Technische Universität Braunschweig

www.tu-braunschweig.de
Research and teaching in figures

- 86 degree programmes
- 3,500 first semester students
- 17,800 students
- 120 institutes
- 2,300 scientists
- 3,800 university employees
- 124,000,000 euros in outside funding
- 393,000,000 euros in overall budget
History

1745 The Collegium Carolinum, a new type of educational institution between secondary school and university, is established.

1878 The institute is renamed Ducal Polytechnic School (Herzogliche Technische Hochschule Carolo-Wilhelmina).

1968 After the establishment of a Faculty of Humanities and Social Sciences, the TH is renamed Technische Universität.

1978 The Teacher Training College is incorporated into TU Braunschweig.
History

2007  Braunschweig is named »City of Science«. 
      Foundation of the Automotive Research Centre Niedersachsen.

2009  Foundation of the Aeronautics Research Centre Niedersachsen.
      Foundation of the Braunschweig Integrated Centre of Systems Biology.

2012  Foundation of the Centre of Pharmaceutical Engineering.

2016  Completion of the Open Hybrid LabFactory research campus.
      Inauguration of the Masch.Bau students‘ building.

2017  Record high of 20,116 students.


2019  Relocation to the new Laboratory for Emerging Nanometrology.

2020  TU Braunschweig celebrates its 275th anniversary.
      Start of construction of a new student house and the Centre for Fire Research (ZeBra).
Good reasons for choosing TU Braunschweig

- An excellent reputation and a long tradition – since 1745
- The university with the broadest range of engineering courses in Northern Germany
- Top-notch connections in Europe’s number one research region
- Jobs and research projects at local research institutes and companies
- First-rate contacts with the industry and hands-on training
- Short distances between the TU’s campuses in the vibrant city of Braunschweig
6 Faculties

- Carl-Friedrich Gauß: Mathematics, Computer Science, Business Science and Social Sciences
- Life Sciences
- Architecture, Civil Engineering and Environmental Sciences
- Mechanical Engineering
- Electrical Engineering, Information Technology and Physics
- Humanities and Educational Sciences
Core Research Areas

**MOBILITY**

**ENGINEERING FOR HEALTH**

**METROLOGY**

**FUTURE CITY**
Core Research Areas and Research Centres

**MOBILITY**
- Automotive Research Centre Niedersachsen (NFF)
  - Open Hybrid LabFactory (OHLF)
- Battery LabFactory Braunschweig (BLB)
- Aeronautics Research Centre Niedersachsen (NFL)
- SE²A - Sustainable and Energy-Efficient Aviation

**ENGINEERING FOR HEALTH**
- Braunschweig Integrated Centre of Systems Biology (BRICS)
- Centre of Pharmaceutical Engineering (PVZ)

**METROLOGY**
- Laboratory for Emerging Nanometrology (LENA)
- QuantumFrontiers

**FUTURE CITY**
- Centre for Fire Research (ZeBra)
Student enrolment numbers

<table>
<thead>
<tr>
<th>Total number of students</th>
<th>Number of first-semester students</th>
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</thead>
<tbody>
<tr>
<td>2.000</td>
<td>2.000</td>
</tr>
<tr>
<td>2.657</td>
<td>2.946</td>
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<tr>
<td>2.809</td>
<td>3.102</td>
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<tr>
<td>3.350</td>
<td>3.669</td>
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<tr>
<td>4.360</td>
<td>4.730</td>
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<td>4.570</td>
<td>4.487</td>
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<tr>
<td>4.317</td>
<td>3.613</td>
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<td>3.613</td>
<td>3.547</td>
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</tbody>
</table>

Winter semester

Mathematics, Computer Science, Business Science, Social Sciences

Degree Programmes

- Business Informatics (Bachelor, Master)
- Computer Science (Bachelor, Master)
- Data Science (Master)
- Mathematics (Bachelor, Master)
- Mathematics in Finance and Industry (Bachelor, Master)
- Media Sciences (Bachelor)
- Media Technology and Communication (Master)
- Organisation, Governance, Education (Master)
- Social Sciences (Bachelor, Master)
- Technology-orientated Management (Master)
Life Sciences

