## Career prospects

- Design Engineer Power Supply
- Project Engineer Development (Software/Hardware)
- Development Engineer Drive Technology
- IC Designer (Frontend/Backend)

## Master's programme at HTW Dresden

- Master Elektrotechnik/Electrical Engineering (German language)
- Master Angewandte Robotik (German language)

"My decision to study at the HTW was one of the best I ever made. Each professor brings a wealth of real-world industry experience to their lectures, seamlessly bridging the gap between theory and practical application. The patience and consideration I encountered as a foreign-language student at the HTW was paramount to my success; I can't imagine having had a similar experience at a much larger university."

**James Hollis** (USA)
7th semester
Vehicle Mechatronics

## Admission requirements

- University entrance qualification (equivalent value to the German "Abitur")
- English language proficiency at level B2 CEFR (Common European Framework of Reference for Languages)

## Application

- International applicants with a foreign university entrance qualification apply via uni-assist.
  Application deadline for winter semester: **15th June**
  More information about the application process at www.uni-assist.de.
- Applicants with a German "Abitur" or "Fachhochschulreife" apply directly at the HTW Dresden.
  More information at www.htw-dresden.de/bewerbung.

## Studying at HTW Dresden

- High practical relevance in teaching and research
- Personal study atmosphere in small groups
- Rich variety of internship opportunities in industry
- No tuition fees
- German course during studies (additional costs)

## Contact


Subject-specific consultancy
Prof. Dr.-Ing. Tim Baldauf
E-Mail: tim.baldauf@htw-dresden.de
Phone: +49 (0)351 462 2035
www.htw-dresden.de/elektrotechnik

Student advisory service
E-Mail: international@htw-dresden.de
Phone: +49 (0)351 462 2015
www.htw-dresden.de/international


Zertifikat seit 2014
audit familiengerechte hochschule

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Hochschule für Technik und Wirtschaft Dresden
University of Applied Sciences
Friedrich-List-Platz 1
01069 Dresden
Germany

www.htw-dresden.de
Visit us at:



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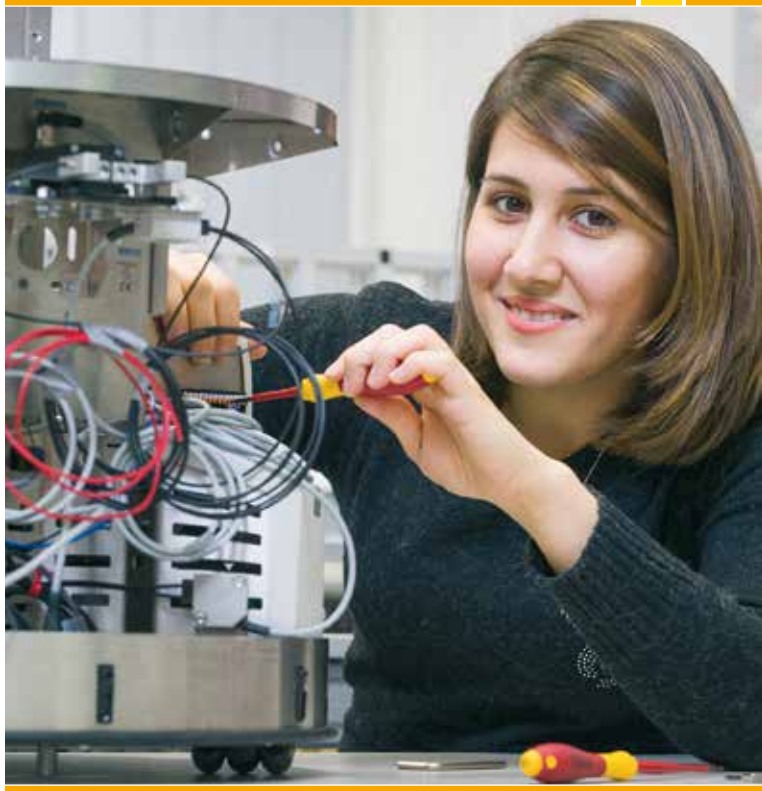
Hochschule für Technik und
Wirtschaft Dresden
University of Applied Sciences


