OTH REGENSBURG

B.ENG. INTERNATIONAL ELECTRICAL ENGINEERING (IEE)
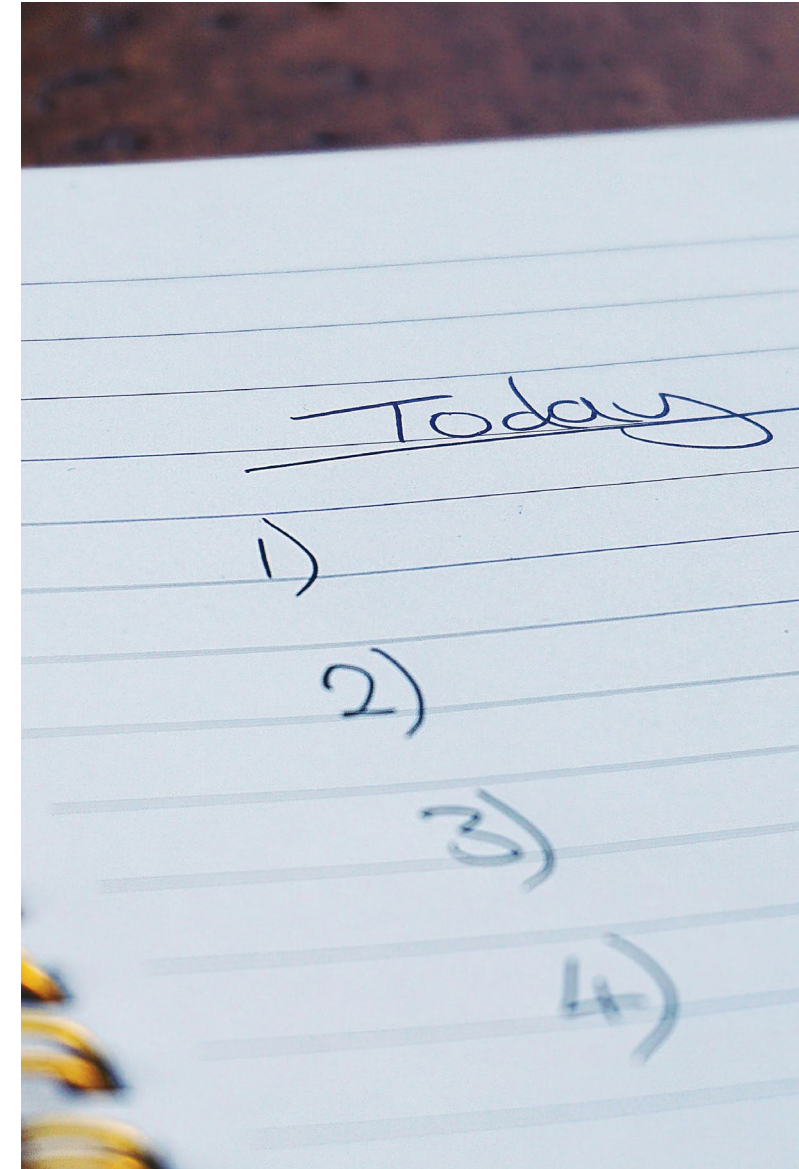
OSTBAYERISCHE TECHNISCHE HOCHSCHULE REGENSBURG

FACULTY OF ELECTRICAL ENGINEERING AND INFORMATION TECHNOLOGY (EI)

International Electrical Engineering

Agenda

1. Regensburg, OTH Regensburg, Faculty of Electrical Engineering and Information Technology

2. B.Eng. International Electrical Engineering

3. Application / Timeline

4. Questions

International Electrical Engineering

Regensburg – A vibrant city!

International Electrical Engineering

Regensburg – A vibrant city!

- City in Eastern Bavaria
- The medieval city center is a UNESCO World Heritage
    →biggest medieval city site north of the alps
- Population: ~155,000
    of which ~ 35,000 students

International Electrical Engineering

OTH Regensburg – General Information

- >10,000 students

- >240 professors

- 60 study programs

- 120 laboratories

"Bavaria's most popular university"
(Studycheck.de, 2022)

International Electrical Engineering

Faculty EI by numbers

33

Professors,

>50 staff members,

>50 external lecturers

10

Courses of Study

1,200

Students from
>30 countries

33

Laboratories on
>4,000 m²

International Electrical Engineering

Faculty EI study programs

- **Bachelor's degree programs**
  - **International Electrical Engineering**
  - Electrical Engineering and Information Technology
  - Intelligent Systems Engineering
  - Mechatronics
  - Renewable Energy Engineering and Energy Efficiency

