Compulsory Courses

Specialisation Gebäudeautomation

MODUL	SWS	CrP
Grundlagen der Elektroinstallationstechnik (Introduction to Electrical Installations)	4	5
Planung und Dokumentation in der Technischen Gebäudeausrüstung (Planning and documentation for technical building equipment)	4	5
Grundlagen der Automatisierungstechnik (Fundamentals of automation technology)	4	5
Gebäude- und Raumautomation (Building and Room Automation)	4	5
Internet of Things	4	5
Datenkommunikation und Bussysteme (Data Communications and Bus Systems)	4	5
Smart Buildings and Cities	4	5

Specialisation Technische Informatik

MODUL	SWS	CrP
Embedded Systems	4	5
Objektorientierte Programmierung (Object Oriented Programmiung)	4	5
Informationstechnik (Information Theory)	4	5
Computernetze und Security (Computer Networks and Security)	4	5
Internet of Things	4	5
Rechnerarchitektur (Computer Architecture)	4	5
Datenbanken (Databases)	4	5

START AND DURATION

The studies can be each summer semester (1st of April). The duration is 9 semesters (4.5 years). In winter semester, similar study programs 'Bilingular Mechanical Engineering and 'Bilingular Mechatronics Engineering' are offered at THM. Please find further information on our website.

ENROLLMENT

Application via uni-assist (https://www.uni-assist.de) is needed.
The minimum requirements are:

English - Level B2:
- TOEFL test with a minimum score of 85 (iBT)
- IELTS test with a minimum score of 6.5
- or an equivalent internationally recognized test with comparable results

German - Level B1:
- Goethe-Zertifikat B1
- Zertifikat Deutsch / telc Deutsch B1
- ÖSD Zertifikat B1 (ZB1)
- DSD I or DSD I PRO: at least level B1 in all skill areas.

University entrance qualification

If you have any further questions about enrollment, please contact the Admissions Office:

- go.thm.de/studsek

ACADEMIC DEGREE

The degree program concludes with the academic degree Bachelor of Engineering (B.Eng.) in "Elektro- und Infomationstechnik".

After graduation, students can consecutively complete the German three-semester Master's programme in "Elektro- und Informationstechnik" or the international "Control, Computer and Communications Engineering", which lead to the Master of Science (M.Sc.).

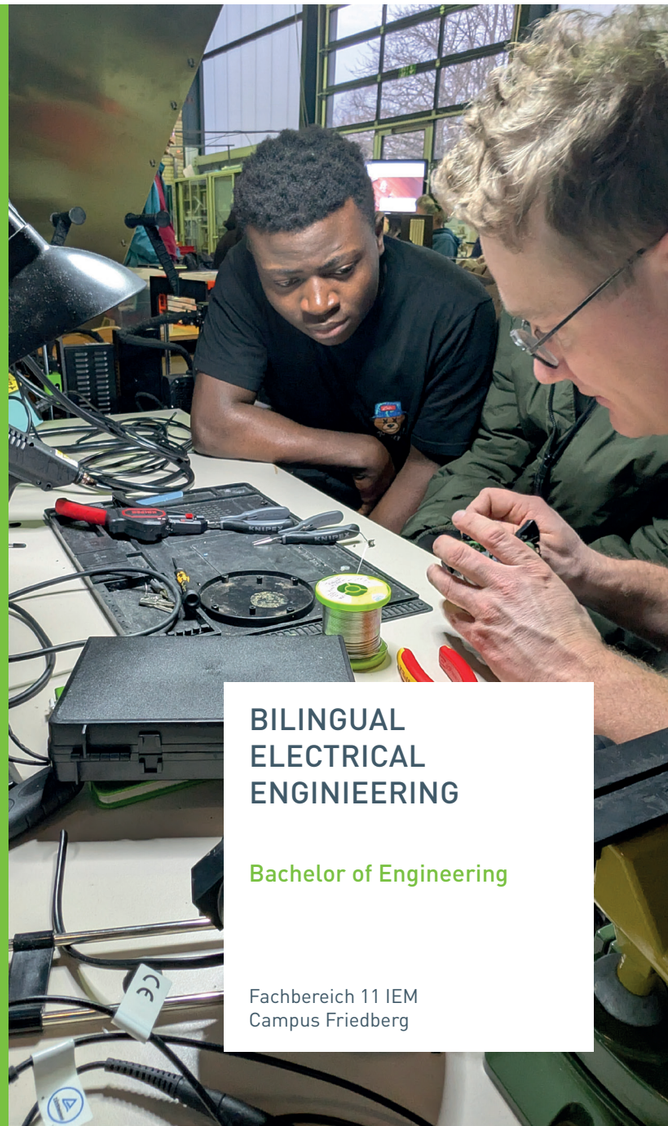
CONTACT

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Wilhelm-Leuschner-Strasse 13
61169 Friedberg
Germany
info@thm.de
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VISITE THE WEBSITE FOR MORE INFO:

go.thm.de/eit-bachelor

Verantwortlich: Zentrale Studienberatung Stand: 11/25



BILINGUAL ELECTRICAL ENGINIEERING

Bachelor of Engineering

Fachbereich 11 IEM
Campus Friedberg

BILINGUAL ELECTRICAL ENGINIEERING

Join an exciting academic journey with our Bilingual Electrical Engineering programme, a unique variant of the esteemed German-language Elektro- und Informationstechnik.

ilingual Electrical Engineering is tailored for international students aiming to integrate into the German job market after graduation, combining technical advancement with language skills.

