We are one of Germany's leading universities of technology
TU Darmstadt incorporates diverse science cultures to create its characteristic profile. The focus is set on engineering and natural sciences, which cooperate closely with outstanding humanities and social sciences.

Enjoying a worldwide reputation for excellent research in our highly-relevant, focused profile areas, we dynamically develop our portfolio of research and teaching, innovation and transfer, in order to continue opening up important opportunities for the future of society.
1836 Established as a higher vocational school and polytechnic institute
1877 Becomes an institute of technology
1913 Germany's first female graduate engineer
2005 Germany's first autonomous university
People

- 25,840 students
- 312 professors
- 2,560 academic employees
- 1,870 non-academic employees

2017/18 figures
Some of the many great names:

**Erasmus Kittler (Electrical Engineering)**
The first professor for Electrical Engineering in the world (chair established by the Technische Hochschule (TH) Darmstadt in 1882)

**Jovanka Bontschits (Architecture)**
1913 Germany's first female graduate engineer

**El Lissitzky (Architecture)**
1909–1915 Painter, architect, typographer, co-founder of constructivism

**Chaim Weizmann (Chemistry)**
1948 First President of the State of Israel

**Gerhard Herzberg (Physics)**
1971 Nobel Prize in Chemistry

**Peter Grünberg (Physics)**
2007 Nobel Prize in Physics
In 2017 TU Darmstadt received a total of 453.2 million euros.

Basic funding from the State of Hesse covers approx. 54.4% of the total budget.
Departments

Engineering
Civil and Environmental Engineering
Architecture
Mechanical Engineering
Electrical Engineering and Information Technology
Computer Science

Natural Sciences
Mathematics
Physics
Chemistry
Biology
Materials and Earth Sciences

Humanities
Law and Economics
History and Social Sciences
Human Sciences
Locations

City centre (Stadtmitte)
Lichtwiese
Botanical Gardens
University Stadium
August Euler Airfield (with wind tunnel)

- 250 hectares of property
- 312,000 square metres of usable space
- 164 buildings
Research Profile
Highly interdisciplinary

Our profile areas:

• Cybersecurity
• Internet and Digitisation
• Matter and Radiation Science
• Thermo-Fluids & Interfaces
• Future Energy Systems
• From Material to Product Innovation
Research leadership

6 DFG Collaborative Research Centres
5 DFG Collaborative Research Centres/ Transfer Units
6 LOEWE Research Clusters in Hesse

Spring 2018 figures
Successful in competition

Top positions in German Research Foundation (DFG) rankings:

- Rank 17 in a nationwide comparison of all German universities (total DFG allocation)
- Rank 2 in Engineering (absolute total)
- Rank 4 in the category “DFG funding per researcher”
Global reputation

TU Darmstadt is the most attractive German university for foreign visiting scholars and researchers in the field of engineering science.

"A top spot in the Humboldt Ranking is an important indicator of international contacts and reputation."

(Alexander von Humboldt Foundation)
Top location for junior academics

Ingenium – Young Researchers at TU Darmstadt: umbrella organization for promoting early career researchers

6 DFG Research Training Groups

2 Graduate schools within the Excellence Initiative
   Graduate School of Energy Science and Engineering
   Graduate School of Computational Engineering

5 Heinz Maier-Leibnitz prizes awarded by the German Research Foundation since 2008
Study Profile
Curious about the future

13 departments
5 fields of study
111 degree programmes
14,140 Bachelor's students
8,680 Master's students
1,240 teacher training students

2017/18 figures; excluding those studying for traditional Diplom or Magister degrees and doctoral students
We have been an internationally oriented university ever since our founding.

In the year 1900, one fifth of our students came from abroad. The situation is just the same today.

We are now one of the German universities with the highest proportion of international students.
Diversity

Our students come from 118 countries including

- **China** (830)
- **India** (340)
- **Pakistan** (190)
- **Iran** (150)
- **Tunisia** (140)
- **Turkey** (120)
- **Syria** (90)
- **Cameroon** (80)
- **Russia** (80)
- **Brazil** (70)
- **Bulgaria** (70)

*All persons with foreign citizenship

2017/18 figures
Students who obtained their university entrance qualifications outside of Germany
Interdisciplinary from the start

Right from the first semester, students work in interdisciplinary teams to find solutions to complex practical tasks.

- Increased road safety for cyclists
- Intelligent waste collection systems
- Luggage with a sense of direction
- Humane refugee camps
Learning with a practical focus

Europe's first Process Learning Factory on campus: students experience the whole value chain from processing raw materials through to assembly.

ETA model factory on campus: researching and demonstrating ways of maximizing energy efficiency in industrial production processes. The project is funded by the federal government, the state and 30 companies.
Strong research focus

Combining the latest research findings with practical application in study:

2007 and 2009 Winner of the Solar Decathlon competition in the USA

2014 World's first energy-plus student residence

2014 World championship title for the most intelligent rescue robot
Our students are involved in more than 60 university groups and
- take on social responsibility,
- find innovative technical solutions,
- form valuable networks of contacts
- and enrich cultural life.
Knowledge and Technology Transfer
Cooperating to find solutions

Our innovative power has earned the support of business, science, government and society.

Strategic partnerships and cooperation with companies:

• Bosch (mobility, industrial engineering)
• Continental (automotive)
• Deutsche Bahn (rail, logistics)
• Merck (healthcare, life science, performance materials)
• Siemens (energy systems, mobility, healthcare)
Encouraging start-ups

85 Knowledge and technology-based companies were founded in and around TU Darmstadt since 2013.

HIGHEST, our centre for innovation and start-ups, inspires up-and-coming entrepreneurs and encourages product and business ideas.