- **Master's degree programs**
  - Applied Research in Engineering Science
  - Electrical Engineering and Information Technology
  - Electromobility and Power Electronics
  - Electrical and Microsystems Engineering
  - Automotive Electronics

International Electrical Engineering
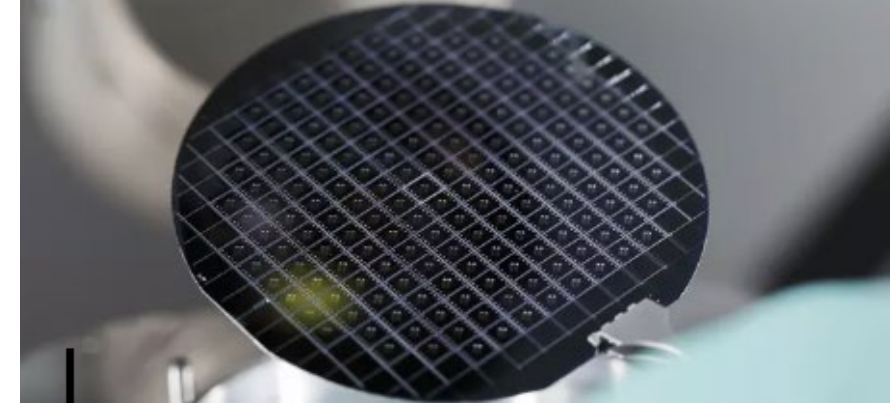
Overview

Target Group

Internationals and Germans

Languages

- German ≥ A2, English ≥ B1 required
- Lectures taught in English (semesters 1-5) and German (semesters 5-8)

Degree

- Degree: Bachelor of Engineering (B.Eng.)
- Type of study: full-time

8 Semesters, 240 ECTS

- 210 ECTS Electrical Engineering curriculum
- 30 ECTS language training (spread over 5 semesters)
- Duration: 4 years

Fees

- No tuition fees (only a 201 € registration fee per semester)
- Service fee for non-EU students: 500 € per semester

Starting dates

- First start on October 1st, 2025
- Every winter term
- Welcome week in October!

International Electrical Engineering

Study plan

Semester													ECTS	SWS
1	Mathematics 1		Computer Science 1		Electrical Engineering 1.1		Physics		Digital Electronics		Language Track 1		240 ECTS	179 SWS
	6	6	6	6	4	4	5	4	5	4	5	4	31	28
2	Mathematics 2		Computer Science 2		Electrical Engineering 1.2		Mechanical Engineering		Material Science		Language Track 2			
	6	6	5	4	5	4	5	4	5	5	5	4	31	27
3	Mathematics 3		Electrical Measurements 1		Electrical Engineering 2		Electronic Components				Language Track 3			
	5	4	5	4	8	8	5	4			6	6	29	26
4	Electrical Measurements 2		Computer Architecture		Signals and Systems		Analog Circuit Design				Language Track 4			
	6	6	6	6	9	8	5	4			6	6	32	30
5	Control Engineering		Electrical Energy Conversion and System Technology		Fields, Waves and Transmission Lines		Electronic Lab Courses		Language Track 6		Language Track 5			
	5	4	6	6	5	4	5	4	3	2	5	4	29	24
6	Internship				Internship Seminar		Mandatory general studies elective module		Mandatory general studies elective module		Mandatory general studies elective module			
	20	0			2	2	2	2	2	2	2	2	28	8
7	Mandatory subject specific elective module		Mandatory subject specific elective module		Mandatory subject specific elective module		Mandatory subject specific elective module		Mandatory subject specific elective module		Mandatory subject specific elective module			
	5	4	5	4	5	4	5	4	5	4	5	4	30	24
8	Mandatory subject specific elective module		Mandatory subject specific elective module		Mandatory subject specific elective module		Bachelor's thesis		Bachelor's thesis presentation					
	5	4	5	4	5	4	12	0	3	0			30	12
	ECTS	SWS												

Legend:
- Teaching Language **English**
- Teaching Language **English or German**
- Teaching Language **German** (individual modules may be offered in **English**)

