

ife

**Information about
the Master's
degree Electrical
Engineering**

Electrical Engineering Students Council
at University Stuttgart



Introduction

Dear fellow students,

you gained a lot of fundamental knowledge during your undergraduate studies which will now be supplemented by further specialization.

This ife can be seen as a small overview that might help you to take the first steps in your graduate studies. If you'd like to have more hints, experiences or insights don't hesitate to contact us directly. You can either visit our office at building V47 near the women's restroom or simply write an email to info@fs-ei.de.

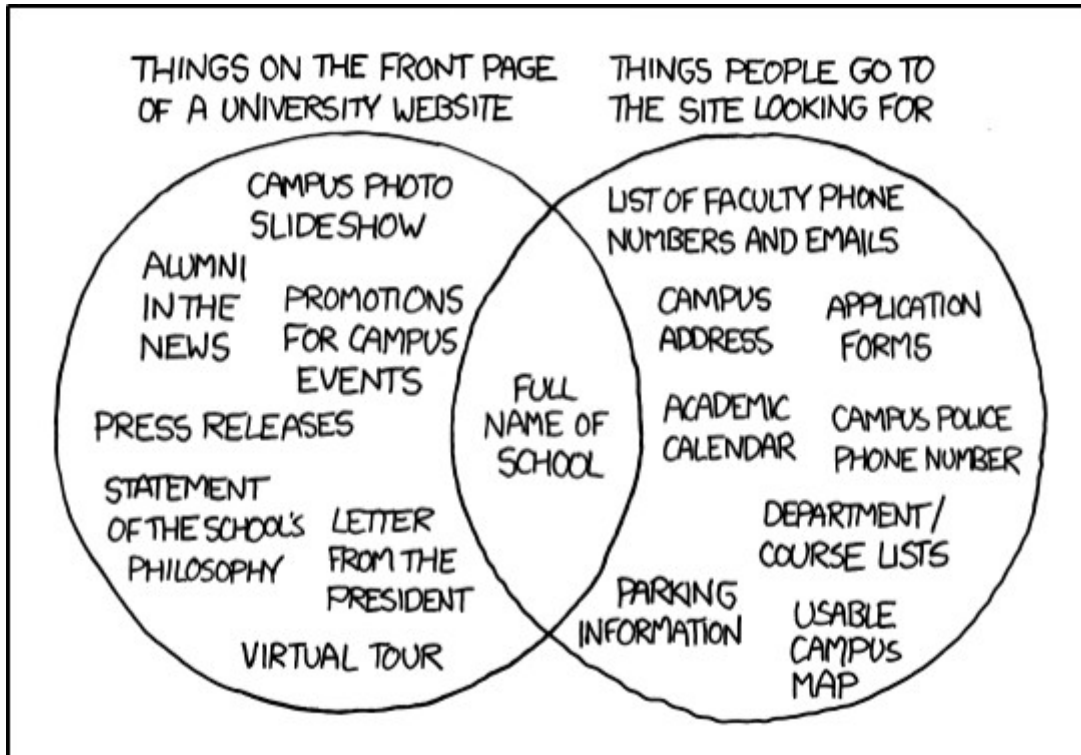


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Structure of the study program

At the beginning of your studies at the University of Stuttgart, you will be able to choose from six different subject areas, called "specializations" (Studienschwerpunkte), which will determine your further courses. But don't worry, your "specializations" will not be set until you register for your first exam during the registration period. This will give you the opportunity to attend as many classes as you like to discover your preferences. Make your choice carefully, as it cannot be changed once you have registered for your first exam.

The entire program is based on credit points (CP) to be earned, similar to your undergraduate studies. Each credit point is equivalent to 30 hours of work, and you must earn a total of 120 CP to complete your M.Sc. If you follow the examination regulations and earn 30 CP each semester, you will receive your degree after 4 semesters. If you decide to spend a semester abroad or write your thesis at a company, you will probably need a little more time. It doesn't matter, as long as you finish your studies within 8 semesters -- after that you will be ex-matriculated.

The 120 CP are made up of the following categories:

- 36 CP Core Modules
- 30 CP Supplementary Modules
- 9 CP Key Competences and Lab Course
- 15 CP Research Project
- 30 CP Master Thesis
- Additional Modules (optional)

Core Modules

For each specialization, there is a catalog with several core modules of 6 CP each, from which you must choose the 6 most interesting.

