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'.

More on studying at h_da:
h-da.de/praktischunschlagbar

Study Programme Polymer Engineering
Faculty of Mechanical and Plastics Engineering
Darmstadt Institute of Plastics Processing – ikd
Haardtring 100, Building A 14
64295 Darmstadt
Phone +49 6151 533-68523
sekretariat.fbmk@h-da.de

Dual Study Programme
Polymer 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:
fbmk.h-da.de/polymer-engineering-master

h_da
hochschule darmstadt

also offered as a dual programme

Polymer Engineering

Master of Science

member of EUT+ EUROPEAN UNIVERSITY OF TECHNOLOGY

Course Outline

The master's programme in Polymer Engineering deepens basic engineering knowledge in the field of plastics technology. Over four semesters, students acquire specific specialist knowledge and the ability to think critically and scientifically with interdisciplinary references.

In projects, students independently develop solutions to current issues from practice or research using scientific methods. An extensive catalogue of core electives, including Lightweight Construction, AI Applications, Recycling Technologies and Innovation Management, allows for individual specialisation. In addition, students acquire management skills.

Lecturers from other renowned research institutions enhance the programme to ensure a practice-oriented education with a balanced theoretical component. Modern laboratory equipment, manageable group sizes, numerous industry contacts and the EUT+ university alliance offer ideal study conditions. A dual study programme with vocational and academic elements as well as a part-time programme alongside work are available.

"In the plastics industry, we need competent employees with sound, practice-oriented training. We have had very good experiences with graduates of the bachelor's and master's programmes in Polymer Engineering at Darmstadt University of Applied Sciences."

Christian Tilsner
M. Eng., Technical Director,
MHT Mold & Hotrunner Technology AG

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 Polymer Engineering, Mechanical Engineering, Technical Chemistry, Precision Engineering, etc.) with an overall grade of "good". In special cases, the Examination Board will decide on admission individually. For those new to the field of study, the faculty offers qualification courses during the first semester.

The programme starts in the winter or summer semester.

Career Prospects

Typical industries and activities:

- research and development
- management positions
- employed or self-employed
- plastics production and plastics engineering
- design and development of plastic components
- plastics processing

The master's programme qualifies graduates for higher civil service positions and enables them to pursue a doctorate at the 'Sustainability Sciences' doctoral centre at Darmstadt University of Applied Sciences or at other German or foreign universities.

Polymer Engineering Master of Science

1st semester	2nd semester	3rd semester	4th semester
Statistical Methods/AI, 5 CP	Design of Injection Molds, 10 CP	Ecological Assessment of Technical Products, 5 CP	Master's Seminar on Scientific Publishing, 5 CP
Design of Extrusion Processes, 10 CP		Reactive Plastics Processing, 5 CP	Master's Thesis with Colloquium, 25 CP
	Engineering Research Project, 5 CP	Polymer Engineering Core Elective or Research Project, 5 CP	
Material Cycles, 5 CP	Polymer Engineering Core Elective or Research Project, 5 CP	Polymer Engineering Core Elective or Research Project, 5 CP	
Advanced Plastics Materials Science, 5 CP	Polymer Engineering Core Elective or Research Project, 5 CP	Corporate Organisation, 5 CP	
Polymer Engineering Core Elective, 5 CP	Interdisciplinary Challenges of Social Developments, 5 CP	Economics and Sustainability in Enterprises Core Elective, 5 CP	

Entry requirements:

A qualified bachelor's degree or diploma in polymer engineering or plastics technology with an overall grade of 2.5 or better and at least 180 CP.

- The faculty offers qualification courses for applicants with bachelor's degrees or diplomas in other engineering subjects (e.g. mechanical engineering, mechatronics, electrical engineering). 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.

Career Prospects:

The master's degree

- qualifies graduates e.g. for positions in plastics production and processing in
  - research and development,
  - design and production,
  - design and components development,
  - management positions

  in the following industries (selection)
  - plastics manufacturing, processing and recycling,
  - machine and tool construction,
  - construction and building components,
  - aerospace technology, automotive industry,
  - medical technology, electrical and electronics industry,
  - sports, leisure and consumer goods,
  - sustainable packaging,
- 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.

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, final thesis, practical phase, core elective, specialisations, interdisciplinary qualifications