International Electrical Engineering

Study plan

								240 ECTS	179 SWS

Basic Lectures in Electrical Engineering and Information Technology

Language Courses and International Competences

Internship/Industrial Placement, Seminar, General elective modules

Advanced Subjects and Bachelor's thesis

Semester							ECTS	SWS
1	Mathematics 1 (6/6)	Computer Science 1 (6/6)	Electrical Engineering 1.1 (4/4)	Physics (5/4)	Digital Electronics (5/4)	Language Track 1 (5/4)	31	28
2	Mathematics 2 (6/6)	Computer Science 2 (5/4)	Electrical Engineering 1.2	Mechanical Engineering (4/4)	Material Science (5/5)	Language Track 2 (5/4)	31	27
3		Electrical Measurements 1 (5/4)	Electrical Engineering 2 (8/8)	Electronic Components (5/4)	Language Track 3		29	26
4	Electrical Measurements 2 (6/6)	Computer Architecture (6/6)	Signals and Systems (9/8)	Analog Circuit Design (5/4)	Language Track 4		32	30
5	Control Engineering (5/4)	Electrical Energy Conversion and System Technology (6/6)	Fields, Waves and Transmission Lines (5/4)	Electronic Lab Courses (5/4)	Language Track 6 (3/2)	Language Track 5 (5/4)	29	24
6	Internship/Industrial Placement (20/0)		Seminar (2/2)	Mandatory Elective Module 1 (2/2)	Mandatory Elective Module 2 (2/2)	Mandatory Elective Module 3 (2/2)	28	8
7	Mandatory subject specific elective module (5/4)	Mandatory subject specific elective module (5/4)	Mandatory subject specific elective module (5/4)	Mandatory subject specific elective module (5/4)	Mandatory subject specific elective module (5/4)	Mandatory subject specific elective module (5/4)	30	24
8	Mandatory subject specific elective module (5/4)	Mandatory subject specific elective module (5/4)	Mandatory subject specific elective module (5/4)	Bachelor's thesis (12/0)	Bachelor's thesis presentation (3/0)		30	12

ECTS SWS

Legend:
- Teaching Language **English**
- Teaching Language **English or German**
- Teaching Language **German** (individual modules may be offered in **English**)

International Electrical Engineering

Language Tracks

Language Track A (LTA)
German as a foreign language (DaF)

- **4 semesters DaF**
  - B1 2x 5 ECTS
  - B2 2x 6 ECTS

- In 5th semester: Supplementary language training on job applications and working life in Germany

2 Language Tracks

- LTA: International prospective students (German A2 or B1)
- LTB: Prospective students with advanced German language skills ≥ B2
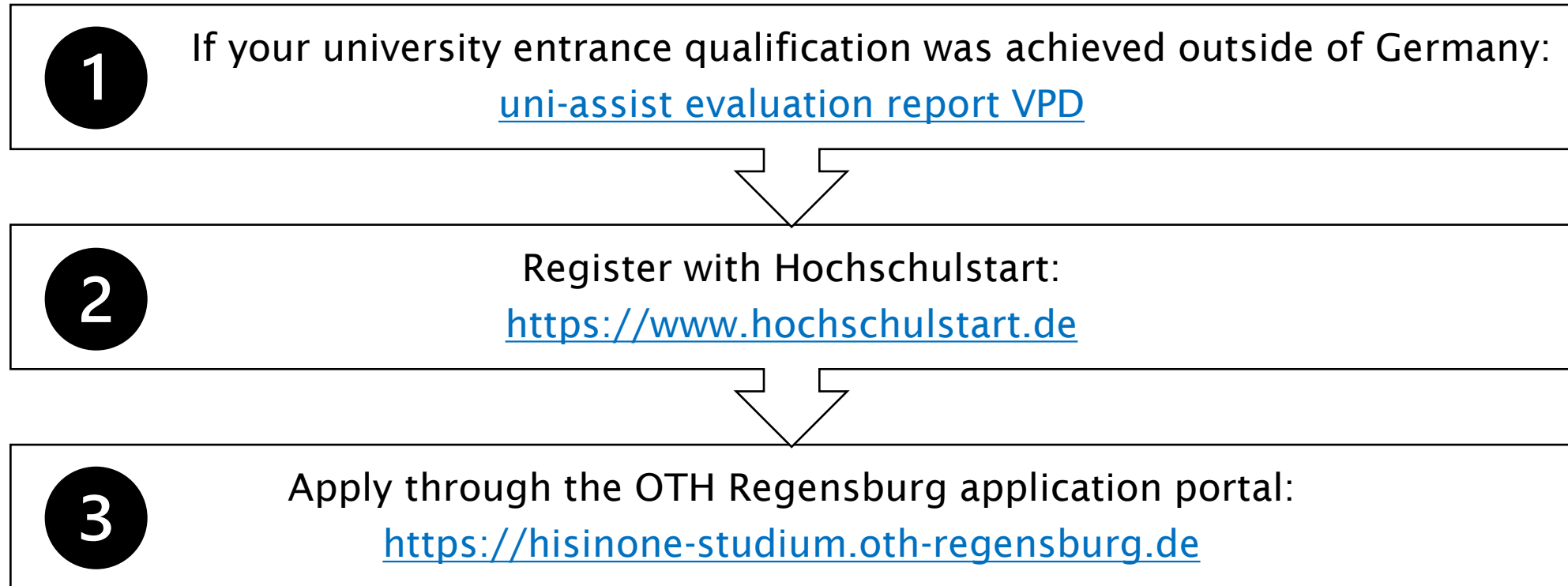
Common compulsory module in 5th semester

