

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 General Mechanical Engineering

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

Dual Study Programme

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



Study Programme+

The study programme is also offered as General Mechanical Engineering+ (8 semesters), allowing more time, individual skills training and personal support. fbmk.h-da.de/maschinenbau-bachelor/plus

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:

fbmk.h-da.de/maschinenbau-bachelor



h_da
hochschule
darmstadt



also offered
as a dual
programme

General Mechanical Engineering

Bachelor of Engineering

More on studying at h_da:

h-da.de/praktischunschlagbar



member of
eut+
EUROPEAN UNIVERSITY
OF TECHNOLOGY

Course Outline

Be it vehicles, wind turbines or medical systems - mechanical engineering is the basis for a wide range of technical applications. The bachelor's programme in General Mechanical Engineering provides a broad foundation in engineering over six semesters.

In project work from the first semester onwards, students learn how to design functional and safe products using modern simulation software and how to systematically consider sustainability. The course also covers the influence of materials, the design of manufacturing processes, machine control and economic efficiency in development and production. Numerous core electives, e.g. Circular Design or Virtual Product Development, allow for individual specialisation. In addition, students improve their language and teamwork skills.

At the start of the programme, optional preliminary courses and the Study Programme+ are available. The first year of study is closely interlinked with the Mechatronics and Polymer Engineering programmes, so that a change is possible. The EUT+ university alliance and established non-European partnerships offer a variety of study abroad opportunities.

With excellent qualifications and a strong practical focus, many h_da graduates have become successful employees in our development departments."

Christian Moll

Human Resources Manager,
DILAS Diodenlaser GmbH, Mainz



Entry Requirements

- no admission restrictions (no NC)
- start of studies in the winter or summer semester

The entry requirements include qualifications, such as:

- general higher education entrance qualification (allgemeine Hochschulreife)
- subject-specific higher education entrance qualification valid in Hesse (fachgebundene Hochschulreife)
- technical college entrance qualification valid in Hesse (Fachhochschulreife)
- vocational qualifications: [h-da.de/studium-ohne-abi](https://www.h-da.de/studium-ohne-abi)

Applications with a foreign certificate need to be made via uni-assist.de/en. The 8-week pre-study internship may be completed either before or while studying.

Career Prospects

- product development, design, production, sales
- jobs at a technical level, in management positions or as a freelancer
- jobs in global companies or regional SMEs

Industries (selection):

- mechanical and plant engineering
- vehicle construction
- energy and environmental technology
- aerospace technology
- medical technology
- materials technology
- management consulting

General Mechanical Engineering			Bachelor of Engineering			Master			
1 st semester	2 nd semester	3 rd semester	4 th semester	5 th semester	6 th semester	7 th semester	8 th semester	9 th semester	10 th semester
Development of Sustainable Systems, 10 CP	Mathematics, 15 CP	Machine Elements and Design 1, 5 CP	Machine Elements and Design 2, 10 CP	Production Engineering, 5 CP	Practical Phase and Basics of Project Work (Introduction in the 5 th semester), 15 CP	The following consecutive master's programmes can be pursued after completing the bachelor's degree: 1. Mechanical Engineering – Master of Science 4 semesters – 120 CP 2. Automotive Engineering – Master of Science 4 semesters – 120 CP Qualification courses prepare students for following master's programmes: 3. Polymer Engineering – Master of Science 4 semesters – 120 CP 4. Industrial Engineering – Master of Science 4 semesters – 120 CP 5. Mechatronics – Master of Science 4 semesters – 120 CP The Diploma Supplement, which assigns an ECTS grade from A to E to the grade, simplifies the recognition of the degree abroad.			
		Thermodynamics, 7.5 CP	Machine Dynamics, 5 CP						
Engineering Mechanics: Fundamentals of Elastostatics, 5 CP	Engineering Mechanics: Elastostatics and Specialisation, 5 CP	Control Engineering, 5 CP	Engineering Core Elective, 5 CP	Bachelor's Thesis with Colloquium, 15 CP					
Materials Engineering, 10 CP	Engineering Mechanics: Kinematics and Kinetics, 5 CP	Fluid Mechanics, 5 CP	Engineering Core Elective, 5 CP						
Manufacturing Processes, 5 CP		Computer-Aided Methods, CAx, 5 CP	Engineering Core Elective, 5 CP	Engineering Core Elective, 5 CP					
Computer Science, 5 CP	Measurement Technology, 5 CP	Electrical Engineering, 5 CP	Interdisciplinary Challenges of Social Developments, 5 CP	Fundamentals of Business Administration, 5 CP					
			Technical English, 2.5 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

practical phase

core elective, specialisations

interdisciplinary qualifications

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 final thesis