Supplementary Modules

You can also choose additional modules from a catalog. You will receive a total of 30 CP. Of these, you can choose up to 2 modules with a maximum of 12 CP from our undergraduate program, if you haven't already taken them in your own undergraduate program. Another option is to get up to 12 CP from other modules offered by different faculties. In this case, you must submit an application to the examination board. A list of possible courses can be found in the C@MPUS system.

Key Competences and Lab Course

The examination regulations suggest a laboratory course during the second semester of your studies at one of the institutes of the Department of Electrical Engineering and Information Technology. You can find more information on their homepages or on C@MPUS. In addition, you must earn 3 CP through non-technical key competencies, such as language courses or cultural competency workshops.

Research Project

In your third semester, you should focus on your research project, which requires a workload of approximately 450 hours based on 15 CP. You must complete the project within 6 months or less. This project is basically a major experimental or theoretical paper on a topic of your choice, which must be approved by one of our professors. You are also allowed (and even encouraged) to do the project in cooperation with a company, which requires a bit more organization in advance (4-5 months, if you want to go abroad probably more) because you'll have to write applications etc. Keep in

mind: Some companies will only allow you to go abroad if you have worked for them before.

Master Thesis

Last but not least, you have to finish your studies at our university by writing your master thesis, which is worth 30 CP. This is your chance to show that you are able to solve a project or problem related to electrical engineering in a scientific way and to present it adequately within a limited period of time. You must have already passed your research project and earned 72 CP before you can begin. As with your research project, you are free to choose your own topic, as long as the workload is reasonable and the examining professor approves. However, your thesis must be done at one of our institutes and cannot be done with a company. A good way to find a topic is to visit our different institutes and look at their blackboards or homepages. If you don't find anything that interests you, you can also talk to our professors directly about your ideas; they are usually very open to new ideas. To find the right institute or interesting topics in advance, you can also ask older graduate students, our student association, or various staff members at the institutes. They know best what they are working on and can give you an insight into their current work. The most important thing is that you stick to the 6-month time limit. Otherwise, you will be struck off the university register right at the end of your studies, and that would be more than annoying.

Additional Modules

Are you interested in more than just electrical engineering stuff, but you already have all your CP's planned out? No problem! Your examination regulations allow you to take up to 5 additional modules. The grades will be listed on your transcript if you wish, but will not affect your overall grade.

Campus-IT

There are various services and web services at the university, the most important of which are presented here. For all portals, the access data you received during your enrollment, i.e. your st account, is applicable.

Web services

E-Mail

An e-mail box is automatically set up with enrollment. For this purpose, there is a web interface as well as Exchange and IMAP interfaces. It is strongly recommended that you check these emails regularly, as you will receive important information this way.

C@mpus

www.campus.uni-stuttgart.de C@mpus is a comprehensive administration system. It enables the registration for exams, the query of exam results and the registration for courses. Basically, registration for lectures and exercises is not obligatory, but it does make sense, as it is used to create the timetable and to access the working materials in Ilias. On the other hand, it is important to register for exams in good time. If you are in a hurry, you can be notified by e-mail as soon as the exam results are published. It is very useful to import the C@mpus appointment calendar in iCal format into your own calendar, e.g. on your smartphone. This gives you direct access to dates, venues, etc. and also lets you know immediately if an event is cancelled.

Ilias

www.ilias.uni-stuttgart.de Lecture and exercise materials and, in some cases, lecture recordings are made available on the Ilias platform. In addition, forums can be set up in which some lecturers provide relevant information.

Campus Infrastructure

WIFI

Almost everywhere at the university there is WLAN (eduroam), where you can log in with a st account. On the website of the TIK there is information about the installation. There are also network sockets in the workrooms and in some other places. By the way, eduroam is used by universities worldwide, so you can often get WLAN access even in foreign cities.

