Come closer to success

in an exciting study program
at the Faculty of Technology.

Contact

We will be happy to help you!

For general questions:
Our student advisory service

Phone +49 4921 807-7575
» zsb@hs-emden-leer.de

For questions about the degree program:

Faculty of Technology
Department of Electrical Engineering and
Computer Science
Phone +49 4921 807-1841
» sekretariat.emi.technik@hs-emden-leer.de

Interested in this degree program?
More information available at
» www.hs-emden-leer.de/en/sl/mii

or come and see us in Emden.
Visit the university and the laboratories,
and find out more in a personal meeting.

CLOSE TO SUCCESS.

Status: 03.2021

↳ Faculty of Technology

Industrial Informatics

» Industrial information, automation and communication
  technologies
» Industrial digitalization
» Cyber-physical systems and roboticsh

Master of Engineering (M.Eng.)

Come closer » www.hs-emden-leer.de/en

Your future career field

The master's degree program in Industrial Informatics
opens up a wide variety of fields of activity with excellent
career opportunities at home and abroad, especially in
medium-sized companies and industrial enterprises that
offer innovative products, solutions, and services for a ra-
pidly growing market. With this degree program, you are
very close to the topics that are increasingly important in
our digitalized and networked society:

↳ **Industrial Cyber-Physical Systems (ICPS)**

↳ **Industrial digitalization and**
   Industry 4.0 technologies

↳ **Engineering of Industry 4.0-enabled systems**

↳ **Industrial automation, mechatronics and**
   robotics systems

Your degree program

The master's degree program Industrial Informatics offers
you practical training in the field of industrial application
of electrical engineering and computer science. The care-
fully selected contents of the program guarantee you suc-
cessful entry in fields of activity that are in high demand
in the industrial environment due to the growth of infor-
mation technologies.

In addition to the lectures and practical courses, in-depth
projects and accompanying seminars in particular provide
intensive preparation for independent and scientific work.
The degree program takes up topics from current research
projects, which we carry out in cooperation with interna-
tionally active companies and research institutions. This
enables you to establish yourself - with the best training -
in the growing, future-oriented job market.

Industrial Informatics in Emden

The Faculty of Technology offers you a coordinated spectrum of ideally complementary degree programs in the Department of Electrical Engineering and Computer Science. Consistently updated, these programs take into account the dynamic development in the fields of industrial information, communication, automation and digitalization technologies.

With the Industrial Informatics degree program, you are very close to the dynamic developments in industrial information, communication and digitalization technologies. This master's program deals with specialised in-depth topics from the fields of application of electrical engineering and computer science. This ranges from digitization, data processing and automation systems through to industrial mechatronics and robotics; from network technologies to security concepts, in each case with reference to the standards of industrial enterprise architectures and systems.
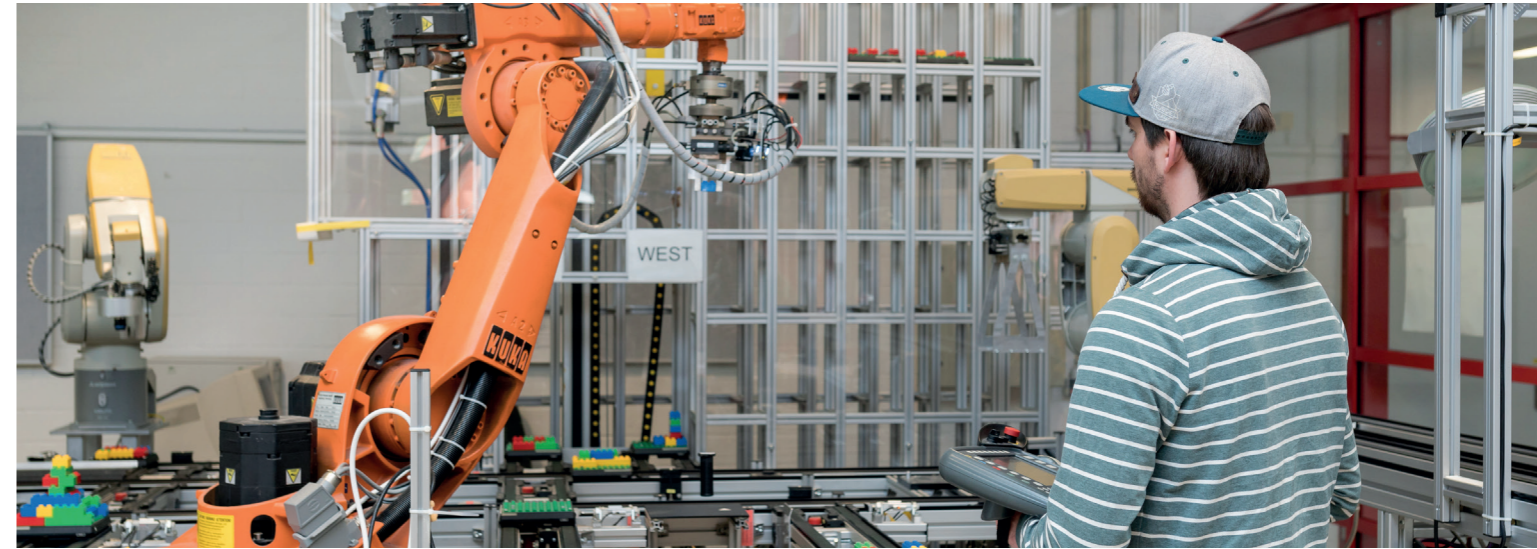
Course of studies

The master's program lasts three semesters and is divided into two specializations:

↪ Information Processing for Cyber-Physical Systems (in German)

↪ Industrial cyber-physical systems (in English)

The specialization program is divided into two phases, for a total of 90 credit points (CP). The first phase comprises the modules of the first two semesters, for a total 60 credit points. The second phase consists of the master's thesis, for an additional 30 credit points.

The modules of the first phase are part of three thematic blocks:

↪ Modules in Block 1 convey advanced knowledge in the formal basics of industrial computer science and train problem-solving skills.

↪ Elective modules in Block 2 impart further knowledge in the subject areas of industrial computerization and digitalization systems, and industrial information processing. With the compulsory elective modules, you take part in a specialized in-depth study.

↪ Projects in Block 3 serve the independent scientific focus, or the practical application of contents from the modules in Blocks 1 and 2. The projects can be carried out within the framework of industrial or scientific co-operation at home and abroad.
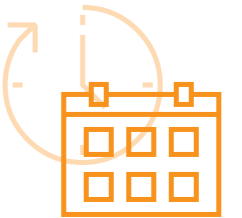
Degree

Upon successful completion of the master's program in Industrial Informatics, the university will award you the academic degree of Master of Engineering (M.Eng.), with the prospect of doctoral studies in cooperation with one of our university partners.

Admission requirements

The admission requirement is a bachelor's degree (BA) from a university (belonging to one of the Bologna signatory states) in electrical engineering, computer science, mechatronics, or an equivalent degree from a German or foreign university in a subject-related suitable bachelor's degree program. More information on admission requirements can be found in the admission regulations.

Start of studies

Admission takes place in the **summer and winter semester.**

Current enrollment details can be found at
» www.hs-emden-leer.de/en/sl/enrollment

Information for first-semester students is available at
» www.hs-emden-leer.de/en/sl/firstsemester