and Natural Sciences with Applications in Technology. As of the 2024/2025 winter semester, the university offers a total of **96 degree programmes**. A particular hallmark is the high degree of interdisciplinarity.

Chemnitz University of Technology considers **excellent teaching** to be an essential basis for additional lively scientific development of the research landscape as well as for the transfer of new questions, findings and methods to the economy and society. The university has created the necessary framework for this in its "**Teaching Mission Statement**". Thus, teachers and students jointly shape the teaching and learning conditions at Chemnitz University of Technology in the context of internationality and regionalism. The further development of study programmes is regularly initiated by the **TUCpanel student survey** as well as by **accreditation procedures**. This makes student success factors visible, which ultimately helps **more students to successfully complete their studies in the standard period of study**

With **30 percent international students** and numerous international researchers with **cooperative relationships with 120 universities worldwide**, Chemnitz University of Technology is one of the most internationally oriented universities in Germany. As a result of numerous exchange programmes, you can meet students from Chemnitz all over the world. It has been pursuing this path for many years with increasing dynamism and at a professional level, as evidenced by the **seal of the HRK Re-Audit Internationalisation of Universities**



University location

Chemnitz, European Capital of Culture in 2025 and the third largest city in Saxony, looks back proudly on a history of innovation with which few other cities can hope to compete. With the advent of the industrial revolution, Chemnitz quickly developed into the leading centre of mechanical engineering in Germany. This great tradition has continued uninterrupted to the present day, even through the period in which

the city was known as Karl-Marx-Stadt. Today, Chemnitz (population 250,000) is well on its way to becoming one of the most important high-tech locations in Germany. But Chemnitz has much more to offer than just science and technology. Amongst other things, there is the Opera House (built in 1909), the King Albert Museum with its excellent collection of German Expressionist paintings, the Natural History Museum and the German Board Games Museum, the only one of its kind in Germany. And in the Kassberg Quarter, you can see the largest intact area of Art Nouveau architecture in Germany.

Contact

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🌐 Course website: <https://www.tu-chemnitz.de/mathematik/studium/index.en.php?page=DS>

📘 <https://de-de.facebook.com/TUChemnitz>

🐦 <https://twitter.com/TUChemnitz>

🌐 <https://www.linkedin.com/school/technische-universitat-chemnitz/>

📷 <https://www.instagram.com/tuchemnitz/>

📺 <https://www.youtube.com/user/tuchemnitz>

Last update 05.01.2025 22:03:01

International Programmes in Germany - Database

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

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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".

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