

study facts



Optimise your academic success

A mix of small groups, individual support and manifold learning formats offers ideal study conditions and prepares you most effectively for your career.



Professional experience as part of your studies

A practical semester and projects with real clients help you to establish contacts in the professional world at an early stage.



Benefit from the practical experience of our teaching staff

They come from the professional world, impart up-to-date knowledge and prepare you for the demands of the industry.



State University

Our study programmes are accredited and therefore quality-assured. As a state university we do not charge tuition fees.



Outstanding Place of Learning

According to UNESCO, h_da is an 'Outstanding Place of Learning for Sustainable Development'.

Study Programme Automotive Engineering

Faculty of Mechanical and Plastics Engineering
Schöfferstraße 3, Building C 12
64295 Darmstadt
Tel +49 6151 533-5650
sekretariat.fbmkl@h-da.de

Dual Study Programme

Automotive Engineering can also be pursued as a dual study programme:
h-da.de/dual



Counselling & Advice

The first point of contact for most questions about studying is the Student Service Center, or SSC for short. In addition to study counselling and information on the details of the application procedure, the SSC also offers advice on the organisation or financing of your studies.

Student Service Center

Schöfferstraße 3, Building C 23
64295 Darmstadt
Phone +49 6151 533-5555
studienberatung@h-da.de
h-da.de/studienberatung

BAföG Student Grant & Student Accommodation

studierendenwerkdarmstadt.de

Study Abroad

international.h-da.de

All information about the study programme:

fbmkl.h-da.de/automobilentwicklung-master



More on studying at h_da:

h-da.de/praktischunschlagbar



h_da
hochschule
darmstadt

also offered
as a dual
programme

Automotive Engineering

Master of Science

member of

eut+
EUROPEAN UNIVERSITY
OF TECHNOLOGY

Course Outline

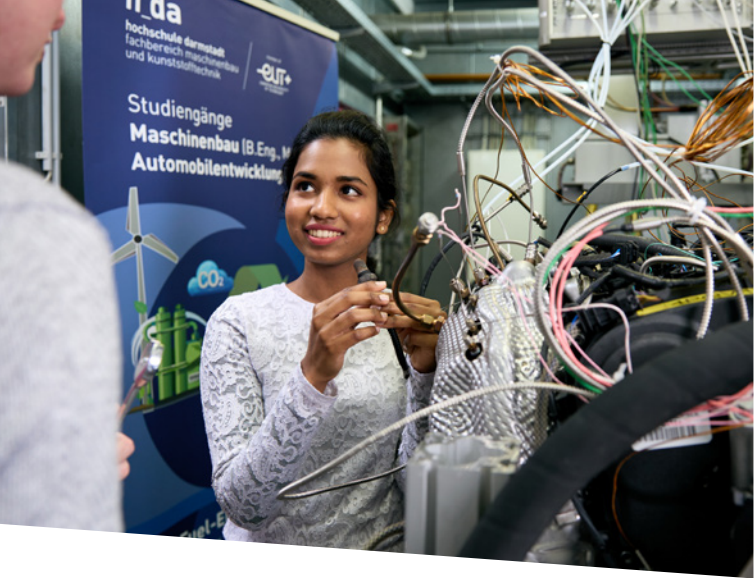
Be it electric drive, hybrid concept or combustion engine, driving dynamics and automated driving - modern vehicles combine different areas of technology. To achieve this, special emphasis needs to be placed on sustainability.

The master’s programme in Automotive Engineering provides comprehensive skills in this diverse range of topics over four semesters. Multiple core electives, including Chassis Development, Aerodynamics, Lightweight Construction, and Eco-Design, allow students to choose an individual focus. Experimental studies and practical computer simulations expand the theoretical learning content in an application-oriented manner. In a larger research project, students work independently and systematically on practical and scientific issues. In doing so, they deepen their scientific and critical thinking skills and link their knowledge from different subject areas. In addition, students acquire management skills.

