Deutscher Akademischer Austauschdienst
German Academic Exchange Service

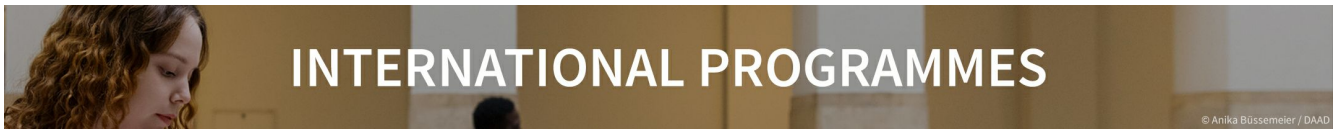

Table of Contents

Master's degree

Electrical Engineering and Information Technology

Darmstadt University of Applied Sciences • **Darmstadt**

Overview

Degree	Master of Science
Teaching language	• English
Languages	• All courses are offered in English. • Additional German classes ensure that our international students reach at least level A2 in German by the end of this course of study.
Full-time / part-time	• full-time
Programme duration	4 semesters
Beginning	Winter semester
Additional information on beginning, duration and mode of study	The programme starts on 1 September with language courses and technical bridging classes. Please check the following website for details: https://mse.h-da.de/our-service/overview.
Application deadline	• 31 March for the following winter semester • No intake in the summer semester • For more information, please check our website:https://mse.h-da.de/our-service/overview.
Tuition fees per semester in EUR	None
Combined Master's degree / PhD programme	No
Joint degree / double degree programme	Yes
Description/content	After a two-semester programme at the university, the students will attend a six-month internship in industry, which is followed by another six-month Master's thesis that will be conducted in industry. This set-up ensures a smooth transition into a professional career either in a German company or worldwide. The programme has been designed to offer various chances to apply what has been learned in the lectures during laboratories. Please check our website https://mse.h-da.de for additional details on the course content and structure. **Common Modules**

All students will attend courses in Technical Management and will perform a semester project. The rest of the curriculum depends on the chosen major.

Automation Major

Automation plays an important role not only in industry but also in our everyday lives, from medical technology to building management. Our electrical engineering faculty is particularly competent in automation. Close cooperation with industry in the Rhein-Main area characterise these focal points. The main foci deal with current issues in control engineering, robotics, factory automation and the Industrial Internet of Things. Identification of dynamic systems, adaptive controls, process visualisation and bus and control technology as well as sensor and actuator technology are analysed and deepened in theory and practice.

Communications Major

The communications major programme offers in-depth background encompassing state-of-the-art communication techniques. The programme builds the students' ability to participate in research and implements projects dealing with modulation and coding schemes. It also expands the students' knowledge on microwave components and systems as well as theory and applications of discrete time signals.

Embedded Electronics and Microelectronics Major

Embedded systems have tremendously influenced our everyday life over the last decade – ranging from wearables and smartphones to medical devices, the Internet of Things and autonomous transportation. Computation power and the available memory of microcontrollers have tremendously grown over the last years, allowing the implementation of complex algorithms like machine learning or computer vision in embedded devices as well. As embedded systems interact with the environment, the design and realisation of hardware solutions also play an important role in this major, which focuses on state-of-the-art microcontrollers and FPGAs, embedded programming, real-time systems and hardware-driven system design.

Power Engineering Major

We do not know what the car of the future will look like, but it will definitely be electric. Energy technology is setting the course for our future. This area ensures that electrical energy is provided safely, sufficiently, cost-effectively and in an environmentally compatible manner. The courses focus on power generation, renewable energy, power distribution and smart grids as well as on e-mobility, electric drives and control of drive systems.

Course Details

Course organisation	The course consists of two semesters with lectures/labs and German classes as well as two semesters in industry (industrial project and Master's thesis). • Semester one: academic theory courses (lectures and labs) • Semester two: academic theory courses (lectures and labs) • Semester three: industrial internship • Semester four: Master's thesis Please check https://mse.h-da.de/program/overview for a detailed course description. » PDF Download
A Diploma supplement will be issued	Yes
International elements	• Language training provided • Training in intercultural skills • Projects with partners in Germany and abroad • International guest lecturers

- Courses are led with foreign partners

Diverse intercultural background of students	Students are from all over the world.
Integrated internships	With a strong emphasis on practical laboratory work, we ensure that you gain solid experience to start a successful career in a highly qualified job in the high-tech engineering industry in Germany or abroad. Many renowned companies cooperate closely with the h_da. Therefore, an important step during the programme is the mandatory internship of six months during the third semester. The student will work at a leading German or international company during this internship. The internship serves as a "door opener" for the Master's thesis, which is also performed in R&D intensive industry.
Course-specific, integrated German language courses	Yes
Course-specific, integrated English language courses	Yes

Costs / Funding

Tuition fees per semester in EUR	None
Semester contribution	• The semester fee is around 337 EUR per semester. It includes a nationwide semester ticket. • After admission to the programme, one-time fees are due. For more information, please check our website: https://mse.h-da.de/admission/tuition-fees.
Costs of living	The cost of living is around 1,000 EUR per month in Darmstadt. Please check our website for additional information on the cost of living: https://mse.h-da.de/admission/tuition-fees.
Funding opportunities within the university	No

