
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

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Automotive Engineering Summer Germany 2019

Technische Universität Darmstadt
Prof. Dr. rer. nat. Hermann Winner



Automotive Engineering Summer Germany

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

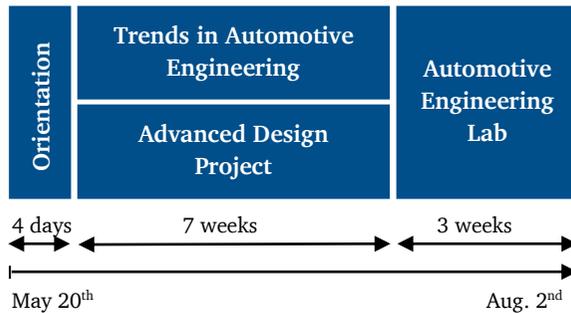
We offer:

- 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.



Classes

Course Title	Type	ECTS / US Credits	Level
Trends in Automotive Engineering	Lecture	4 / 2	Graduate
Advanced Design Project	Lecture & Lab	4 / 2	Graduate
Automotive Engineering Lab	Lecture & Lab	4 / 2	Graduate

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.



DRIVER ASSISTANCE
VEHICLE DYNAMICS
MOTORCYCLE
SAFETY
BRAKE TECHNOLOGY
TEST METHODS