State-of-the-art laboratories, numerous industry contacts, the EUT+ university alliance and the opportunity to participate in the Formula Student Team offer an ideal study experience. A dual study programme with vocational and academic elements as well as a part-time programme alongside work are available.

I was impressed by the master’s students’ high motivation and good command of English. As engineers with an in-depth understanding of vehicle development, they will be in great demand in the industry.”

Dr.-Ing. Volker Prescher
Deputy General Manager at Hyundai Motor Europe Technical Center GmbH



Entry Requirements

Admission for the master’s programme is granted to candidates having obtained a first degree in a technical engineering subject (bachelor’s degree or diploma, e.g. in Mechanical Engineering, Mechatronics, Automotive Engineering, etc.) with an overall grade “good” or better. In special cases, the Examination Board will decide on admission individually.

The programme usually starts in the winter semester. A start in the summer semester is also possible.

Career Prospects

- Industries (selection):
- automotive and vehicle construction
 - supplier industry
 - drive technology
 - aerospace industry

- Activities (selection):
- research and development
 - design and production
 - management positions
 - employed or self-employed

Those interested in science have the opportunity to deepen their fields of study in a doctoral programme and thus pursue an academic career in research and teaching. Furthermore, the master’s degree qualifies graduates for higher civil service positions at federal and state levels.

Automotive Engineering Master of Science					Career Prospects: The master's degree <ul style="list-style-type: none">• qualifies graduates e.g. for positions in - research and development, - design and production, - management positions, - employed or as a freelancer in the following industries (selection) <ul style="list-style-type: none">- automotive and vehicle construction,- supplier industry,- drive technology,- aerospace industry, <ul style="list-style-type: none">• qualifies graduates for higher civil service positions and• provides an opportunity to pursue a doctorate. The Diploma Supplement, which assigns an ECTS grade from A to E to the grade, simplifies the recognition of the degree abroad.
1 st semester	2 nd semester	3 rd semester	4 th semester		
Multibody Systems, 5 CP	Advanced Driver Assistance Systems and Automated Driving, 5 CP	Innovative Engine Technology, 5 CP	Master's Seminar on Scientific Publishing, 5 CP		
Introduction to Automotive Engineering, 5 CP	Vehicle Dynamics, 5 CP	E-Vehicles and Electrical Systems in Cars, 5 CP	Master's Thesis with Colloquium, 25 CP		
Mechatronic Vehicle Systems, 5 CP	Automotive Engineering Core Elective, 5 CP	Engineering Research Project, 15 CP			
Entry requirements: A qualified bachelor's degree or diploma in one of the fields of mechanical engineering, process engineering, or mechatronics with an overall grade of 2.5 or better and at least 180 CP. <ul style="list-style-type: none">• The faculty offers qualification courses for applicants lacking basic knowledge (e.g. in the fields of mathematics, engineering mechanics, thermodynamics) for the core subjects of the master's programme. Participation in and successful completion of these qualification courses may be defined by the Examination Board as additional courses to the regular master's programme for those applicants. • In individual cases, applicants with a grade of better than 3.0 and an ECTS grade of 'C' or better may be admitted on application. The prerequisite for this is that candidates show a clear affinity to the field of study, in particular through good performance in basic subjects. • English language skills are recommended. For detailed and binding information, please refer to the BBPO.	Automotive Engineering Core Elective, 5 CP	Automotive Engineering Core Elective or Research Project, 5 CP	Economics and Sustainability in Enterprises, 5 CP	Economics and Sustainability in Enterprises Core Elective, 5 CP	
	Automotive Engineering Core Elective, 5 CP	Economics and Sustainability in Enterprises, 5 CP			
	Automotive Engineering Core Elective or Research Project, 5 CP	Interdisciplinary Challenges of Social Developments, 5 CP			

CP: The size of the module blocks corresponds to the average amount of studying and learning required. Credit points (CP) are awarded for modules completed - usually 30 CP per semester. Colour legend: standard module core elective, specialisations interdisciplinary qualifications