
About FZD

FZD research projects

FZD is involved in several projects with car and motorcycle manufactures and automotive suppliers. For example FZD is working on predictive suspension control strategies and advanced driver assistant systems. Therefore, the automotive institute owns a plurality of test vehicles like Mercedes E- & 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 TUD

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 (currently Virginia Tech and University at Buffalo) during program
- Graduate or advanced undergraduate student
- General interest in automotive technologies
- High academic standing
- Willingness to explore German culture and language
- Participation in extracurricular activities
- US driver's license

Deadlines:

- VT/UB: please contact your international affairs office
- TU-Darmstadt: **Feb. 28th, 2017**

Application process

For more information please visit:

www.fzd.tu-darmstadt.de/aesg

or contact: magiera@fzd.tu-darmstadt.de

Contact address

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Germany

Automotive Engineering Summer Germany 2017

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.

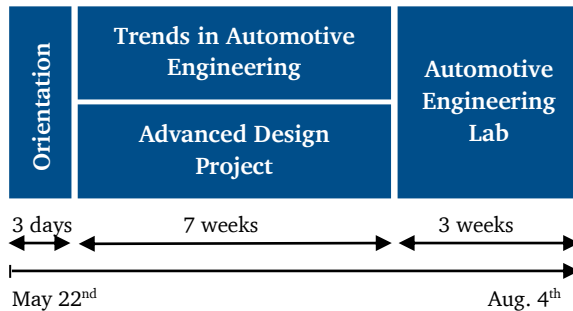
We offer:

- 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
- 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 a language & culture course. Start in Germany will be on **May 22nd, 2017**. Duration of the program is **11 weeks** (until **August 4th, 2017**). Afterwards, you will have time to travel around Europe before 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. A possible topic is the design of a module for Darmstadt's Formula Student Racing Team. You will work hand in hand with German students.

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

Classes will mainly be **held in English**, so that German skills are not necessary before traveling to Europe. Nevertheless, there will be plenty of opportunities to improve your German skills.



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 18 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 2016

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