

  
**HSD**

Hochschule Düsseldorf  
University of Applied Sciences



Faculty of Electrical  
Engineering and  
Information Technology

**Bachelor of Engineering**

# **Industrial Engineering – Electrical Engineering Branch**

## **Profile**

This bachelor's programme is tailored to students who are interested in technical and business-related contents and want to develop in-depth knowledge in a very practice-oriented study programme.

The interdisciplinary study programme combines business administration with technology. On the one hand, it provides you with skills such as knowledge of products, their design and production, and on the other hand, you gain an understanding of the complexity of project controlling and the management of interfaces.

The syllabus is divided into modules. The basic modules teach you the fundamentals of business administration, natural sciences and mathematics as well as electrical engineering and information technology. Courses on various topics in economics, electrical engineering and information technology also form part of the programme.

We react quickly and agilely to innovations and adapt module contents in all areas of specialisation accordingly. Thanks to our broad range of elective modules on technical and economic contents, you get to pick your own specialisation and build your individual syllabus accordingly.

Besides lectures and exercises, the syllabus includes extensive practical elements, such as practical trainings, that take place from the very first semester onward. In state-of-the-art laboratories, you learn to work in teams responsibly and to independently realise projects in small groups. On field trips, during the realisation of a project as part of the Design Project course and during the practical phase of several months, you get in touch with businesses in the region and may already find your future place of employment.

**Please note:** Language of instruction is mainly German.

## **Career Prospects**

The main objective of the Faculty of Electrical Engineering and Information Technology is to provide you with a solid and high-quality education, to challenge you intellectually and to broaden your horizons. We prepare you in a goal-oriented manner to become leading industrial engineers with solid technical expertise and practical know-how in the German and international job markets.

The bachelor's programme in industrial engineering offers you excellent job and promotion opportunities as the demand for specialists continues to be high in businesses. If you are looking for employment as a junior engineer, you will find numerous high-paying entry-level job offers. Thanks to the interdisciplinary study programme, industrial engineers can work in almost all kinds of corporate divisions.

## **Admission Requirements**

Please check if you meet all requirements for admission to the study programme. Further information:

[ei.hs-duesseldorf.de/bwi-en](http://ei.hs-duesseldorf.de/bwi-en)

# SYLLABUS

## **SEMESTERS 1-3 TECHNICAL MODULES**

- Fundamentals of Automation Technology
- Fundamentals of Electrical Power Engineering
- Fundamentals of Electrical Engineering
- Fundamentals of Computer Science
- Fundamentals of Information Technology
- Fundamentals of Microelectronics
- Mathematics
- Fundamentals of Natural Sciences

## **SEMESTERS 1-5 ECONOMIC MODULES**

- Accounting, Annual Accounts and Controlling
- Fundamentals of Business Administration
- Intercultural Management and Business Etiquette and Quotation
- Industrial Marketing
- Investment Calculation
- Cost Accounting, Results Accounts and Pricing
- Market Analysis and Operations
- Market Research and Statistics
- Sales, Products and Services

## **SEMESTERS 4-5 TRANSFERABLE SKILLS MODULES**

- Project Management and Business Simulation
- Design Project
- Technical and Business English
- Technical Elective Modules
- Economic Elective Modules

## **SEMESTER 6 PRACTICAL PHASE AND BACHELOR'S THESIS**

Please check the module manual (currently available in German only) for detailed information on the contents of the study programme.

## Further Information

### Faculty contact:

Dean's Office at the Faculty of Electrical Engineering and Information Technology

T +49 211 4351-2300

[dekanat.ei@hs-duesseldorf.de](mailto:dekanat.ei@hs-duesseldorf.de)

About the programme, admission requirements and application:

[ei.hs-duesseldorf.de/bwi-en](http://ei.hs-duesseldorf.de/bwi-en)

## Get in Touch

### Admissions Office

[zulassung@hs-duesseldorf.de](mailto:zulassung@hs-duesseldorf.de)

[hs-duesseldorf.de/zulassungsstelle](http://hs-duesseldorf.de/zulassungsstelle) (in German only)

### Student Advisory and Counselling Service (ZSB)

[studienberatung@hs-duesseldorf.de](mailto:studienberatung@hs-duesseldorf.de)

[hs-duesseldorf.de/zsb-en](http://hs-duesseldorf.de/zsb-en)

### International Office (IO)

[international-office@hs-duesseldorf.de](mailto:international-office@hs-duesseldorf.de)

[hs-duesseldorf.de/io-en](http://hs-duesseldorf.de/io-en)

### Family Support Centre

[familienbuero@hs-duesseldorf.de](mailto:familienbuero@hs-duesseldorf.de)

[hs-duesseldorf.de/fam-en](http://hs-duesseldorf.de/fam-en)

### Disability Services (ABS)

[barrierefrei@hs-duesseldorf.de](mailto:barrierefrei@hs-duesseldorf.de)

[hs-duesseldorf.de/abs-en](http://hs-duesseldorf.de/abs-en)

### Psychological Counselling Service (PSB)

[info.psb@hs-duesseldorf.de](mailto:info.psb@hs-duesseldorf.de)

[hs-duesseldorf.de/psb-en](http://hs-duesseldorf.de/psb-en)

## HSD Invites You

Visit us! Join courses during our yearly trial week (*Schnupperstudium*) and attend our information events (e.g. *Tag der offenen Tür*, *Hochschulinformationstage*, *Wochen der Studienorientierung*).

Information on all events (in German only):

[hs-duesseldorf.de/zsb\\_veranstaltungen](http://hs-duesseldorf.de/zsb_veranstaltungen)

HSD on social media  
[facebook.de/hsduesseldorf](https://facebook.de/hsduesseldorf)  
[instagram.com/hsduesseldorf](https://instagram.com/hsduesseldorf)

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