Technical German, Technical English, Scientific Writing 3 ECTS

Language Track B (LTB)
Foreign languages, international and intercultural skills

- Largely freely selectable modules from Language Program segment

- Up to15 ECTS freely selectable modules from the international or intercultural area

International Electrical Engineering

Application

1. If your university entrance qualification was achieved outside of Germany:
uni-assist evaluation report VPD

2. Register with Hochschulstart:
https://www.hochschulstart.de

3. Apply through the OTH Regensburg application portal:
https://hisinone-studium.oth-regensburg.de

Deadline: July 15

International Electrical Engineering
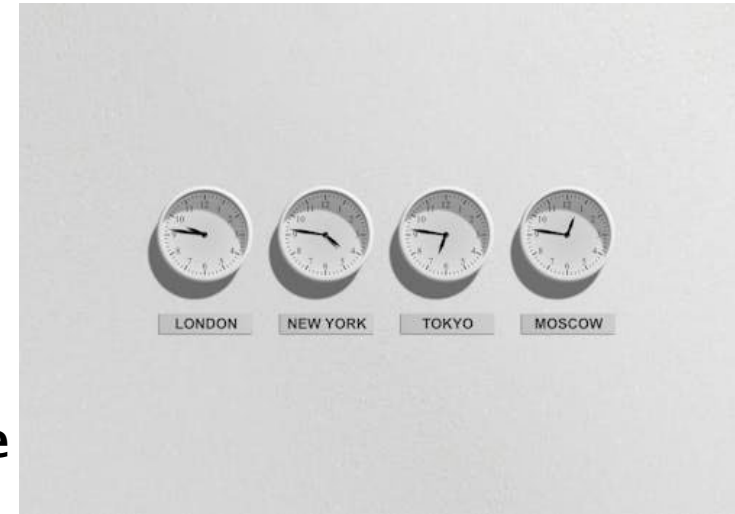
Application
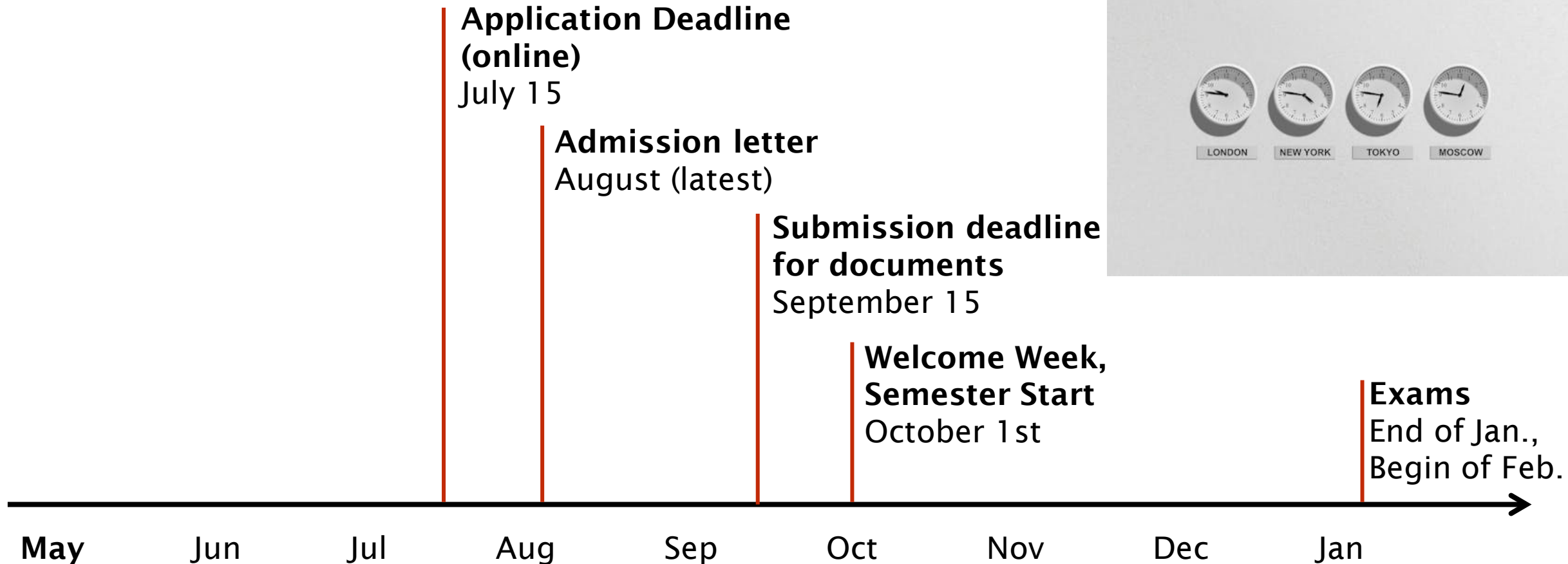
Required Documents:

