SERVICE FOR STUDENTS

At the University of Paderborn, we conduct internationally recognized, cutting-edge research. This is your chance! We’ll prepare you for challenging positions where you will take responsibility.

1. “Try before you buy”: during the pupils’ practicum for prospective engineers, you can test out both us and yourself to see if it’s a good fit.
2. Female students are welcome! The University of Paderborn has set a goal of increasing the number of female students in the engineering disciplines further.
3. Thanks to our Germany-wide (and international) system “eduroam”, students from the University of Paderborn can use the internet for surfing or research for free on campus in Paderborn, at any major German university, or any participating university in the world.
4. The student representatives (German: Fachschaft) for mechanical and electrical engineering, as well as the student organization WING, are available to support you with advice and assistance.
5. The UPB cooperates with universities in many countries around the world. Through these cooperations, students have a variety of options for spending a semester or a year studying abroad.
6. In addition, departments and working groups offer internships, event-related excursions and visits to interesting companies.
7. Continuous cooperation and collaboration with companies also provides students with opportunities for practice and internships.

PROGRAM DESCRIPTION

The required foundational modules provide a solid basis for the knowledge and methods needed for your chosen concentration. Typically they are completed over the course of the first four semesters and consist of modules such as:

- Basics of Natural Sciences
- Mathematics
- Engineering Mechanics
- Metrology and Electronics
- Organizational and Political Economics
- Trade Law
- Programming
- Operational Management and Organization
- Energy and Process Technology
- Vehicle Technology
- Production Technologies
- Polymer Technologies
- Lightwave Design and Hybrid Systems
- Mechatronics
- Production Technologies
- Micro- and Macroeconomics
- Commercial/Business IT
- Communication Technology
- Microsystems Technology
- Optoelectronics
- Process Dynamics
- Microelectronics
- Microsystems Technology
- Cognitive Systems
- Energy and Environmental Science
- Information Technologies
- Social Information Systems
- Automation Technologies
- Process Dynamics
- Electrical Circuitry
- Information Technologies
- Cognitive Systems
- Energy and Environmental Science
- Information Technologies
- Social Information Systems
- Automation Technologies
- Data Science
- Production Technologies
- Polymer Technologies
- Lightwave Design and Hybrid Systems
- Mechatronics
- Product Development
- Material Properties and Simulation

For specializations in electrical engineering, the following concentrations are possible:

- Automization
- Microelectronics
- Microsystems Technology

Hands-on, practical projects and/or theses allow students to apply and consolidate their knowledge. The economics and management modules include:

- Micro- and Macroeconomics
- Commercial/Business IT

The industrial engineering and management degree program in Paderborn has a strong technical focus in both the bachelor’s and master’s programs.
**WHAT QUALIFICATIONS DO YOU NEED?**

- **German general qualification** for German universities (German: Abitur), or a subject-specific university qualification (Fachhochschulreife or FH-reife).
- **A German qualification specifically for economics** (Wirtschaftsberufe or Fachhochschulreife), together with certification of having completed the general education requirements of German, English (or another foreign language) and mathematics, as well as the bachelor's degree in engineering.
- International-office or subject-specific confirmation of having completed the general education requirements of German, English (or another foreign language) and mathematics, as well as the bachelor's degree in engineering.

**REQUIREMENTS FOR ADMISSION**

- **Suitability (fachliche Eignung)** or subject-specific confirmation of having completed the general education requirements of German, English (or another foreign language) and mathematics, as well as the bachelor's degree in engineering.
- **A legally recognized equivalent qualification** for international certificates, please turn to the International Office at the University of Paderborn at www.uni-paderborn.de/international/ international-office or a professional certificate which fulfills the corresponding university regulations.

**PRAXIS/INTERNSHIP**

Students are required to obtain at least 6 weeks of practical experience. We recom- mend that students complete this experience before beginning their studies and, if possible. If a student is not able to comple- te this experience before starting, Incbe must do so in the first half of their bachelor's program. You can find more information on this in the “Practicum/Internship Regula- tions” (Praktikumsordnung).

**BACHELOR’S DEGREE PROGRAM**

This program focuses on foundational courses in Electrical Engineering and management, complemented by practical courses, labs, and seminars. It typically lasts for 4 se- mesters.

**DURATION**: 6 semesters
**START**: Winter Semester

**MASTER’S DEGREE PROGRAM**

The master’s program gives students the ability to analyze technical, business-foc- used/management, and interdisciplinary challenges and to generate solutions. The bachelor’s degree is a prerequisite for the master’s program; the master’s program offers specializations, each of which is designed for professionals in specific fields. Graduates have a vast spectrum of profes- sional options, ranging from major collabo- ration or leading the design and structuring of industrial value-add and -creation pro- cesses, all the way to assuming a lead- ership position in an industrial environment.

**IT GOES LIKE THIS**

**PROFESSIONAL PROFILE**

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**YOUR CHANCE**

The Faculties for Electrical Engineering and for Mechanical Engineering are educating the next generation of engineers, innovators, and interdisciplinary leaders. The University of Paderborn is internationally recognized as being cutting-edge, and the results from their research are then integrated directly back into academia. We will prepare you for challenging positions requiring personal responsibility.

**WHAT QUALIFICATIONS DO YOU NEED?**

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