



Deutscher Akademischer Austauschdienst  
German Academic Exchange Service



## Table of Contents

<b>Master's degree .....</b>	<b>2</b>
<b>MSc in Data Engineering • Constructor University • Bremen .....</b>	<b>2</b>

# Master's degree



## MSc in Data Engineering

Constructor University • Bremen

### Overview

Degree	Master of Science
Teaching language	<ul style="list-style-type: none"><li>English</li></ul>
Languages	Courses are held in English.
Full-time / part-time	<ul style="list-style-type: none"><li>full-time</li></ul>
Programme duration	4 semesters
Beginning	Winter semester
Application deadline	<ul style="list-style-type: none"><li><b>Application due by 1 June for international students</b>(for those who require a visa to enter and study in Germany)</li><li><b>Application due by 15 July for EU/EEA citizens and citizens of the following countries:</b> United States of America (including the US Virgin Islands, American Samoa, Guam, Puerto Rico, and the Northern Mariana Islands), Andorra, Australia (including the Cocos [Keeling] Islands, Norfolk Island, Christmas Island), Brazil, Canada, El Salvador, Honduras, Israel, Japan, Monaco, New Zealand (including the Cook Islands, Niue, and Tokelau), San Marino, Republic of South Korea, and Switzerland</li></ul>
Tuition fees per semester in EUR	10,000 EUR
Additional information on tuition fees	Annual <b>undergraduate</b> 2023/24 tuition fees – 20,000 EUR  Annual <b>graduate</b> 2023/24 tuition fees – 20,000 EUR  Annual <b>International Foundation Year</b> 2023/24 tuition fees – 12,000 EUR
Combined Master's degree / PhD programme	No
Joint degree / double degree programme	No
Description/content	Data engineering is an emerging profession concerned with big data approaches to data acquisition, data management and data analysis.  The two-year programme in data engineering offers a fascinating and profound insight into the

methods and technologies of this rapidly growing area. The programme combines the big data aspects of data analytics and data science with the technological aspects of data acquisition, curation, and management.

Thus, the programme provides the essentials for paving the way to a successful career: computer skills and mathematical understanding paired with practical experience in selected application fields.

The programme is targeted towards students who have completed their BSc in areas like computer science, physics, applied mathematics, statistics, electrical engineering, communications engineering, or related disciplines, and who want to deepen their knowledge and proceed to research-oriented work in a Master's programme or ultimately a PhD programme.

The tailor-made curriculum comprises lectures, tutorials, laboratory training, and hands-on projects. In a unique setting, students also team up with industry professionals in selected courses.

## Course Details

Course organisation	<p><b>Core components</b> of the programme and the <b>Methods Area</b> include the following modules:</p> <ul style="list-style-type: none"> <li>• The big data challenge</li> <li>• Data analytics</li> <li>• Big databases and cloud services</li> <li>• Machine learning</li> <li>• Data visualisation and image processing</li> <li>• Data acquisition technologies and sensor networks</li> <li>• Modelling and control of dynamical systems</li> <li>• Modern signal processing</li> <li>• Web analytics</li> <li>• Network approaches in biology and medicine</li> <li>• Applied dynamic systems</li> </ul> <p><b>The Elective Area</b> is designed for students to integrate and strengthen their previously acquired knowledge and skills. Students can choose modules from four tracks:</p> <ul style="list-style-type: none"> <li>• Computer sciences</li> <li>• Geoinformatics</li> <li>• Bioinformatics</li> <li>• Business and supply chain engineering</li> </ul> <p><b>The Discovery Area</b> features a project seminar on current topics and challenges in data engineering, which is followed by two advanced projects in data engineering.</p> <p><b>The Career Area</b> lets students acquire skills preparing them for a career as data engineers in industry.</p> <ul style="list-style-type: none"> <li>• Language skills</li> <li>• Communications and ethics</li> <li>• Career skills for data engineers</li> </ul> <p><a href="#">» PDF Download</a></p>
Integrated internships	The programme supports students in completing an internship in industry and research.
Course-specific, integrated German language courses	No
Course-specific, integrated English language courses	No