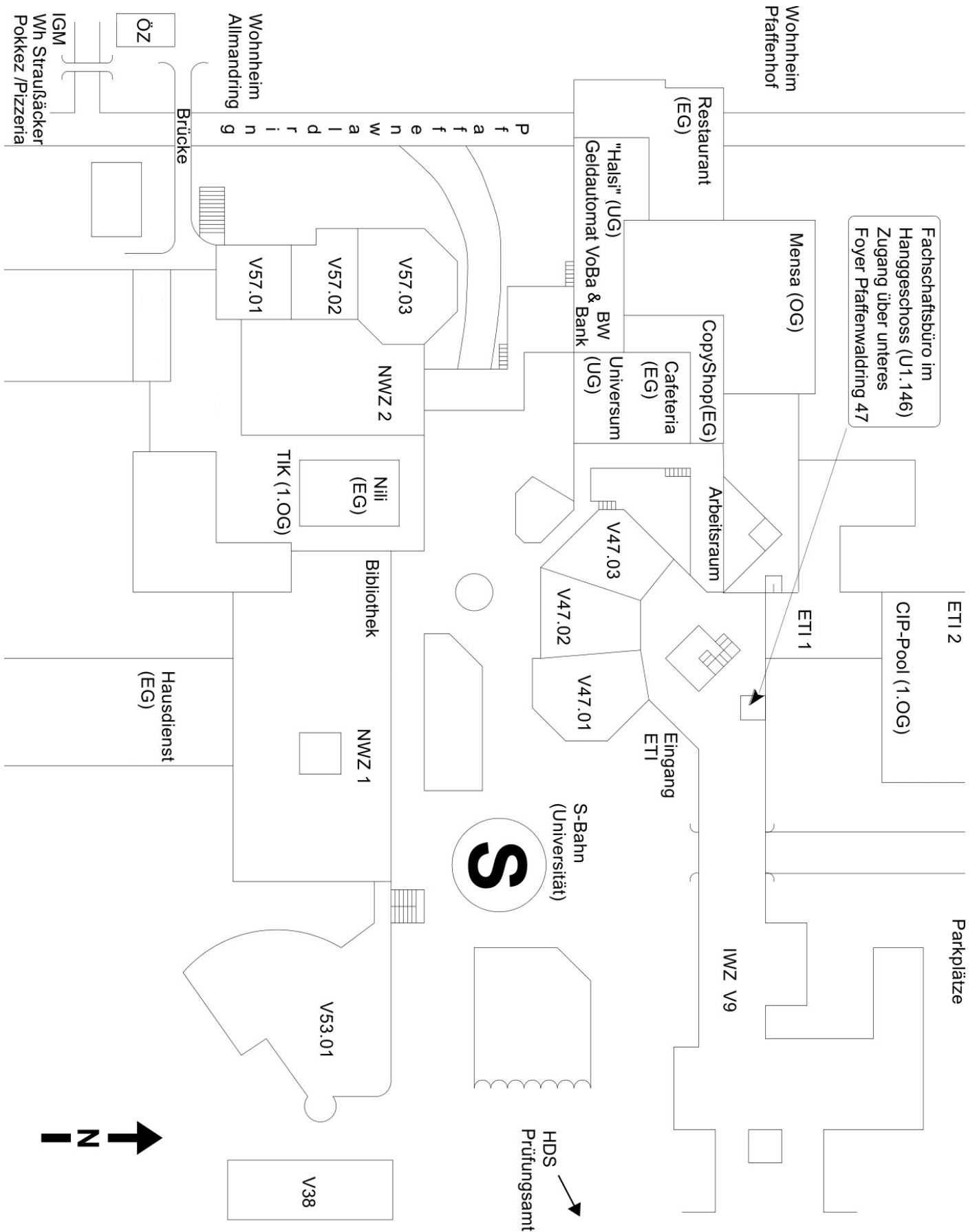
Pool of the TIK

For students, TIK offers pools at NWZ-II (Pfaffenwaldring 57), IWZ (Pfaffenwaldring 9, room 2.270), Universum and PWR6 (Pfaffenwaldring 6, room 0.24). There are two more pools in the city center. (Opening hours at NWZ-II 1st floor: Monday to Friday 7:00 to 23:00; Saturday 7:00 to 12:00).

ECUS

The ECUS, your student ID, has long been a cashless means of payment in the cafeterias and dining halls and is also required for borrowing items from the library. With the ECUS you have 24/7 access to the ETI building and the Universum workroom.