1. **University entrance qualification**

2. University entrance qualification outside of Germany:
VPD from Uni-Assist
→ VPDs issued for other universities are also accepted; valid for 12 months

3. **Proof of sufficient English language skills**: at least level B1 (B2 is recommended)
→ IELTS, TOEFL, Cambridge English, TELC, native speaker

4. **Proof of sufficient German language skills**: at least level A2
→ Goethe (A2), Telc (A2), ÖSD (A2), DSD (Level I)

Information on the Application   + see course Website

International Electrical Engineering

Timeline

Application Deadline (online)
July 15

Admission letter
August (latest)

Submission deadline for documents
September 15

Welcome Week, Semester Start
October 1st

Exams
End of Jan., Begin of Feb.

| May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan |

Look for accommodation early!!! → Living in Regensburg
Late arrival is possible for Visa difficulties through hybrid/online lectures

International Electrical Engineering

Contact

Prof. Dr. Anton HORN

Prof. Dr. Johannes RESCHKE

iee@oth-regensburg.de

International Electrical Engineering
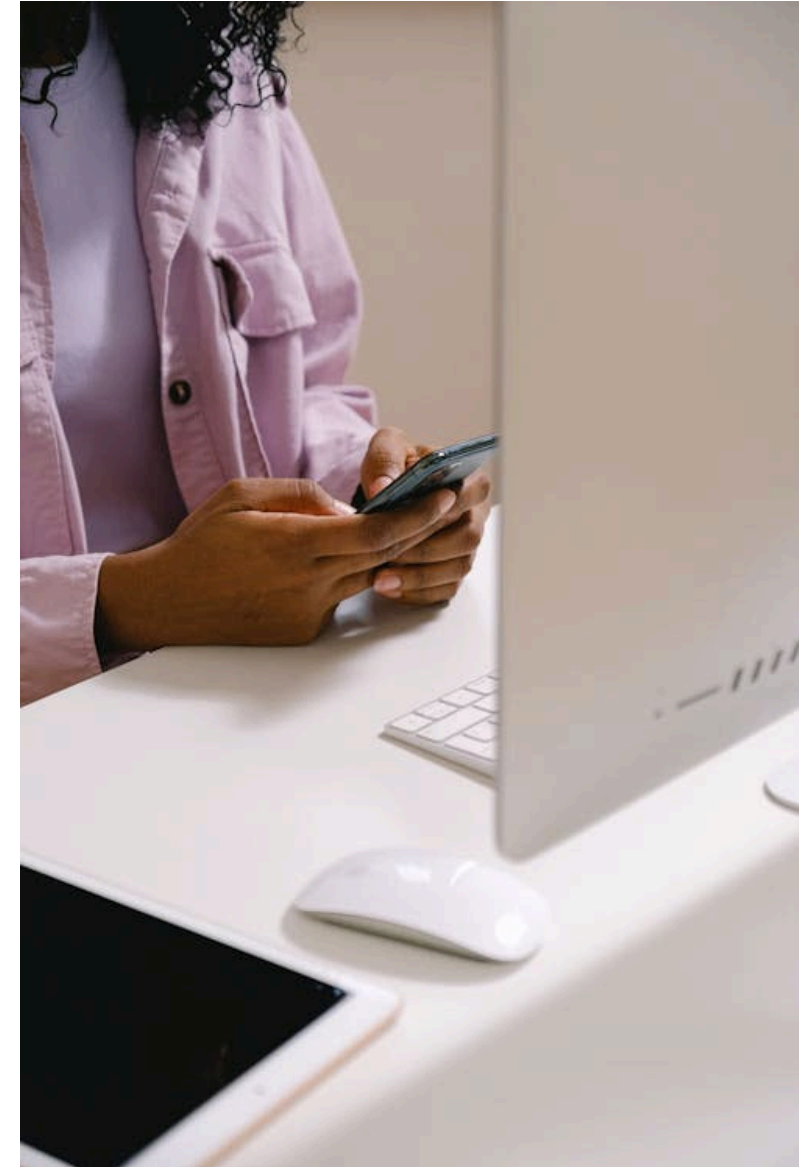
Links

[Information on the Application](#)

[Course Website](#)

[Living in Regensburg + Accommodation Tips](#)

[OTH International Office](#)

[YouTube: OTH International](#)

International Electrical Engineering

OPEN vhb course

How to Study in Germany. An Introduction to German Academic Life

Free course for everyone https://open.vhb.org/blocks/occoursemetaselect/detailpage.php?id=133

Among others, the course will address the following questions:

- What types of universities exist in Germany?
- How should I prepare to go to Germany?
- What do I have to do upon arrival?
- What is expected of a student in Germany?
- What types of classes and exams will I take?
- How should I communicate with faculty, staff, and my peers?
- Which German words are important to know?
- How can I get involved outside of class?

International Electrical Engineering
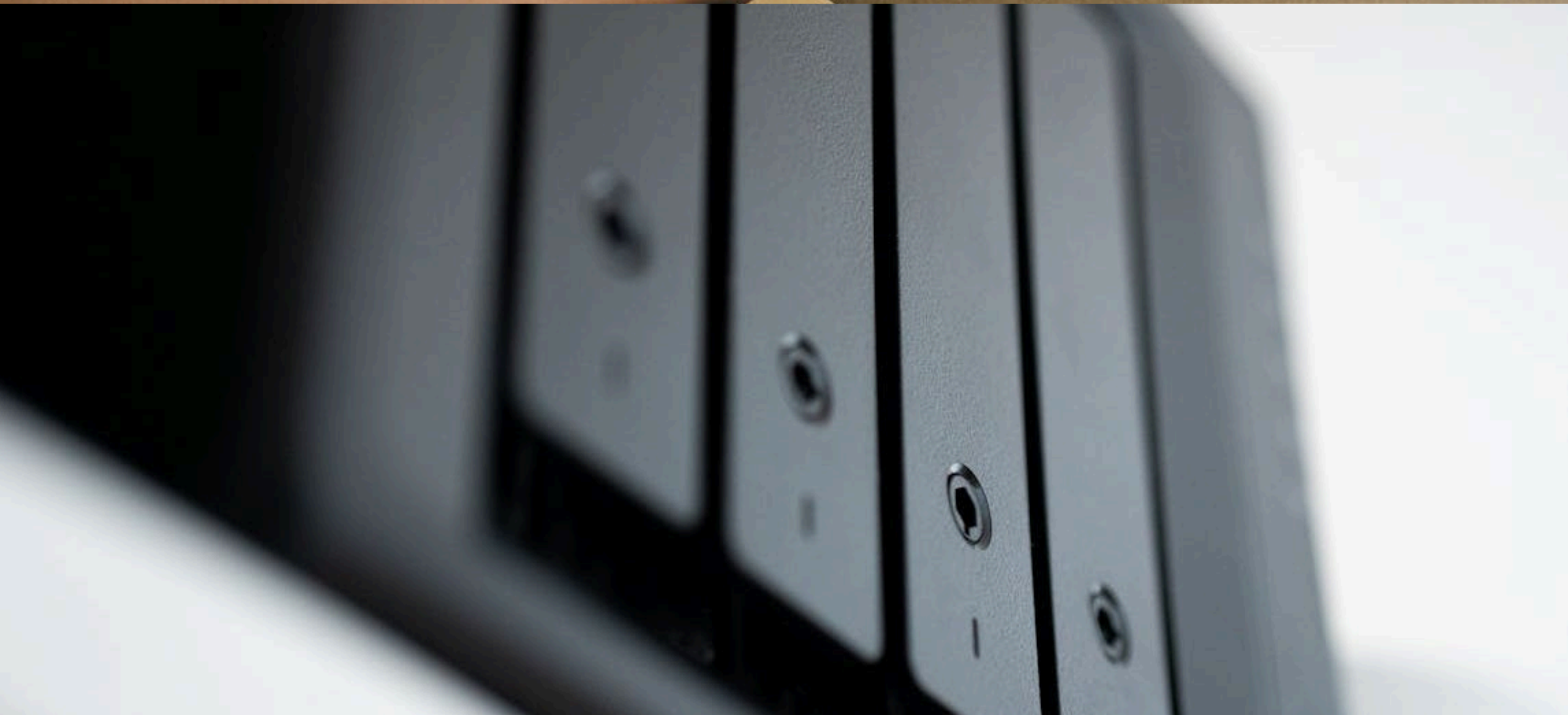
Credit Transfer

- **After enrolment**, you have the possibility to transfer previously attained credits to the IEE course

- The underlying formal process is called a credit transfer request. It will be explained during the welcome week (first week of the semester) and can only be done after enrolment

International Electrical Engineering

Example 1 for Language Tracks

Semester	Language Track A German as a Foreign Language		A & B both		Language Track B Foreign Languages with/without pre-knowledge		Language Track B Additional intern. Competences	
1	LT1 A: DaF B1.1				LT 1 B: Spanish A1			
	5	4			5	4		
2	LT2 A: DaF B1.2				LT 2 B: Spanish A2			
	5	4			5	4		
3	LT3 A: DaF B2.1				LT3 B: Chinese A1.1		Listening Skills for Science and Technology	
	6	6			5	4	2	2
4	LT4 A: DaF B2.2				LT4 B: Chinese A1.2			
	6	6			5	4		
5	LT5 A: DaF Application and working life		LT6 A&B Tech. German/English, Scientific Writing		LT5 B: Chinese A2.1			
	5	4	3	2	5	4		
Sum	30				30			
	ects		SWS					

International Electrical Engineering

Example 2 for Language Tracks

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Example

Semester	Language Track A German as a Foreign Language		A & B both		Language Track B Foreign Languages with/without pre-knowledge		Language Track B Additional intern. Competences	
1	LT1 A: DaF B1.1				LT 1 B: Czech A1.1			
	5	4			5	4		
2	LT2 A: DaF B1.2				LT 2 B: Czech A1.2			
	5	4			5	4		
3	LT3 A: DaF B2.1						Internationale Handlungskompetenz Zusatzsstudium IHaKo	
	6	6					6	4
4	LT4 A: DaF B2.2						Internationale Handlungskompetenz Zusatzsstudium IHaKo	
	6	6					6	4
5	LT5 A: DaF Application and working life		LT6 A&B Tech. German/English, Scientific Writing		LT5 B: Korean A1.1			
	5	4	3	2	5	4		
Sum	30				30			
	ects		SWS					

Example

Semester	Language Track A German as a Foreign Language		A & B both		Language Track B Foreign Languages with/without pre-knowledge		Language Track B Additional intern. Competences	
1	LT1 A: DaF B1.1				LT 1 B: Japanese A1.1			
	5	4			5	4		
2	LT2 A: DaF B1.2				LT 2 B: Japanese A1.2			
	5	4			5	4		
3	LT3 A: DaF B2.1				LT3 B: Business English I		The new Silk Road China and the world of the future	
	6	6			3	2	3	2
4	LT4 A: DaF B2.2				LT4 B: Business English II		Negotiation & meetings in an intercultural setting	
	6	6			3	2	3	2
5	LT5 A: DaF Application and working life		LT6 A&B Tech. German/English, Scientific Writing		LT5 B: Korean A1.1			
	5	4	3	2	5	4		
Sum	30				30			
	ects		SWS					

Faculty EI – Overview

OTH site-map
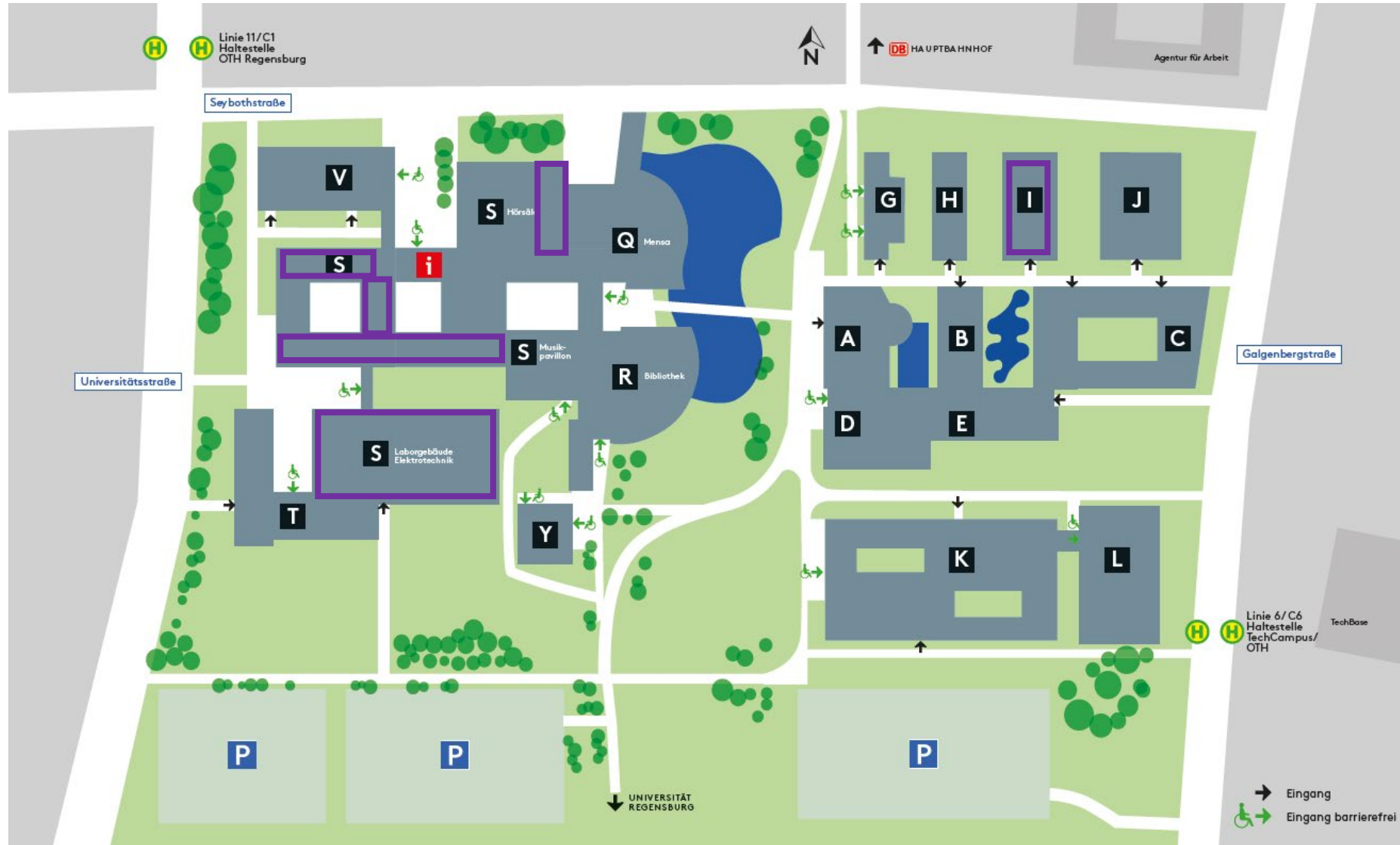
Offices and laboratories of faculty EI

Additional laboratories in building "Sammelgebäude" of Regensburg University

Faculty EI – International

International Students

- \> 20 Courses in English (not including IEE lectures)
  - Constantly growing range of courses
  - Levels: Bachelor and Master

- Welcome Events and Onboarding

- Student Body of Faculty EI (frequent events, tutors, …)

- TechWomen EI

- Formula Student

Energy Storage

Encryption for Internet of Things (Selected Topics of Electrical Engineering 2)

Applications of Control Engineering

Advanced Course on Measurements and Sensor Technology

Optoelectronics

Electrical Maschines

Electronic Circuits and Systems

Faculty EI – Study

Doctoral Programs

- > 30 PhD students

- PhD Centers partnering with TH Nuremberg and HS Munich:
  - Center for Applied Computer Science

  - Center for Physical and Biomedical Engineering

  - Center for Energy Technologies

Faculty EI – Research

Research Topics and Laboratories

- Regensburg Center of Energy and Resources (RCER)
- Regensburg Center for Artificial Intelligence (RCAI)

- Competence Centers
  - Laboratory for Safe and Secure Systems (LaS³)
  - Research Center for Energy Networks and Energy Storage (FENES)
  - Laboratory for Intelligent Materials and Structures

- >30 ongoing Research Projects (volume of appr. 15m €)
  - Public funding
  - Industry cooperations

- Research on Innovative Teaching