Degree Programmes

- Biochemistry/Chemical Biology (Master)
- Biology (Bachelor, Master)
- Biotechnology (Bachelor, Master)
- Chemistry (Bachelor, Master)
- Child and Adolescent Psychotherapy (Approbation)
- Food Chemistry (Bachelor)
- Pharmacy (State examination)
- Psychology (Bachelor, Master)
- Psychotherapy (Approbation)
Degree Programmes

- Architecture  (Bachelor, Master)
- Architecture+  (Bachelor)
- Civil Engineering  (Bachelor, Master)
- Computational Sciences in Engineering  (Master)
- Environmental Engineering  (Bachelor, Master)
- Environmental Sciences  (Bachelor, Master)
- Industrial and Civil Engineering  (Bachelor, Master)
- Transportation Engineering  (Bachelor, Master)
Mechanical Engineering

Degree Programmes

- Aerospace Engineering (Master)
- Automotive Engineering and Mobile Systems (Master)
- Biochemical Engineering (Master)
- Biological, Chemical and Pharmaceutical Engineering (Bachelor)
- Industrial and Mechanical Engineering (Bachelor, Master)
- Mechanical Engineering (Bachelor, Master)
- Metrology and Analytics (Master)
- Pharmaceutical Process Engineering (Master)
- Sustainable Energy Engineering (Master)
- Sustainable Engineering of Products and Processes (Bachelor)
Degree Programmes

- Computer Systems Technology  (Bachelor, Master)
- Electrical Engineering  (Bachelor, Master)
- Electromobility  (Master)
- Electronic Automotive and Aerospace Systems  (Master)
- Industrial and Electrical Engineering  
  (Bachelor, Master)
- Physics  (Bachelor, Master)
- Sustainable Power Systems and Electromobility  
  (Bachelor)
Humanities and Educational Sciences

Degree Programmes

- 2-subject Bachelor’s degree  (B.A. or B.Sc.)
- Culture of the Technical-Scientific World  (Master)
- Educational Sciences  (Bachelor)
- Teacher Training Course – Grundschule  (Master)
- Teacher Training Course – Haupt- und Realschule  (Master)
- Teacher Training Course – Gymnasium  (Master)
International

- 3,300 international students
  from 120 countries = 19 %

Top-notch connections:

- 330 partner universities around the world
- 170 cooperation programmes with European universities (Erasmus)
- Strategic partnerships with universities in France, Great Britain, Italy, Switzerland, the USA, China, Singapore, Japan, Brazil, Mexico and Australia.
Active in the Research Region – networked in Germany

- Research Alliance of Technische Universität Braunschweig and Leibniz Universität Hannover
- Member of TU9
- Strong partner of the research industry
Europe’s Research Region

- Braunschweig is the most active research region in Europe.

- Braunschweig is also Europe’s top investment region, with the highest level of spending on research and development *(eurostat 2015/2018)*.

### TOP 5 REGIONS IN THE EU
#### RESEARCH AND DEVELOPMENT INTENSITY, 2015

<table>
<thead>
<tr>
<th>Region</th>
<th>Research and Development Intensity (% of GDP)</th>
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</thead>
<tbody>
<tr>
<td>Braunschweig</td>
<td>9.50</td>
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<tr>
<td>Prov. Brabant Wallon</td>
<td>6.54</td>
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<tr>
<td>Stuttgart</td>
<td>6.24</td>
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<tr>
<td>Steiermark</td>
<td>5.16</td>
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<tr>
<td>Midi-Pyrénées</td>
<td>4.75</td>
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</table>

*EU-28: 2.04*
The City of Braunschweig – university and life style

- Metropolitan city with 250,000 inhabitants from 150 countries
- Largest city between Berlin and Hanover
- Focal point of a renowned science and research region and an important business hub
- Rich in medieval history, with an exciting present and a high-tech-oriented future
- Broad range of cultural, sporting and recreational activities