

# Industrial Engineering and Management

Hochschule Fresenius, Campus Köln  
Bachelor of Engineering



## Program

Are you fascinated by the interplay between technology and business, especially in the realm of digitalization? Our bachelor's program in Industrial Engineering and Management (B.Eng.) equips you with the skills to analyze, link, and optimize technical and business processes, enabling you to actively participate in digital transformation. With this qualification, you will be prepared to assume pivotal roles at the interface between development, production, and management - both nationally and internationally.



## Key Facts

**Semester 6**  
**Credits** 180 CP  
**Studienbeginn** Winter semester  
**Sprache** Englisch  
**Studiengangsform** Full time  
**Bewerbungsfrist** possible all year round  
**Studiengebühren** 950,00 € monthly + 70,00 € per month (non-EU)

## Contact

**Study advice**  
Phone: +49 (0)221 650339 88  
E-Mail: [study@hs-fresenius.de](mailto:study@hs-fresenius.de)

[Request info brochure!](#)

## Content

### Curriculum

- Foundational engineering principles, mathematics/natural sciences
- Fundamentals in economics and finance
- Quantitative methods, Data Science and Data Analytics
- Principles of Computer Science and Digital Transformation

### Specializations

In your fourth and fifth semesters, you'll have the chance to concentrate on two specialized fields based on what interests you most. This gives you the freedom to personalize your studies, allowing for deeper understanding of subjects that are both engaging and important for your professional development. If needed, you can complete these specialization courses flexibly, either online or on campus. The available options include:

- Technical Services
- Production and Logistics (incl. lab-work)
- International Management
- Industry 4.0

### Practical focus

This program focuses on practical experience alongside solid theoretical knowledge. Early on, you'll gain hands-on skills through practical labs in the fourth and fifth semesters—two digital and one in-person, such as a two-day session at a partner company. Interactive workshops, guest lectures, and excursions further enhance learning. You can also choose a practical semester in the sixth semester, extending your studies to seven semesters and allowing you to apply your knowledge in a real business environment.

## Career

### Career Prospects

As a graduate of the bachelor's program in Industrial Engineering and Management (B.Eng.), you will have diverse career opportunities with global companies, both in Germany and internationally. Possible industries and positions include:

- Business Consultant
- Product and Project Manager
- System Analyst
- Controlling Specialist
- Supply Chain Manager
- Sales and Production Manager
- Product Development Engineer
- Customer Service Manager
- Configuration Manager
- Sales and Systems Administrator

## Admission

### Admission Requirements

To apply for the Industrial Engineering and Management (B.Eng.) program at Fresenius University of Applied Sciences, you need either a recognized university entrance qualification or to pass the university's entrance exam. Additionally, you must demonstrate English language skills at least at level B2 of the Common European Framework of Reference for Languages (CEFR) through an accepted language certificate.

Wirtschaftsingenieurwesen

Produktionstechnik