Site plan university campus Vaihingen



Dates

You can also find some of the dates under:



www.uni-stuttgart.de/en/study/application/academic-calendar/

Winter semester:

3. week of October	Start of the lecture period in the winter semester
Friday in 2. lecture week	eMotions (best university party)
23.12 – 06.01.	Year end semester break: lecture-free
2. week of February	End of the lecture period in the winter semester

Summer semester

2. week of April	Start of the lecture period in the summer semester
One week at the end of May or beginning of June	Whit sun holidays: lecture-free
3. week of July	End of the lecture period in the summer semester

Student Council

Student Council Electrical Engineering and Information Technology

We - the student council - are a group of students who work, not entirely altruistically, to simplify the study program. To this end, we sit on various committees of the department and, for example, have a say in the appointment of new professors. We also want to enrich life at the university and therefore participate in projects of the student council, organize parties and other events. On the H-floor (lower exit of the lecture halls) of V47 we have our own workroom and a student council office in room U1.146 (on the left past the ladies' toilets). This is where people meet who want to help shape everyday life at the university in one way or another. We have both experienced students (higher semesters) and children (3rd semester). In the breaks between lectures or often in the late morning you will always meet someone who can help you or at least has an idea who you can turn to. You can have old exams printed out at cost price. Our student council meetings take place in the student council office. There, the representatives of the different committees (FakRat, Studienkommission, Berufungskommissionen, StuPa, ...) report and it is discussed how they should behave in upcoming votes. In addition, other activities of the student council that are not bound to official committees are coordinated here. Our meetings take place regularly on Mondays at 13:05 during the lecture period. Of course, everyone is invited to just drop by. We don't have rigid organizational structures and are always happy to welcome new people who see the university as more than just a "think tank", organize the freshman orientation (ESE), manage the Studlab and the student council IT, ...

But what do you get out of such a commitment

yourself? Well, the bad news first: There is no money for it. Now the good news: You get to know people: Students from higher semesters who can tell you how they solved the problem you have now. You get to know the professors on the various committees and, most importantly, you get to know the professors personally, which can often be very helpful during your studies. In addition, an insight into the structures of the university can be interesting and sometimes very funny. In addition, the student council offices and especially the "Nili" (see below) are among the few places on the Vaihingen university campus where there is still something going on in the late afternoon and evening. Here we often discuss late into the night, tinker on the computer, drink beer, cook and eat, watch TV, meet for sports or barbecue, ... You are always welcome to join us.

Stuvus

In Baden-Württemberg, the state government made the constituted student body mandatory for all universities a few years ago. This means that every student who is enrolled at the University of Stuttgart automatically becomes a member of the student body of the University of Stuttgart and pays a kind of "membership fee" per semester, which finances the work of the student representation (stuvus) as well as parts of the administration of the student body. The central body of Stuvus is the student parliament (StuPa). In addition to 13 members directly elected by the students for the StuPa, the 7 student senators and one student member from each of the 10 faculty councils of the University of Stuttgart sit here. The thirty-member body meets once or twice a month on Wednesday afternoons and decides or advises in its meetings on student issues that usually affect the entire university. In addition, members are appointed to various working groups and committees where more specific tasks and problems are discussed. The meetings are open to the public, which means that anyone

interested in the work of the StuPa (and thus the whereabouts of their membership fee) is welcome to attend. Less formal and also open to everyone are the so-called Stuvus meetings, which usually take place once a month and in which everything is discussed that cannot find a place in the StuPa meeting.

Further study offers

Studium Generale

The Studium Generale has nothing to do with the "normal" study of electrical engineering. Here, lectures, seminars, etc., which seem suitable for students of all disciplines, are compiled in a range of events. In the DIN A5 booklet, which is available at the beginning of the semester, e.g. in the university library, you will find a large number of interesting events from the engineering and natural sciences, but especially from the non-technical courses of study at the University of Stuttgart. In some cases it is also possible to take exams or obtain certificates in these subjects. In the basic studies, however, it is not advisable to take such "additional" exams, since every registered exam must be passed in any case. Nevertheless, the Studium Generale offers a good opportunity to look beyond the horizon of electrical engineering studies and to get to know other disciplines.

University Sports Stuttgart

University sports are part of the Studium Generale. It offers almost all common team and martial arts sports, health and fitness courses, dancing, swimming, skiing trips and much more. The university sports program, also a DIN A5 booklet, is usually available in the Segelhaus (Allmandring 28) three weeks before lectures begin. The booklets also contain details on registration, costs and dates. For almost all courses that require registration, you must register two weeks before the start of lectures. There is always a need to hurry. The

dates for many offers are sometimes already taken after a few seconds. Further information at www.hochschulsport.uni-stuttgart.de/en.