## Costs / Funding

Tuition fees per semester in EUR	10,000 EUR
Additional information on tuition fees	<p>Annual <b>undergraduate</b> 2023/24 tuition fees – 20,000 EUR</p> <p>Annual <b>graduate</b> 2023/24 tuition fees – 20,000 EUR</p> <p>Annual <b>International Foundation Year</b> 2023/24 tuition fees – 12,000 EUR</p>
Semester contribution	Approx. 330 EUR per semester, which includes public transportation
Funding opportunities within the university	Yes
Description of the above-mentioned funding opportunities within the university	<p>The Tuition Deferral Programme is an innovative way to finance a portion of your tuition fees at Constructor University:</p> <ul style="list-style-type: none"> <li>• The deferral of tuition fees will be calculated automatically, and the option of deferring tuition fees will be available to you shortly after admission.</li> <li>• You decide whether you want to take advantage of this personalised financing option.</li> <li>• Granted independent of your financial situation</li> <li>• Flexible repayment plan based on your future income and personal circumstances</li> </ul>

## Requirements / Registration

Academic admission requirements	<ul style="list-style-type: none"> <li>• Letter of motivation</li> <li>• Curriculum vitae (CV)</li> <li>• University transcript in English or German</li> <li>• Bachelor's degree certificate or equivalent (may be handed in later)</li> <li>• Two letters of recommendation</li> <li>• A certificate demonstrating English language proficiency (see below)</li> </ul>
Language requirements	An English language proficiency test with a minimum score of 90 (TOEFL), 6.5 (IELTS) or 110 (Duolingo). Native speakers and applicants who have completed their undergraduate studies in English may be exempt from this requirement. Please note that most English proficiency tests are only valid for two years.
Application deadline	<ul style="list-style-type: none"> <li>• <b>Application due by 1 June for international students</b>(for those who require a visa to enter and study in Germany)</li> <li>• <b>Application due by 15 July for EU/EEA citizens and citizens of the following countries:</b> United States of America (including the US Virgin Islands, American Samoa, Guam, Puerto Rico, and the Northern Mariana Islands), Andorra, Australia (including the Cocos [Keeling] Islands, Norfolk Island, Christmas Island), Brazil, Canada, El Salvador, Honduras, Israel, Japan, Monaco, New Zealand (including the Cook Islands, Niue, and Tokelau), San Marino, Republic of South Korea, and Switzerland</li> </ul>

Submit application to

<https://constructor.university/programs/graduate-education/data-engineering/de-application-information>

## Services

---

**Possibility of finding part-time employment**

We offer a limited number of student jobs on campus as well as support in finding student jobs off campus.

**Accommodation**

Constructor University offers **on-campus** accommodation that includes room and board (full meal plan). This accommodation is offered to **undergraduate and International Foundation Year students**. The fee for one academic year (nine months) is 8,000 EUR.

Constructor University offers a variety of **off-campus** student housing options for **graduate students** in Bremen. You can reserve accommodation through Constructor University and take advantage of our housing support services, flexible lease terms, and full campus amenities. The fee for accommodation for one academic year (nine months) is 4,500 EUR.

Generally, the cost of housing in Bremen can be considered affordable compared to other German cities. Private rooms range from 300 to 500 EUR per month.

**Career advisory service**

The Constructor University Career Services Center accompanies students through all stages of their career development in order to enable them to become responsible leaders of tomorrow.

<https://constructor.university/student-life/career-services>

**Support for international students and doctoral candidates**

- Welcome event
- Specialist counselling
- Cultural and linguistic preparation
- Help with finding accommodation

**General services and support for international students and doctoral candidates**

As most of our students have an international background, we focus on your wellbeing.

---

# Contact

## Constructor University

Student Marketing & Recruitment

Campus Ring 1  
28759 Bremen

Tel. +49 4212004247

✉ [graduateadmission@constructor.university](mailto:graduateadmission@constructor.university)

🌐 Course website: <https://constructor.university/programs/graduate-education/data-engineering>

📘 <https://www.facebook.com/constructor.university/>

🐦 [https://twitter.com/constructor\\_uni](https://twitter.com/constructor_uni)

🌐 <https://www.linkedin.com/school/constructor-university/>

📷 [https://www.instagram.com/constructor\\_uni/](https://www.instagram.com/constructor_uni/)

📺 <https://www.youtube.com/@constructor.university/about>

Last update 06.05.2024 22:35:34

# 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  
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