

Study programme:

Master of Science Industrial Engineering

Full-time

Why study Master of Science Industrial Engineering?

The world is moving towards Industry 4.0. Industrial engineering, central to manufacturing and industry, needs to fulfil the increasing demands for more flexible, individual and efficient production and sustainable processes. A new generation of industrial engineering with continuing focus on the management and optimisation of production, processes and value chains remains crucial to all industries worldwide.

The rapid development of the industrial world calls for specialised professionals who have comprehensive knowledge and expertise of industrial engineering with in-depth understanding on industrial processes and all related management methods.

The FOM Master's study programme "Industrial Engineering" is developed to meet the fundamental needs of the ever-changing industrial dynamic under digitalisation. The programme contents are specifically geared to the anchoring management requirements of the industrial sector. Students of

this programme will acquire focused management skills for classic industries, processes and operations in line with forefront international standards. Graduates of this programme are capable of handling a wide range of possible applications in the context of modern industry and qualified for demanding management positions in engineering area in national and international companies across all industries.



Studying in Essen, Germany

Germany, the world's 4th largest economy, birthplace of Industry 4.0. Essen, centre of the Ruhr Region, heart of the eminent German industry with distinguished engineering tradition, pioneering industrial visions and a modern, vibrant economy. With the many powerful residing multinationals, strong SMEs and thriving start-ups, Essen is among the most popular destinations for practice-oriented study leading to ample career opportunities.

As one of the European Green Capitals, the city offers countless recreation possibilities accompanied by plenty of cultural highlights: the renowned Folkwang Museum, the Krupp Residence Villa Hügel, UNESCO World Heritage Zollverein Coal Mine Complex, Red Dot Museum, theatres and concert halls. Open, vibrant, and versatile – Essen is waiting for you.



FOM University

FOM University was founded in 1991 at the initiative of the non-profit "Stiftung BildungsCentrum der Wirtschaft" (Foundation for the Centre of Education for Trade and Industry). With more than 50,000 students on 35 campuses in Germany, FOM is one of the largest universities in Europe. Focus of the university is to provide students with practice-oriented higher education to promote knowledge transfer between the university and business.

FOM works extensively with German companies of different scales and major international corporations. Its integral connections with over 10,000 cooperation partners across all sectors of the economy offer exclusive study opportunities to combine academic studies and professional improvement through unique learning experience. Parallel to the traditional on-campus study format, FOM expands its digital landscape through the innovative "Digital Live Study", offering worldwide accessible interactive lectures broadcast live from the state-of-the-art, multifunctional high-tech studios to provide students with maximum flexibility. FOM is where the transfer between theory and practice takes place – in both traditional and digital ways.

KEY FACTS

Language
English

Time model
Full-time (daytime)

Duration
3 semesters including thesis

Place of study
Essen, Germany

Credit points
90 ECTS

Fees
Registration fee: 1,580 €, Tuition fee: 15,570 €, Examination fee: 350 €, **Total cost: 17,500 €**

Degree
Master of Science (M.Sc.)

Admission requirements

- University degree with 210 ECTS
 - in the field of industrial engineering;
 or
 - a University degree with 210 ECTS
 - having at least 60 ECTS in engineering + completion of bridge course Business Administration;
 or
 - having at least 60 ECTS in economics + completion of bridge course Engineering & Technology;
 or
 - in any subject field + 1.5 years of relevant professional experience related to industrial engineering + completion of both bridge courses mentioned above.
- English language proficiency B2

Note:

Admission to the programme with a university degree of 180 ECTS is also possible. Please contact us for more information.

CONTACT



Michaela Schönherr-Gündogdu M.A.
incomings@fom.de
+49 201 81004864



Lena Brülls M.A.
incomings@fom.de
+49 201 81004864



Prof. Dr. Dr. habil. Clemens Jäger
incomings@fom.de

Bridge Courses for Self-Study

Business Administration / Engineering & Technology / Design

Preparation Courses for International Master's Programmes

Prior knowledge in a related subject field is often mandatory for attending a Master's programme. Our bridge courses for self-study provide you with the opportunity to acquire the necessary subject knowledge required for your chosen degree programme before the programme starts – regardless of your time zone and location.

The bridge courses are Moodle-based and free of charge for candidates of our international Master's programmes.

Bridge Course Business Administration

80 to 100 Hours of Self-Study

- Introduction to Business Administration
- Strategic Management
- Operating Functions and Value Chain
- Operational Accounting and Controlling
- Financial Management and Risk Management

Corresponding programmes:

- M.Sc. Industrial Engineering
- M.A. Design & Innovation Management

Bridge Course Engineering & Technology

80 to 100 Hours of Self-Study

- Introduction to Technology, Modelling & Engineering Science
- Mechanical Engineering, Product Design & Simulation
- Sensor and Embedded Systems, Signal Processing & Computer Networks
- Process Engineering, Production Systems, Automation processes & Digital Transformation
- Energy and Sustainability

Corresponding programmes:

- M.Sc. Industrial Engineering

Bridge Course Design

80 to 100 Hours of Self-Study

- Design Process
- Design Areas in the Company / Agencies
- Communication Tools for Brands and Corporate Communications
- Recognising the Relevance of Corporate Identity in Design Management
- Marketing Management and Consumer Behaviour

Corresponding programmes:

- M.A. Design & Innovation Management

Registration & Instructions

You fulfil nearly all entry requirements of your chosen Master's programme but just need to acquire necessary knowledge in a related subject field? Along with the confirmation to your programme registration, you will receive an automatic admission to a suitable bridge course. Your access to the course in Moodle will be activated immediately. In the course platform, you are going to follow the instructions in the course plan, study the provided readings on your own, and finish the given questions and exercises. Hints to answers are indicated in the end so that you can check your learning outcome. Online counselling sessions are available to help you clarify your questions. An online oral exam of 15 minutes with focus on practical problem-solving in the subject field concludes the course. Successful completion qualifies you for final admission to your chosen degree programme.

Online counselling sessions and oral exam require registration in advance. Up to two exam repetitions are allowed.

For more information, please contact the International Office: incomings@fom.de.