Language courses

You can also take language courses at the University of Stuttgart. The Language Center offers courses in many languages (from Arabic to Hungarian). Here you can not only refresh or deepen existing knowledge, but also learn languages from scratch. The courses themselves are free of charge except for copying costs, but the literature used is often not cheap. In addition to (graded and ungraded) certificates, many languages also offer the possibility of earning a certificate after a certain number of courses.

For English as the lingua franca par excellence, the offer of the Language Center is of course particularly interesting. In addition, more and more courses are being held in English in specialized studies and, as a rule, examinations are also held in English. In English, there are general language courses (Intermediate I-Advanced II), which are textbook-oriented and similar to school lessons. They are suitable for re-entry after a longer break. In addition, there are a larger number of certificate courses aimed at those who want to obtain the "Certificate of International Communicative Competence". These courses are much more demanding and work-intensive, often requiring the preparation of papers, etc. The certificate, which requires 5 of these courses, has been found to require a significant amount of extra work in addition to normal studies. Unfortunately, the English courses offered by the Language Center are completely overcrowded and there are often not enough places available. In addition (this applies to all language courses), they almost always take place in the city center and often at very inconvenient times (mornings). Registration for language courses must be done online via C@mpus. For many languages there is also a placement test. Further information is available at www.sz.uni-stuttgart.de/.

Despite the effort involved, we can recommend participation with a clear conscience, as comprehensive language skills are becoming increasingly important.

Abbreviations

AK	Arbeitskreis, Working group
Assi	Assistant
ei	Electrical engineering and information technology
el	Elektrotechnik, Electrical engineering
ETI	Electrotechnical Institutes. All institutes are located at Pfaffenwaldring 47 (ETI 1 = old building, ETI 2 = new building), the IGM at Allmandring 3b
EMV	Elektromagnetische Verträglichkeit, Electromagnetic compatibility
FHG	Fraunhofergesellschaft
FS	Fachschaft, Student Council
Halsi	When someone at the Vaihingen campus says "he goes to Halsi," he probably means the "cheap" supermarket under the refectory.
HiWi	Wissenschaftliche Hilfskraft, Scientific assistant
Inst.	Institute
IZ	Internationales Zentrum, International Center
KI,KII	Kollegiengebäude I or II (twin high-rise buildings Keplerstr. 11 and 17 in Stuttgart Mitte)
LP	Leistungspunkte, CP) Credit Points
Mxx.yz	Lecture hall in the city center, building xx, lecture hall number yz on the y.floor
Nili	Stuvus office "Light Blue Hippo" (Pfaffenwaldring 57, ground level under the NWZ2 high-rise)
NWZ	Naturwissenschaftliches Zentrum, Natural Science Center Pfaffenwaldring 55 und 57)
ÖZ	Ökumenisches Zentrum, Ecumenical

	center
PO	Prüfungsordnung, Examination regulations
RUS	= TIK
S	Seminar
Sem	Semester
SS	Sommersemester, Summer semester
stuvus	Studierendenvertretung der Universität Stuttgart, Student Council of the University of Stuttgart
SWS	Semesterwochenstunden, Semester hours per week or Studentenwerk Stuttgart
TIK	Technical information and communication services (central IT service facility)
Ü	Übungen, Exercises
V	Vorlesung, Lecture
Vxx.yz	Lecture hall in Vaihingen, building xx, lecture hall number yz on the y.floor
VVS	VerkehrsVerbund Stuttgart
VÜ	Vortragsübungen, Recital exercises
WS	Wintersemester
ZFB	Zentrales Fachschaftsbüro in der Stadtmitte, Central student council office in the city center

General

Numbering of the lecture halls

All lecture halls have a number, e.g. Vxx.yz if the lecture hall is located in Vaihingen, or Mxx.yz for the city center. Here xx is the house number of the building, y the floor (0 = first floor) and z the consecutive number of the lecture hall in this floor of the building.

The main lecture halls are V47.01 ... V47.06 in the ETI (Electrotechnical Institutes, Pfaffenwaldring 47), V57.03 in the NWZ-II (Physicists' Tower), V53.01 (Large Lecture Hall, Audimax) and M17.01 (Deep Lecture Hall in the basement of K II, Keplerstrasse 17, Stadtmitte).

In addition, there are V9.xy (Faculty of Mechanical Engineering) and V7.xy (Faculty of Civil Engineering).

