Delegation from Iran
Visit at TU Darmstadt on October, 16th 2018
in cooperation with
German Rectors‘ Conference (HRK) Bonn

Greeting

Prof. Dr.-Ing. Ralph Bruder
Vice President
Academic Affairs
TU Darmstadt
We are one of Germany's leading universities of technology
History

1836 Established as a higher vocational school and polytechnic institute
1877 Becomes an institute of technology
2005 Germany's first autonomous university
People

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

2017/18 figures
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
Highly interdisciplinary

Our profile areas:

• Cybersecurity
• Internet and Digitisation
• Matter and Radiation Science
• Thermo-Fluids & Interfaces
• Future Energy Systems
• From Material to Product Innovation
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
Strategy at TU Darmstadt

• University-wide strategy for the promotion of early career researchers

• Holistic, consistent approach to promoting early career researchers in all qualification phases:
  • Doctoral phase (R1)
  • Postdoctoral phase (R2)
  • Qualification phase for a professorship (R3)

• Needs- and career-appropriate support in all qualification phases
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.
**International**

**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)

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*All persons with foreign citizenship

2017/18 figures

Students who obtained their university entrance qualifications outside of Germany
Reputation and visibility
International presence of TU Darmstadt

• Strategic partnerships
  (Tongji, Virginia Tech, TU Graz)

• High level partnerships with universities and research institutes (new partnerships with e.g. KAIST, Technion, UTSydney, WashingtonStateU, UTexas, UToronto, TRIUMF…)

• Participation in associations and networks (esp. Cluster)
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 fundend by the federal government, the state and 30 companies.
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

Current successful start-ups

- **Alcan**: satellite antennae for reliable vehicle-based Wi-Fi
- **Wingcopter**: transport drones with aircraft-like capabilities
- **Tracktics**: Intelligent management of performance data in the field of professional sport
- **IT-Seal**: cyber-crime awareness in the corporate environment
- **Compredict**: vehicle component operational status sensor technology
- **Wer-denkt-was**: Internet platforms for digital citizen participation
- **Meshcloud**: multi-cloud service provider integration in strict and exclusive accordance with German security standards

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.
Words of recommendation
"In my opinion, you definitely ought to go to Darmstadt. They have a good polytechnic school there."

Albert Einstein, 1919