Current successful start-ups

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcan</td>
<td>satellite antennae for reliable vehicle-based Wi-Fi</td>
</tr>
<tr>
<td>Wingcopter</td>
<td>transport drones with aircraft-like capabilities</td>
</tr>
<tr>
<td>Tracktics</td>
<td>intelligent management of performance data in the field of professional sport</td>
</tr>
<tr>
<td>IT-Seal</td>
<td>cyber-crime awareness in the corporate environment</td>
</tr>
<tr>
<td>Compredict</td>
<td>vehicle component operational status sensor technology</td>
</tr>
<tr>
<td>Wer-denkt-was</td>
<td>Internet platforms for digital citizen participation</td>
</tr>
<tr>
<td>Meshcloud</td>
<td>multi-cloud service provider integration in strict and exclusive accordance with German security standards</td>
</tr>
</tbody>
</table>
Strong economic engine

13,000 jobs nationwide linked to TU Darmstadt

400 million euros per year generated in knowledge capital which accumulates long-term and helps to foster innovation and growth

700 million euros per year contributed in gross value added

52% of graduates remain in the Rhine-Main region ten years after graduation, often in key positions

2012 DIW Econ study
FrankfurtRhineMain metropolitan region

**Ranked 1st for internationality**
Proportion of foreign residents: 13.4%
(national average: 8.7%)

**Ranked 2nd for high-level skills**
39.9 students per 1,000 residents
(national average: 32.4)

**Ranked 1st for innovative power**
25.8% of employees work in knowledge-intensive services
(national average: 20.6%)

**Ranked 2nd for economic strength**
GDP of 72,506 euros per person employed per year
(national average: 64,084 euros)

Source: 2016 report on intellectual capital by the Frankfurt RhineMain knowledge region
The Rhine-Main Universities

• Close cooperation in research, studies and teaching
• Connected by 25 major research alliances and research platforms
• Close proximity and broad spectrum of subjects
• Attractive for junior researchers
• Coordinated study options and joint courses
• Configure FrankfurtRhineMain as an integrated, internationally visible science region

Source: Own calculations; Rhine-Main Universities As of 2018
Darmstadt – city of science

European Space Operations Centre
(control centre for the European Space Agency)

GSI Helmholtz Centre for
Heavy Ion Research

3 Fraunhofer Institutes
• Secure Information Technology (SIT)
• Structural Durability and System Reliability (LBF)
• Computer Graphics Research (IGD)

TU Darmstadt cooperates closely with these bodies – and many of the approx. 30 research and scientific institutions in the city.
TU Darmstadt is a focal point for information and communications technologies (ICT)

Facilities here include:

- the Center for Research in Security and Privacy (CRISP), one of Europe's biggest research centres for IT security,
- the Intel Collaborative Research Institute for Autonomous and Resilient Systems (CARS Lab) and
- the world's most powerful network in enterprise software.

### Europe’s top ICT centres

<table>
<thead>
<tr>
<th>Rank</th>
<th>City/Municipality</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Munich, city</td>
<td>100</td>
</tr>
<tr>
<td>2.</td>
<td>Inner London – East</td>
<td>97</td>
</tr>
<tr>
<td>3.</td>
<td>Paris</td>
<td>95</td>
</tr>
<tr>
<td>4.</td>
<td>Karlsruhe, urban district</td>
<td>80</td>
</tr>
<tr>
<td>5.</td>
<td>Cambridgeshire CC</td>
<td>78</td>
</tr>
<tr>
<td>6.</td>
<td>Stockholm country</td>
<td>77</td>
</tr>
<tr>
<td>7.</td>
<td><strong>Darmstadt, city</strong></td>
<td>73</td>
</tr>
<tr>
<td>12.</td>
<td>Bonn, city</td>
<td>59</td>
</tr>
<tr>
<td>15.</td>
<td>Berlin</td>
<td>58</td>
</tr>
<tr>
<td>17.</td>
<td>Aachen, city</td>
<td>55</td>
</tr>
<tr>
<td>21.</td>
<td>Stuttgart, urban district</td>
<td>50</td>
</tr>
<tr>
<td>22.</td>
<td>Heidelberg, urban district</td>
<td>49</td>
</tr>
<tr>
<td>23.</td>
<td>Munich, administrative district</td>
<td>49</td>
</tr>
<tr>
<td>30.</td>
<td>Frankfurt/Main, city</td>
<td>44</td>
</tr>
</tbody>
</table>

Source: 2014 study by the EU Commission on ICT clusters
Darmstadt – city of the future

Excellent prospects

- High density of research institutions and innovative companies
- High proportion of graduates in MINT* subjects
- Many companies embracing Industry 4.0

"Darmstadt is the city of the future. In terms of innovative power, creative potential and industry's readiness for the future, this city of science in the south of Hesse will be one of Germany's most competitive regions by 2030."

*mathematics, information/computer science, natural sciences and technology
Arts and culture

The Mathildenhöhe shown here is a sign of Darmstadt's status as the centre of Jugendstil (Art Nouveau). The Georg-Büchner-Preis, one of Germany's most important literary prizes, is awarded annually by the German Academy for Language and Literature, which is based in Darmstadt.
Words of recommendation
"In my opinion, you definitely ought to go to Darmstadt. They have a good polytechnic school there."

Albert Einstein, 1919