SWS - Semester Week Hours

The unit of measurement for the temporal scope of a course is the semester hour per week (SWS). It corresponds to the total number of hours of a course, which lasts 45 minutes per week during a semester. Often in official documents, the designation of a course is followed by (3/1). In this example, this would mean that the course consists of 3 SWS lecture and 1 SWS tutorial. However, SWS are rarely used anymore except in module handbooks, mostly the workload of a course is described by the number of credit points (LP).

Local transport ticket/ DeutschlandTicket JugendBW Studierende (ohne Soli)

With the JugendTicketBW, students under the age of 27 can travel cheaply by bus and train throughout Germany.

www.ssb-ag.de/tickets/schueler-azubis-und-studierende/deutschlandticket-jugendbw/

For students aged 27 and older is the DeutschlandTicket available

www.bahn.de/angebot/regio/deutschland-ticket

Library

The University Library offers guided tours at the beginning of each semester. These take place both in Vaihingen and in the city center. The dates are on the registration lists in the library. ECUS is required for borrowing, but reservations can also be made online.

Calculator

At the beginning, a normal calculator is quite sufficient. In the further course of studies, functions for calculating matrices and complex

numbers as well as programming skills can be useful; however, calculators with such capabilities are prohibited in many exams. In some subjects, calculators with recallable constants are very helpful. Our tip: the Casio FX-991DE-X, which can convert different representations of imaginary numbers into each other, for example.

Re-registration

At the end of each semester, you must re-register to show the university that you wish to continue studying. To do this, the tuition fee must be transferred to the office specified in C@mpus. The re-registration deadlines are usually from January 15 to February 15 and from July 15 to August 15. Students who miss the re-registration deadline will be (provisionally) exmatriculated without mercy. The re-registration process is then very time-consuming.

Canteen

There is one in Vaihingen and one in the city center. You can pay cash or with the ECUS, which you can top up at various SWS machines (or via Paypal with Autoload). It is recommended to pay with the ECUS, otherwise you have to pay the guest price. The biggest rush is usually around 1pm. At this time it can happen that a meal is already sold out.

A few years ago, front cooking was introduced (wok or "grilled" meat). These dishes are a bit more expensive, but a (welcome) alternative. Drinks are also offered. Otherwise, the menu repeats about every three weeks. Below the cafeteria is the dining hall. Here there is a burger bar, a salad buffet, and the daily specials of the normal Mensa.

Cafeteria

There is a cafeteria near the canteen which also offers small meals and drinks outside the opening hours of the canteen. Further cafeterias are located at the mechanical engineering department (Pfaffenwaldring 9) and at the chemistry department.

Copier

Copiers are one of the most important things in studying. That's why there are copiers all over campus. For the photocopiers you only need your student ID card, from which the costs of a few cents per page are deducted. There is also a photocopy shop in the cafeteria where you can make copies up to DIN A0. Copies can also be punched or stapled here.

Studierendenwerk

The Studierendenwerk runs the dining halls, cafeterias and most of the dormitories. It also offers kindergartens and daycare centers, free psychosocial counseling, BAföG counseling and legal counseling. In addition, the Studentenwerk has taken out accident insurance for students and grants interest-free loans in emergencies. (More info at www.studierendenwerk-stuttgart.de/)

Examination regulations

These and other official documents of the faculty can also be viewed on the internet on the homepage of the faculty.

Course Catalogue

The course catalog is fully integrated into C@mpus. Here you can find all lectures, exercises, etc. offered by the organizations and institutes. It is definitely worthwhile to think outside the box and see what other areas of the university are doing.

Uni-Film

Such a lecture hall is in principle also well suited as a cinema. That's what some students thought and created the UNI-Film. Not only older films are shown, but also relatively recent ones (about 3 months after their release). Of course, the brand-new stuff is not shown, but you can't expect that at a free cinema visit. If you go more often, the Uni-Film e.V. is happy about a donation. The screenings take place alternately in the lecture hall V47.01 and in the city center: www.uni-film.de

Lockers

The EIT has several hundred lockers for students on the H floor. These are managed by the student council. For more information, please contact the student council (schliessfach@fs-ei.de). In contrast to the lockers in the ETI and the NWZ, the lockers in the library are emptied daily.

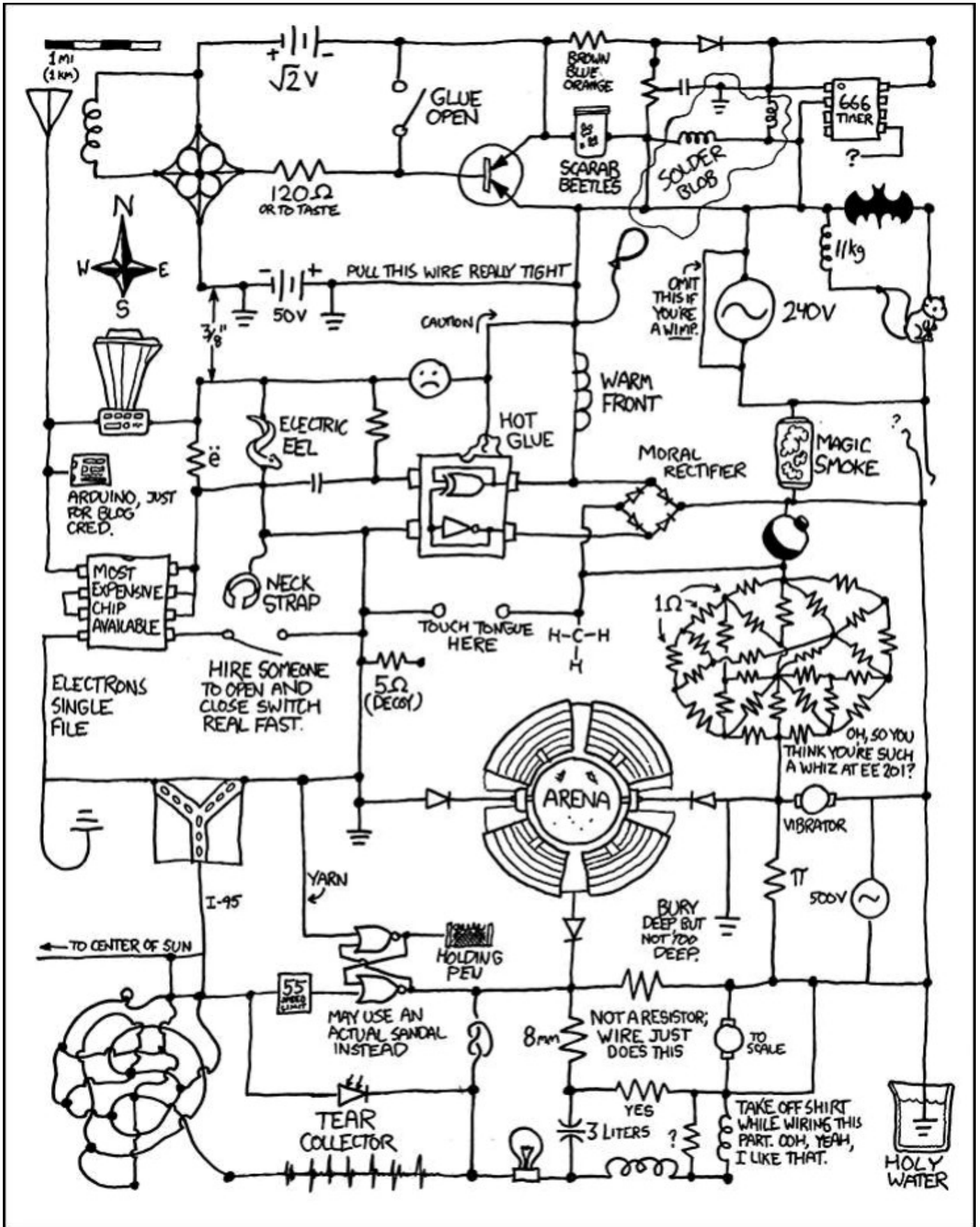
Lost and found

Can be handed in or picked up at the house service. This is located on the first floor of the NWZ-I (chemists' building), telephone 64000. The housekeeping service is also responsible for the building services (loudspeaker and lighting system, elevators, etc.) and for unlocking the lecture halls.

Closing words

This ife is peppered with many personal opinions from not too many people. In the end, everyone has to form their own opinion. We hope that we have been able to make the start of your studies easier. If you have any suggestions, questions, grievances, praise, (cautious) reprimands, or just feel like having a cup of coffee, feel free to drop by; we don't bite and we had our problems in the beginning, too.

Something to smile about



Imprint

Still questions?

Then just come to the student council office or contact your mentors by e-mail (or the student council: info@fs-ei.de). If you have any questions or anything else is unclear to you, you can always drop by the student council. Of course, we are also happy to help outside of the mentoring program.

Publisher

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