

Welcome at D-ITET!

Welcome Event for new doctoral students

29 October 2020

Welcome



Prof. Vanessa Wood

- Head of the Institute for Electronics
- Head of Department at D-ITET
- Vice President for Knowledge Transfer and Corporate Relations of ETH Zurich



Prof. Sebastian Kozerke

- Head of the Cardiovascular Magnetic Resonance Group at the Institute for Biomedical Engineering
- Director of Studies at D-ITET

Welcome

Sean Weaver

- Doctoral student at the Laboratory of Biosensors and Bioelectronics
- Co-President of VMITET



Reto Kreuzer

- Head of student administration D-ITET
- Coordinator of studies and student advisor D-ITET



Maja Bügler

- Head of Human Resources (HR) for D-ITET



Programme

1. **ETH and D-ITET**
2. Introduction VMITET
3. Doctoral studies, research and teaching
4. Some employment information
5. Further information & contact persons
6. Code of Conduct
7. Case studies

ETH and D-ITET

Prof. Vanessa Wood

Top EE-faculty in continental Europe



QS World University Ranking (2020)

No. 6 in the world (overall ranking)

No. 5 in Electrical & Electronic Engineering

THE World University Ranking (2020)

No. 13 in the world (overall ranking)

No. 13 in Electrical & Electronic Engineering

Academic Ranking of World Universities (2019)

No. 19 in the world (overall ranking)

No. 10 in Electrical & Electronic Engineering

The D-ITET in numbers

BSc	ETH D-ITET	9'895 787	<ul style="list-style-type: none"> • 42 professors • 50 other lecturers • 400 doctoral students • Study administration • AMIV • IT support
MSc	ETH D-ITET Electrical Engineering MSc Biomedical Engineering MSc Energy Science & Technology MSc Quantum Engineering MSc <i>Neural Systems & Comp. MSc (UZH)</i>	7'037 707 427 111 99 25 45	
Exchange	ETH D-ITET	467 56	

Four core research areas

- **Electronics and Photonics**
- **Information and Communication**
- **Energy**
- **Biomedical Engineering and Neuroinformatics**

in 19 Labs

Four core research areas in 19 labs

Electronics and Photonics

- **Prof. Luca Benini**
- **Prof. Colombo Bolognesi**
- **Prof. Gian-Luca Bona**
- **Prof. Qiuting Huang**
- **Prof. Taekwang Jang**
- **Prof. Juerg Leuthold**
- **Prof. Mathieu Luisier**
- **Prof. Lukas Novotny**
- **Prof. Christoph Studer**
- **Prof. Vanessa Wood**
- **Prof. Maksym Yarema**

Four core research areas in 19 labs

Information and Communication

- Prof. Helmut Bölcskei
- Prof. Florian Dörfler
- Prof. Orçun Göksel
- