

University of Stuttgart



M.Sc. Electrical Engineering University of Stuttgart

Introductory Lecture
Summer Term 2025

Ingmar Kallfass
Dean of Students

E²
M.Sc.

- 
- A photograph of a university campus in autumn. In the foreground, a young man with glasses sits on a large dark rock, looking towards two young women who are standing and talking. The woman on the left is wearing a grey sweater and blue jeans, and the woman on the right is wearing a red and black plaid shirt and blue jeans, carrying a backpack. The ground is covered with fallen yellow and orange leaves. In the background, there are large trees with yellowing leaves and a modern university building with large glass windows. Other students are visible in the distance.
- **Welcome to the University of Stuttgart**
 - **International Service Point**
 - **Internationalisation**
 - **Student Council**
 - **The Study Programme**

M.Sc. Electrical Engineering (EENG)

**RESEARCH
UNIVERSITY**

University of Stuttgart

- 21,000 students enrolled at 10 faculties
- 270 full professors
- About 5300 international students from more than 100 countries
- More than 500 partner universities throughout the world
- Top 200 Universities Worldwide (THE Reputation Ranking)



The Stuttgart Region

Culture



Opera, Ballet, Theatres, Museums ...
Botanical and Zoological gardens ...
Cannstatter Volksfest, Nightlife ...

Hightech and Innovation



Head offices
Bosch, Daimler, Porsche, IBM, Sony ...

Landscape



Black Forest, Swabian Jura, Alps ...
Tübingen, Heidelberg, Strasbourg ...

ISP



International
Service Point

International Service Point Faculty 5

Complementary to the services of the university's International Office:

- Support and contact point for the faculty's international students
- Promoting further internationalization at Faculty 5
- Events & networking activities for and with international students

Stay informed!

- [ISP Website](#)
- [Monthly mailing - Faculty 5](#)
- Follow [Meta](#) & [Laura](#) on LinkedIn



Meta Geisbüsch, LL.M. & Laura Busch, M.A.

International Service Point (ISP) | Faculty 5
University of Stuttgart
Pfaffenwaldring 47 | Room 4.270
internationalstudents@f05.uni-stuttgart.de

MentorEENG - Peer Mentoring Program for 1st semester EENG Students

Learn from your seniors.

Meet fellow students. Ask your questions.

- Special support program for newly enrolled EENG students (1st semester)
- coordinated by the university's International Office in collaboration with ISP Faculty 5
- leisure activities and network meetings organized by committed EENG mentors
- No registration
- events in summer semester 2025:
 1. Meeting Monday, April 7, Unithekle (course / exam registration,...) → more infos in the WhatsApp group
 2. *tba*
 3. *tba*

Join the
EENG
WhatsApp
group!

<https://chat.whatsapp.com/FTnnz6ze9Tt2VrYuEIWI TW>



EENG Student Mentors in Summer Semester 2025

Meet your
EENG mentors
at the 1st
Dean's Lunch!



Erfan



Ipsita



Satya



Chirag



Ankita

Upcoming events for international students of Faculty 5

- **Welcome Days** at the university's **International Office** (IZ): April 2, 11:00 am-3:00 pm CEST
- **EENG Dean's Lunch** | April 23, May 14, and June 4
- **Semester Opening Faculty 5** | May 15
- **Working in Germany** – Online Session (by Career Service) | May 21
- **C³ career-contact-connect – International Career Day** | June 4
- *Save the date:* **International Days at Faculty 5** | Nov 25-Dec 10



Our monthly mailing!

Stay up to date on **important information**
and events for international students of
our faculty!

Sign up!



Internationalisation

International

Stay abroad during your studies

Exchange programs

Erasmus+: 35 partnerships in 9 countries

Other exchange programs: worldwide

- Exemption from the tuition fees at the partner university
- Support before and during your stay
- Funding opportunities (Erasmus+ scholarship ...)
- Recognition of the study achievements after consultation with the Department

Contact:

Ms. Virginie Herbasch erasmus@ei.uni-stuttgart.de

Register to the
MAILING LIST

[El-International](#)



Embrace the challenge:



Double Master's program Electrical Engineering

in specializations "Communication Systems" or "Electromagnetics and applications" University of Stuttgart and Vietnamese-German University, Ho Chi Minh City, Vietnam



4-semester double master's
program Electrical Engineering
2 degrees
Application until January 15th



2 semesters at University of Stuttgart
and 2 semesters at Vietnamese-
German University
(including Master's thesis)



Teaching language: English
No tuition fees in Vietnam
Funding opportunities

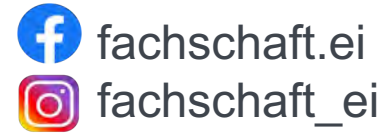
Online meeting for interested students during June, 2025



www.uni-stuttgart.de/vguus

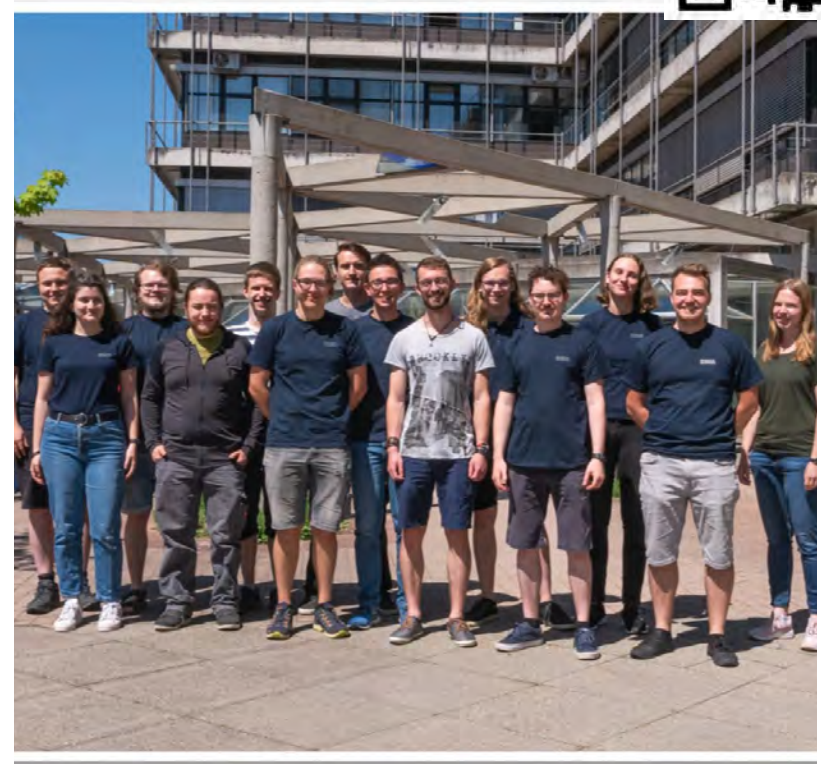
Student Council

Electrical Engineering Students Council (so-called „Fachschaft“)



- “Fachschaft” = **association** of all students studying *Electrical Engineering* or any other program at the *Department of Electrical Engineering*.

→ simply put 😊: group of student’s that are studying the same thing and want to **voluntarily** help make the whole study experience better and support whoever needs help.
- Activities: representation of interests in university bodies (e.g. Faculty Council), info-point for questions and problems, First Semester Introduction, Party (eMotions), day trips to companies and workshops, etc.
- Great opportunity to meet other (German) students
- <https://www.ei.faveve.uni-stuttgart.de/en/>





Tips and counseling for good learning!

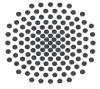
- Counseling for individual students and study groups
- Weekly learning tips newsletter
- Workshop:
 - *Learning methods: Preparing for your degree and exams*

Contact: lernberatung@uni-stuttgart.de

More information: www.uni-stuttgart.de/zsb/lernberatung

Know how to learn!

Learning counseling offers



Support for managing many issues and when facing problems



Overview: www.student.uni-stuttgart.de/beratung/

Examples:

- **Student Counseling Center**
Organizing the study program, reorientation, change of study program, improving study skills, contact point for all unclear issues.
We can also direct you to the relevant institution.
www.uni-stuttgart.de/zsb in Vaihingen: House of Students
- **Students with a disability or chronic illness**
Advice and support to students with disabilities or chronic illnesses concerning all questions ranging from accessibility to organization of the course of studies. Commissioners: Ms Eicken und Ms von Wolff
www.uni-stuttgart.de/studium/beratung/behinderung/
in Vaihingen: House of Students
- **Studying and family**
We are a family-friendly university and support you!
Service Uni & Family, Ms. Alvermann
www.uni-stuttgart.de/studium/beratung/studieren-mit-familie/

The M.Sc. Electrical Engineering Study Programme

Challenges and Opportunities of University Studies



University of Stuttgart



High Degree
of Self-Reliance

Challenge
consecutive
master
degree

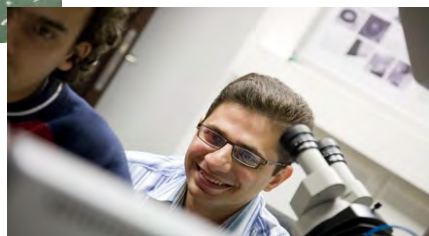
Carefully
map your
bachelor's
profile to the
majors



Studies Abroad



Large Range of Electives



Early Integration
in Research

Challenge
knowledge
transfer /
applied
science

The focus is on
understanding
rather than
reproducing
lecture content

a.m.m.



Universität Stuttgart

Faculty 5: Computer Science, Electrical Engineering
and Information Technology

University Chairs at the Department of Electrical Engineering and Information Technology



IIS Prof. Dr.
Jens Anders



IPV Prof. Dr.-Ing.
Peter Birke



INES Prof. Dr.-Ing.
Joachim Burghartz



IGM Prof. Dr.-Ing.
Norbert Frühauf



IHF Prof. Dr. sc. techn.
Jan Hesselbarth



ILH Prof. Dr.-Ing.
Ingmar Kallfass



IKR Prof. Dr.-Ing.
Andreas Kirstädter



IAS Prof. Dr.-Ing.
Andrey Morozov



IEW Prof. Dr.-Ing.
Nejila Parspour



IEH Prof. Dr.-Ing.
Krzysztof Rudion



IPV Prof. Dr.
Michael Saliba



INT Prof. Dr.-Ing.
Georg Rademacher



ILEA Prof. Dr.-Ing.
Jörg Roth-Stielow



INU Prof. Dr.-Ing.
Stephan ten Brink



IEH Prof. Dr.-Ing.
Stefan Tenbohlen



IAS Prof. Dr.-Ing.
Michael Weyrich



ISS Prof. Dr.-Ing.
Bin Yang



IHT Prof. Dr.-Ing.
Alwin Daus

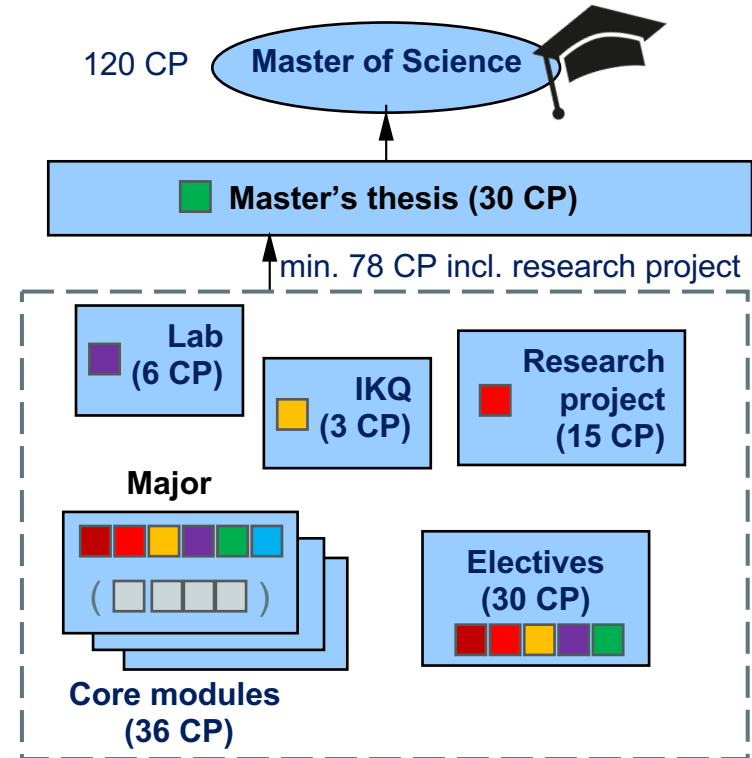
STRUCTURE M.SC. EENG



University of Stuttgart
Germany

120 Credits according to ECTS

Master's Thesis	30 credits	6 months full-time min. 78 credits required to register
Research Project	15 credits	In any R&D institution incl. industry
Interdisciplinary Key Qualifications	3 credits	rf. Campus catalogue
Lab	6 credits	1x 6 credit lab
Elective Courses	30 credits	from full department portfolio
Compulsory Courses	36 credits	6 out of topical major catalogue



MAJORS IN M.SC. EENG AND M.SC. ETIT



University of Stuttgart
Germany

M.Sc. EENG

Electrical
Energy
Systems

Smart
Information
Processing

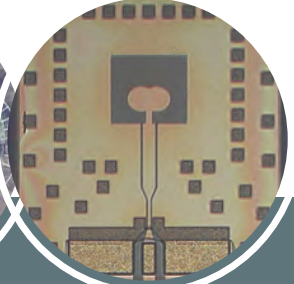
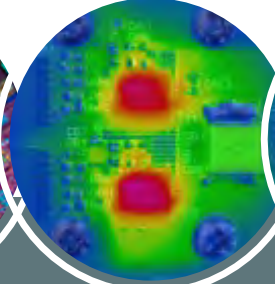
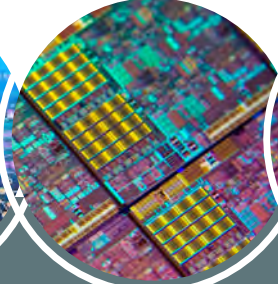
Ubiquitous
Communication
Systems

Nano- and Opto-
Electronics

Power Electronics
Systems and
Technologies

Smart
Systems

Electro-Magnetics
Applications



Elektrische
Energiesysteme

Intelligente
Informations-
verarbeitung

Universelle
Kommunikations-
systems

Nano- und Opto-
elektronik

Leistungs-
elektronische Systeme
und Technologien

Intelligente
Sensoren

Hochfrequenz-
technik

M.Sc. ETIT

Automatisierungs- und
Regelungstechnik

ELEKTROTECHNIK UND INFO



Program Structure

https://www.uni-stuttgart.de/studium/studienangebot_assets/electrical-engineering/pdf/Studienverlaufsplan_MSc_Electrical_Engineering.pdf

- Free choice of order
- Each element must be fulfilled to obtain the M.Sc. degree
- Master thesis can be started when 78 ECTS credits incl. research project have been obtained
- Goal: approx. 30 ECTS per semester

1. Term (Winter)	2. Term (Summer)	3. Term (Winter)	4. Term (Summer)
Core Module EENG 1 6 CP	Core Module EENG 3 6 CP	Core Module EENG 5 6 CP	Master Thesis 30 CP
Core Module EENG 2 6 CP	Core Module EENG 4 6 CP	Core Module EENG 6 6 CP	
Supplementary Module 6 CP	Supplementary Module 6 CP	Supplementary Module 6 CP	
Supplementary Module 6 CP	Supplementary Module Key Competences 3 CP	Research Project 5 CP	
Supplementary Module 6 CP	Master Lab Course 6 CP		
Sum: 30 CP	Sum: 27 CP	Sum: 33 CP	Sum: 30 CP
Total count for credit points (CP): 120			
(University of Stuttgart, Version 01.10.2018)			
Legend:			
Core Modules		Supplementary Modules	
Key Competences (non-technical)		Master Thesis	

Electives

- Build your individual knowledge profile using electives
- Choose from
 - All courses offered in the EIT department and selected associated courses, including core modules of other majors
 - Approved courses from other universities, e.g. in the frame of Erasmus
 - Ask for recommended electives in your major by the responsible professor

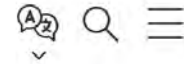
Individual Theses: Research Project and Master's Thesis

Landing page <https://www.f05.uni-stuttgart.de/en/ei/study-programs/thesis/>



University of Stuttgart

Faculty 5: Computer Science, Electrical Engineering
and Information Technology



🏠 Department of Electrical Engineering › study programs › Thesis

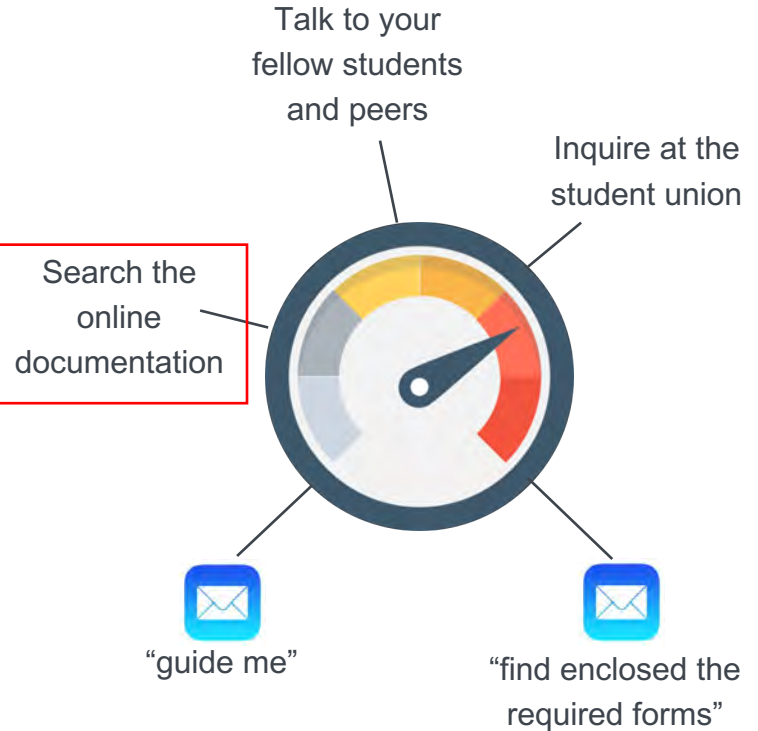


Student work in the bachelor's and master's program

The final thesis in a degree program of the Department of Electrical Engineering and Information Technology is carried out at an institute of the department. Here you can find information from the institutes about student theses.

In Case of Questions / Inquiries / Applications

- General questions on enrollment, visa, legal issues etc.
 - Contact the admissions office: <https://www.uni-stuttgart.de/en/study/application/admissions-office/>
- Issues concerning the course of studies
 - Check out <https://www.f05.uni-stuttgart.de/en/ei/study-programs/eeng/> first!
 - Contact the Study office of Electrical Engineering and Information Technology: info@ei.uni-stuttgart.de
- Applications for recognition of elective courses from other degree programmes, (justified) prolongation of bachelor/master theses, ...
 - Contact the chair of the examination board: pav@ei.uni-stuttgart.de
 - Note: such applications require a justification: <https://www.f05.uni-stuttgart.de/en/ei/department/forms/>



...and how about the inclusion and connection to industry?

- Many guest lectures from industry can be taken as electives
- Participation in R&D projects with partner companies at the institutes in the frame of student helper contracts
- Field trips, lectures, seminars, conferences a.m.m.
- Study thesis (15 ECTS in M.Sc.) can be performed either at a university institute or in industry, also abroad
- Bachelor- and Master's theses* in the frame of cooperations between the department's institutes and companies are available in Germany and abroad

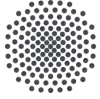
*the **definition of the content and supervision** of the thesis must be carried out **by a professor from the Department of Electrical Engineering and Information Technology**. Content definition and supervisory approval by a professor in the department must be **obtained before the thesis is started**.

Dean's Lunch

- Meet and discuss with the dean of students over the lunch break
- Infos on ILIAS [Introduction M. Sc. Electrical Engineering](#)



Dean' Lunch Sessions Summer Term 2025			
Session	Focus topics	Date	Room
1	Course registration, weekly schedule, introduction to Campus and ILIAS	Wednesday, April 23	Faculty room, ET11 4.282
2	Exam registration	Wednesday, May 14	Aquarium, ET11 -1.010
3	Finding topics and places for research projects and master's thesis	Wednesday, June 4	Laura's Lab, ET12 01.311



University of Stuttgart

Department of Electrical Engineering and Information Technology

<https://www.f05.uni-stuttgart.de/en/ei/departament/mailling-lists/>

Mailing Lists of the Department of Electrical Engineering and Information Technology

- **EI-Firmen**
Internships, job offers, events, excursions etc. from selected partner companies
- **EI-Studiendekan**
News and information directly from your Dean of Studies
- **EI-International**
Information about your opportunities for spending time abroad during your studies
- **EI-Hiwi**
Student assistant (Hiwi) job offers at the Department of Electrical Engineering and Information Technology
- **EI-Diversity**
Information, news and offers on the topics of equality and diversity
- **International Service Point (ISP) Fakultät 5**
Monthly mailing on news and activities for foreign students of Faculty 5



Congratulations, Graduates!



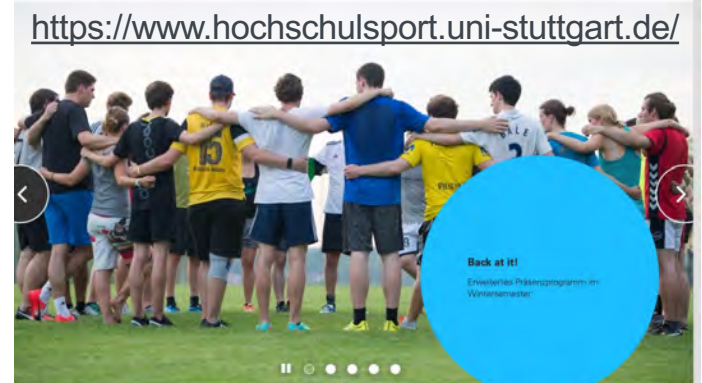
Summer Colloquium with Graduation Ceremony
Alte Reithalle Stuttgart, May 2024



<https://www.unimusik.uni-stuttgart.de>



<https://www.greenteam-stuttgart.de>



<https://www.hochschulsport.uni-stuttgart.de/>

<http://studlab.ei.faveve.uni-stuttgart.de/>



<http://www.emotions-stuttgart.de/>





University of Stuttgart

Institute of Robust Power Semiconductor Systems

Thank You!



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University of Stuttgart

Institute of Robust Power Semiconductor Systems

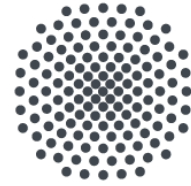
Pfaffenwaldring 47, 70569 Stuttgart, Germany

www.ilh.uni-stuttgart.de



**Viel Erfolg und
eine gute Zeit in
Stuttgart**





Universität Stuttgart

Introduction for the New Students

**Student Council of the Electrical Engineering and Information
Technology Department**

March 31, 2025

Time Schedule for Today

- 12:30 Pancakes with the Student Council
- 13:30 Campus Tour (in English)

Who Are We?



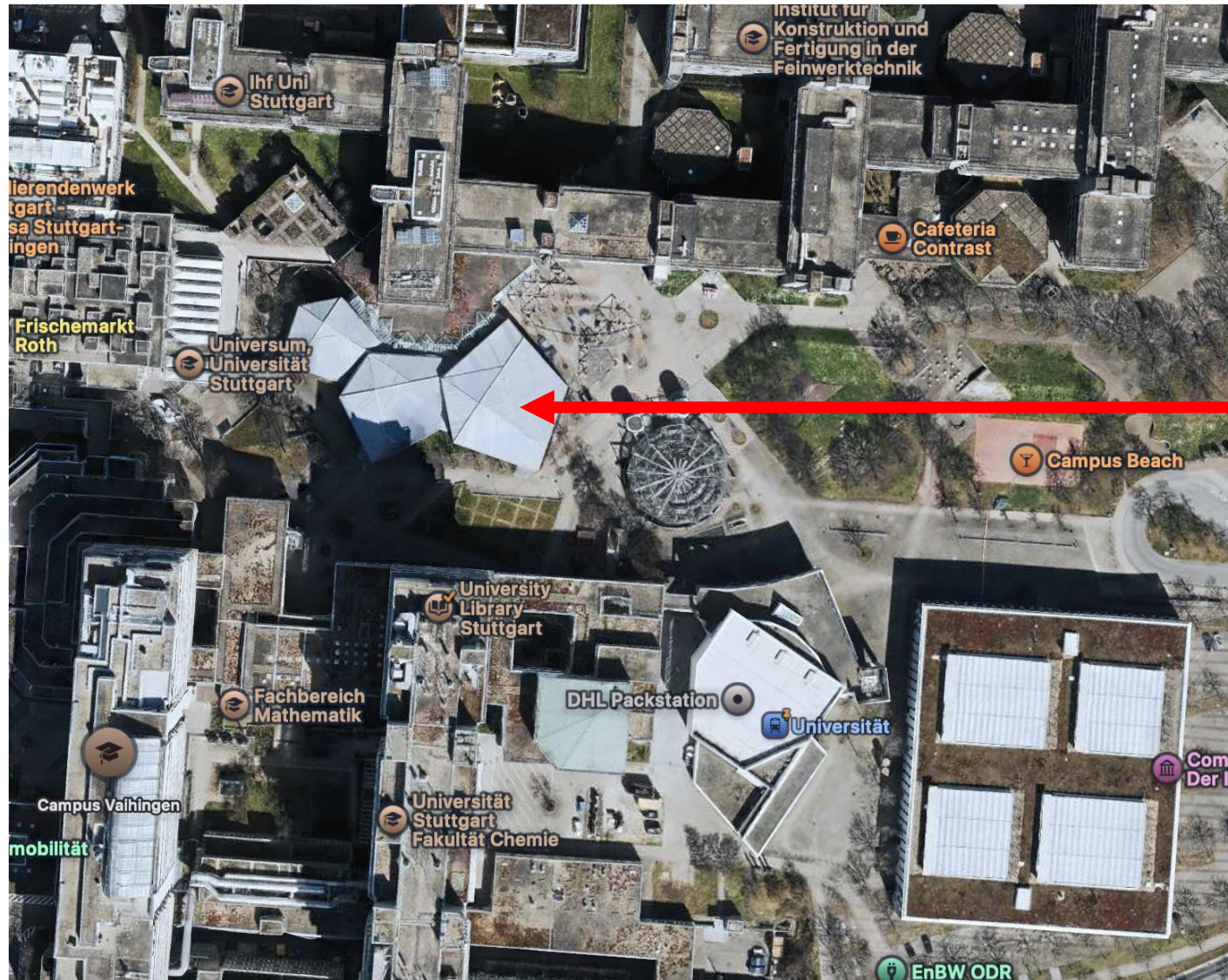
What We Do?

- Represent the Interests of Students
- Offer Guidance and Support for Student Issues
- eMotions Party*
- Plan Excursions
- Manage Lockers
- Supervise StudLab
- Offer EE Merch

*Sidenote: The Best University Party.

Upcoming Events

- April 7: Start of the Lectures
- May 9: Spacenight (Aerospace Eng. Party)
- July 3: Bauigelfest (Civil Eng. Party)
- October 24: eMotions (Electrical Eng.)



We are here.

eMotions 2025 (October 24)



StudLab

- Administered by the Student Council
- Supervised by Prof. Kalfass
- Made for Personal Projects
- Equipment
 - 3D Printer
 - Soldering Workstation
 - Measuring Equipment
- Sign Up Online www.studlab.de

Merch

- Hoodies and T-Shirts
- Currently for Preorder
- www.fs-ei.de/merch



Other University Offers

- Studium Generale
- University Sports (Allgemeiner Hochschulsport)
- Language Courses
- Student Associations
 - Student Small Satellite Group (KSAT)

CAMPUS IT

- WIFI via eduroam
- Uni-VPN
- Student Licenses for Software
- Unidays (Discounts on Many Products)
- Managed by TIK
 - www.tik.uni-stuttgart.de

Student Newsletter and Instagram



fs-ei.de/en/services/mailling_list/2025_ese



[instagram.com/fachschaft_ei](https://www.instagram.com/fachschaft_ei)

Join Us!

- Meetings every Monday at 13:05
- Contact: info@fs-ei.de