Requirements / Registration

Academic admission requirements	Applicants must have a BEng/BSc in electrical engineering or an equivalent degree in electrical or electronics engineering, information technology, computer science, or a closely related field. Outstanding performance during undergraduate studies is required. Please check our requirements here: https://mse.h-da.de/admission/international-students.
Language requirements	Very good knowledge of English is required; applicants must provide a certificate: • TOEFL Internet-based score 88 or better • IELTS minimum band score 6.5 or better

Application deadline	• 31 March for the following winter semester • No intake in the summer semester • For more information, please check our website:https://mse.h-da.de/our-service/overview.
Submit application to	https://mse.h-da.de/admission/overview

Services

Possibility of finding part-time employment	Jobs (as a "Werkstudent") are available in various companies in the Rhine-Main region, although availability depends on prior experience and accomplishments. The university has a career centre to support you in finding a job. The internship and Master's thesis (semesters three and four) are conducted in industry and are paid.
Accommodation	In Germany, dormitories are off campus. As we know that it is very challenging to organise a room from a foreign country, we have reserved a sufficient number of rooms in residence halls of the "Studierendenwerk Darmstadt" and help our international students by establishing the contact between them and the housing agency. There are different student residences available, and most of them are close to campus. The rental period is at least 12 months, starting on 1 September. All rooms are furnished with a bed, wardrobe, desk, and chair. Kitchen and bathrooms are shared with other students in the same apartment. All student residences have Internet access.
Career advisory service	More than 80% of our graduates stay and work in Germany! This is one of the key aims of our programme. • The university has an in-house career centre that supports students with finding a job. • Special trainings are offered to support the application process. • Professors guide you during your internship and Master's thesis in industry and act as mentors. • In-house fairs such as meet@h_da and regional fairs, e.g. Konaktiva Darmstadt are held once a year. We focus on our students' good integration into the German labour market. We provide supplementary courses such as legal English and German courses up to level B2, intercultural trainings, and excursions.
Support for international students and doctoral candidates	• Welcome event • Tutors • Accompanying programme • Specialist counselling • Cultural and linguistic preparation • Visa matters • Pick-up service • Buddy programme • Help with finding accommodation • Support with registration procedures
General services and support for international students and doctoral candidates	• Technical and cultural excursions, technical bridging classes, German classes • Please find more information on our website:https://mse.h-da.de/our-service/overview.
Supervisor-student ratio	17/1,000

Darmstadt University of Applied Sciences

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h_da is one of the largest universities of applied sciences in Germany with approx. 17,000 students and 70 degree programmes.
Its teaching and research capacity ranges from engineering sciences, natural sciences and mathematics, and information sciences and informatics to economics and society, architecture, the media, and design.
Quality characteristics of the university include good student mentoring and a clear practical orientation to ensure a good study progress.
Various independent studies have regularly confirmed the good reputation of its graduates.

Darmstadt University of Applied Sciences (h_da) is taking on a pioneering role nationwide with its goal of becoming a European university.
To this end, it intends to merge completely with its eight other partners from the EUt+ (European University of Technology) university alliance in the long term.

h_da

University location

Darmstadt is a "City of Science". This designation, granted in 1997 with a certificate by the Hessian Ministry of the Interior, recognises the national and international importance of the city in the areas of science and research. Three Fraunhofer institutes have their home in Darmstadt: IGD, LBF and SIT. Darmstadt is a capital of European space technology due to its two central institutions: Eumetsat – the meteorological centre of Europe – and ESA/Esoc – the European Space Operations Centre.
Darmstadt's globally operating companies such as Merck, Software AG, Wella, Goldwell/KPSS, Evonik-Röhm, Schenck-Process or Schenck-RoTec have distinctive departments of research and development at their disposal.
The renowned GSI Helmholtz Centre of Heavy Ion Research performs research in physics and related natural science disciplines. Many elements were discovered here for the first time, such as "Darmstadtium" – element 110 of the periodic table of elements – named after the home town of GSI. The element is also commemorated in the name of the Science & Congress Centre.
The city has an exceptionally fortunate location in the centre of Europe. It lies just half an hour away from the international Rhine-Main airport in Frankfurt. As a medium-sized city with more than 140,000 inhabitants, it offers 120,000 jobs – a remarkably favourable ratio.
The city is the economic and cultural centre of the southern Rhine-Main area. In education, leisure, culture, shopping or sports, many visitors find Darmstadt to be a friendly city in the Rhine-Main-Neckar area.

Contact

Darmstadt University of Applied Sciences
Faculty of Electrical Engineering and Information Technology

Prof Dr-Ing Peter Fromm

Birkenweg 8
64295 Darmstadt

master.fbe@h-da.de
Course website: https://mse.h-da.de
Sabine Francois

Tel. +49 615153368839
Email

https://www.youtube.com/c/IMSEITHochschuleDarmstadt

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