WHY CHOOSE OUR BILINGUAL PROGRAM?

For the first four semesters (2 years), you will engage in a comprehensive English-language curriculum, including exams, ideal for students with limited German proficiency. Concurrently, we offer customized German language courses at no additional cost, equipping you with essential language skills. We further enhance your education with AddOn courses conducted in German together with local students, promoting language skills and cultural exchange.

After the fourth semester, you'll achieve the necessary C1 level in German, enabling you to seamlessly continue your studies within the regular Elektro- und Informationstechnik-programme.

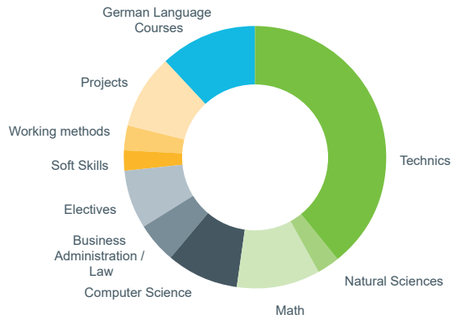
SPECIALISATIONS

From the 6th semester onwards, you will choose of our three specialisations:

- Allgemeine Elektrotechnik (General Electrical Engineering)
- Gebäudeautomation (Building Automation)
- Technische Informatik (Technical Computer Science)

In addition to the compulsory courses that result from the specialisation, you also have the opportunity to adjust your studies individually according to your interests through many elective offers at the THM. Your studies will be completed by an internship in a company as well as the bachelor thesis in the 9th semester.

CONTENT AT A GLANCE



STUDIENPROGRAMM

MODUL	SWS	CrP
Electrical Engineering 1	9	8
Mathematics 1	8	8
Initial Project	4	5
Deutsch B2.1 (German language course)	6	
TOTAL 1ST SEMESTER	**27**	**21**
Electrical Engineering 2	10	9
Mathematics 2	8	8
Tech AddOn 1	2	
Deutsch B2.2 (German language course)	6	
TOTAL 2ND SEMESTER	**26**	**17**
Introduction to Programming 1	4	5
Digital Electronics	4	5
Tech AddOn 2.1	4	
Tech AddOn 2.2	2	
Zusatz AddOn 2	4	
Deutsch C1.2 (German language course)	6	
TOTAL 3RD SEMESTER	**24**	**10**
Introduction to Programming 2	4	5
Measurement and Sensor Technology	6	7
Tech AddOn 3.1	4	
Tech AddOn 3.2	4	
Deutsch C1.1 (German language course)	6	
TOTAL 4TH SEMESTER	**24**	**12**
Elektrotechnik 3 (Electrical Engineering 3)	4	5
Mikrocontrollertechnik (Microcontroller technology)	8	8
Elektronik (Electronics)	6	6
Physik (Physics)	6	6
Transformationen (Math Transformations)	4	5
TOTAL 5TH SEMESTER	**30**	**30**
Regelungstechnik (Control Theory)	4	5
Projektseminar 1 (Project Seminar 1)	6	5
Qualitäts- und Projektmanagement (Quality and Project Management)	4	5
WPF / Schwerpunktfach (Specialisation / Elective)	4	5
WPF / Schwerpunktfach (Specialisation / Elective)	4	5
WPF / Schwerpunktfach (Specialisation / Elective)	4	5
TOTAL 6TH SEMESTER	**26**	**30**

SWS = lecture hours per week | CrP = credit points
Lecture hour = 45 minutes

MODUL	SWS	CrP
Projektseminar 2 (Project Seminar 2)	6	4
Internationale Projektarbeit (International Project)	4	4
Management und Recht (Management and Law)	6	2
WPF / Schwerpunktfach (Specialisation / Elective)	4	5
WPF / Schwerpunktfach (Specialisation / Elective)	4	5
WPF / Schwerpunktfach (Specialisation / Elective)	4	5
TOTAL 7TH SEMESTER	**28**	**30**
WPF / Schwerpunktfach (Specialisation / Elective)	4	5
WPF / Schwerpunktfach (Specialisation / Elective)	4	5
WPF / Schwerpunktfach (Specialisation / Elective)	4	5
WPF / Schwerpunktfach (Specialisation / Elective)	4	5
WPF / Schwerpunktfach (Specialisation / Elective)	4	5
WPF / Schwerpunktfach (Specialisation / Elective)	4	5
TOTAL 8TH SEMESTER	**28**	**30**
BPP mit Vortrag (Internship, incl. presentation)	13	13
Bachelor Thesis	12	12
Bachelor Kolloquium (Colloquium)	5	5
TOTAL 9TH SEMESTER	**30**	**30**

Compulsary Courses

Specialisation Allgemeine Elektrotechnik

MODUL	SWS	CrP
Informationstechnik (Information Theory)	4	5
Nachrichtentechnik (Communication Technology)	4	5
Elektromagnetische Verträglichkeit (Electromagnetic Compatibility)	4	5
Schaltungstechnik (Circuit Design)	4	5