HTW D

# ELECTRICAL ENGINEERING/ ELEKTROTECHNIK

BACHELOR OF ENGINEERING



## ACHIEVE MORE PRACTICALLY
## PRAKTISCH MEHR ERREICHEN

## Electrical Engineering/Elektrotechnik

Does the long tradition and ingenuity of German engineering fascinate you? Are you interested in the operating principles of electrical systems? How about studying Electrical Engineering and learning German at the same time?
Our study programme Electrical Engineering is just what you are looking for! It is specifically designed for international students and offers a unique curriculum that combines a sound education in Electrical Engineering with the acquisition of German language skills.


## Short profile

| | |
|---|---|
| Degree: | Bachelor of Engineering (B.Eng.) |
| Teaching Language: | 1st - 2nd semester English<br>3rd - 4th semester English and German<br>5th - 8th semester German |
| Semester start: | winter semester |
| Duration: | 8 semesters |
| ECTS: | 180 |

## Study objectives

By studying Electrical Engineering/Elektrotechnik you gain both broad electrotechnical basic knowledge and know-how in subject-specialized modules. Our applied methods of analysis, design, dimensioning, calculation, measurement and inspection will equip you with an academic, practice-oriented competence preparing you for a various range of working areas of electrical engineering such as renewable energies, medical technology as well as industrial control. You will be able to plan and construct complex electrical systems, to manage projects, to coordinate quality management and much more. In addition, you will be qualified for a Master's programme in Electrical Engineering.

The first four semesters of part-time study are predominantly in English with additional German language training. The following semesters take place in full-time study in German.

**Electrical Engineering/Elektrotechnik**

| | |
|---|---|
| **1. & 2. Semester**<br>Basic studies & German course | Acquisition of basic knowledge (e.g. Electrical Engineering, Mathematics) |
| **3. & 4. Semester**<br>Basic studies & German course | Acquisition of basic knowledge (e.g. Physics, Computer Science) |
| **5. Semester**<br>Basic studies | Acquisition of basic knowledge (e.g. Electronics, System and Control Theory) |
| **6. & 7. Semester**<br>Professional studies | Acquisition of application-oriented knowledge (e.g. Digital Systems) |
| **8. Semester**<br>Internship & Thesis | Ten-week industrial internship, Bachelor thesis |
| **Bachelor of Engineering** | |

## Curriculum

**1. Semester - Basic Studies (part-time)**
- Electrical Engineering Fundamentals 1
- Mathematics 1
- Topics of Electrical Engineering
- First Year Project and Study Skills

**2. Semester (part-time)**
- Electrical Engineering Fundamentals 2
- Mathematics 2
- Computer Science 1

**3. Semester (part-time)**
- Computer Science 2
- Mechanical Design
- Technical Physics 1

**4. Semester (part-time)**
- Electronics Design
- Technical Physics 2
- Elektronics

**5. Semester (full-time)**
- Electrical Engineering Fundamentals 3
- Mathematics 3
- Measurement Engineering
- System Theory
- Fundamentals of Microprocessors
- Digital Circuits

**6. Semester - Advanced Studies (full-time)**

| 1 Energy and Drives | 2 Automation and Mechatronics | 3 Information and Electronics |
|---|---|---|
| e. g.: High Voltage Technology, Power Electronics, Electrical Safety/EMC | e. g.: Actuators, Power Electronics, Automation of Process Plants | e. g.: Test and Verfication, Signals and Systems, RF Technology |

**7. Semester (full-time)**

| | | |
|---|---|---|
| e. g.: Switchgear Technology, Electrical Drives, Power Plant and Grid Technology | e. g.: Process Measurement, Mechatronic System Design, System Identification | e. g.: Mobile Radio, Business Management/Engineering Law, Semiconductor Technology and Microelectronics |

**8. Semester (full-time)**
- Practical Study Period
- Bachelor Thesis