## ESSLINGEN
### AN IDEAL PLACE TO STUDY



The city of **Esslingen** has a population of over 93,000 inhabitants, and lies nestled in the vineyards overlooking the Neckar valley. Stuttgart, the capital city of Baden-Wuerttemberg, is only 20 kilometres away.

Near the university, there are many hiking paths through the vineyards and forests that can be explored on foot, by bicycle or segway. Within the city, there are many parks, the city castle, waterways, street cafés and theatres. In the winter, the old city centre lights up with a Christmas market; in the summer, live music, open-air cinemas and artisan's markets make Esslingen come to life. Esslingen's historical city centre, with its half-timbered houses, its cafés and its diverse cultural life, is an ideal surrounding for a successful study time.

**Esslingen** has a history reaching back over 1,200 years, a history in which tradition and progress have gone hand in hand. Since its industrialisation, Esslingen has been a major centre for engineering education, and it is this mixture of technical prowess and cultural tradition that makes Esslingen an ideal place to study.

## HOW TO APPLY

**Esslingen University of Applied Sciences**
Flandernstrasse 101
73732 Esslingen
GERMANY
Phone +49(0)711 397–44 74
mengasm@hs-esslingen.de

**Admission Requirements**
I   Vehicle Dynamics Major: Bachelor of Automotive Engineering, Mechanical Engineering or equivalent
I   Software Based Automotive Systems Major: Bachelor of Information Technology, Electrical Engineering or equivalent
I   Car Electronics Major: Bachelor of Mechatronics, Electrical Engineering or equivalent
I   English language test

**Application deadline**
31 March

[ APPLY NOW!

**WWW.HS-ESSLINGEN.DE**

PROGRAMM AKKREDITIERT
Akkreditierungsrat

# AUTOMOTIVE SYSTEMS

**Master of Engineering**

M

# BUILD YOUR CAREER IN AUTOMOTIVE SYSTEMS

Automotive Systems (ASM) students choose one of three majors:
I   Vehicle Dynamics
I   Software Based Automotive Systems
I   Car Electronics

Vehicle Dynamics graduates aim to work in the field of development and testing of innovative functions to improve ride & handling, stability, driveability and fuel economy.

Software Based Automotive Systems graduates aim to work in the field of development, market launch and supervision of innovative car communication systems and safe software.

Car Electronics graduates aim to work in the field of specification, development and testing of control units and their integration in the car.

## MASTER OF ENGINEERING

I   **Build your career in automotive systems**
I   **Study in the heart of the European automotive industry**
I   **Learn to work in an interdisciplinary and intercultural environment**
I   **Study in English – live in Germany**
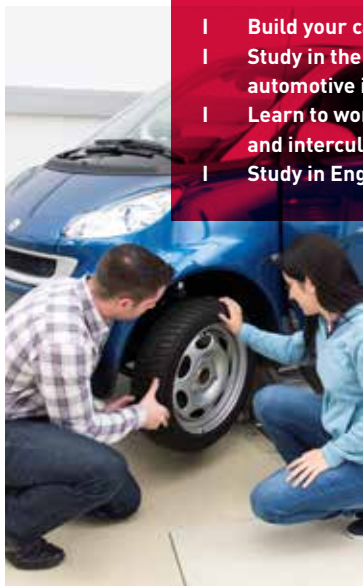
# STUDY IN THE HEART OF THE EUROPEAN AUTOMOTIVE INDUSTRY



As the university is located in the very heart of the automotive industry, students benefit greatly from the close links to the technological and industrial leaders situated in the area, such as **Bosch, Daimler, Audi, Festo, and Porsche**. These are especially important when it comes to master's thesis placement.

### Learn to work in an interdisciplinary and intercultural environment

ASM students have the possibility to work on projects that have been commissioned by the industry. One example is the Electro-Hybrid Bus, the first of its kind in the world. This bus, which showed Esslingen to be a pioneer in electro-hybrid technology, is running in the streets of Esslingen today and has been commissioned by other European cities.

## MASTER OF ENGINEERING AUTOMOTIVE SYSTEMS

**3rd SEM**

Master's Thesis | Soft Skills for Engineers

**2nd SEM**

**Major in Vehicle Dynamics**
Ride and Handling: Handling, Suspension Modeling. Powertrain: Transmission Systems, Transmission Control, Engine Control Systems

**Major in Software Based Automotive Systems**
Automotive Communications: Wireless and Wired Onboard and Offboard Communication Systems, Man-Machine-Interactions (MMI). Reliable Embedded Systems: Safety and Security, Real Time Systems

**Major in Car Electronics**
Electric and Electronic Architecture: Electronics and Communication, Prototyping and Simulation, Optical Systems, Lab Optical Systems. Packaging and Integration: Packaging and Wiring Harness, Automotive EMC, Lab Car Electronics

Simulation and Control 2

Team Project

**1st SEM**

Mathematical Methods in Engineering: Numerical Analysis, Numerical Differential Equations

System Design: Automotive Systems and Software Architectures, Automotive Systems Development Process and System Test

Simulation and Control 1: Basic Control, Advanced Control, Lab Simulation and Control

Vehicles Technology or Electronics Sensors and Measurement Techniques

German language and culture program in September.