About FZD

FZD research projects
FZD is involved in several projects with car and motorcycle manufactures as well as automotive suppliers. For example, FZD is doing research in the field of automated driving. Therefore, the automotive institute owns a plurality of test vehicles like Mercedes S-Class, BMW i3, cars and motorcycles from Honda and many more.

Equipment
As FZD has also research projects in brake technology, cargo load safety and driving simulator technology, the institute is equipped with many test rigs, e.g. hydraulic pulse generator and flywheel dynamometer, a wheeled mobile driving simulator etc.

Furthermore, FZD uses the university own test track on the August Euler Airfield in Griesheim for its research.

Darmstadt and TU Darmstadt
Darmstadt is a city with 150k inhabitants and about 30k students. It is approximately 35 km (22 miles) south of Frankfurt. You can reach many exciting areas of Germany and of Europe easily. Technische Universität Darmstadt (TUD) is one of Germany's best universities for mechanical engineering, as confirmed by all known rankings.

Application
Prerequisites
- Enrolled as a student at a participating partner university (Virginia Tech, University at Buffalo, University of Illinois at Urbana-Champaign)
- Graduate or advanced undergraduate (junior year must be completed before arrival in Germany)
- General interest in automotive technologies
- High academic standing
- Willingness to explore German culture
- Participation in extracurricular activities
- US driver's license

Deadlines:
- Please contact your international affairs office for internal deadlines (usually around January)
- TU-Darmstadt: Feb. 15th, 2019

For more information please visit: www.fzd.tu-darmstadt.de/aesg
or contact: ruppert@fzd.tu-darmstadt.de

Contact address
Technische Universität Darmstadt
Fachgebiet Fahrzeugtechnik
Otto-Berndt-Straße 2
64287 Darmstadt
Automotive Engineering Summer Germany

Start your Master Studies early or complete your Bachelor Studies at Technische Universität Darmstadt, Germany.

We offer:
- Studying automotive technology in Germany, where the automobile was born and most of the premium cars are developed and produced
- Studying at one of Germany's best universities for mechanical engineering
- Experiencing the cutting edge of automotive research
- Execution of a research project together with German students

And furthermore:
- Global experience
- The opportunity to travel within Europe
- Learn the German language if you want
- More free time during following semesters – for leisure or to focus on your research
- Becoming acquainted with the German culture

The program consists of three automotive engineering classes (Trends in Automotive Engineering, Advanced Design Project, Automotive Engineering Lab) and some cultural supporting program. Start in Germany will be on May 20th, 2019. The overall duration of the program is 11 weeks and therefore the program officially ends in the evening of August 2nd, 2019. Afterwards, you will have further time to travel around Europe before the fall semester in the US begins.

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<tr>
<th>Orientation</th>
<th>Trends in Automotive Engineering</th>
<th>Advanced Design Project</th>
<th>Automotive Engineering Lab</th>
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<tr>
<td>4 days</td>
<td>7 weeks</td>
<td>3 weeks</td>
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<td>May 20th</td>
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<td>Course Title</td>
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**Trends in Automotive Engineering** is an extension of the knowledge about motor vehicles through lectures on current research topics of FZD's scientific employees, as well as field trips.

**Advanced Design Project** is a team project about an automotive topic. For example, tasks of the last years were the construction of a part for Darmstadt's Formula Student Racing.

**Automotive Engineering Lab** is a combination of lectures and experiments. In experiments theoretical knowledge is put into practice.

All Credits can be transferred to your home university and classes will be held in English, so that no German skills are necessary. Nevertheless, if you want there will be plenty of opportunities to learn some German.

Source: DART racing

**About FZD Staff**

Automotive Engineering at Technische Universität Darmstadt (FZD) is a chair and a research institution within the Department of Mechanical Engineering. Head of FZD is Prof. Dr. rer. nat. Hermann Winner. FZD employs 20 scientific assistants (PhD-students), one chief engineer, several lecturers and administrative staff. Research at FZD is supported substantially by the institute's own mechanic and electronic workshops.

FZD faculty and staff 2018

**Research at FZD**
The scientific employees do research with the support of student assistants primarily in six fields: Driver Assistance Systems, Vehicle Dynamics, Motorcycle, Safety, Brake Technology, and Test Methods.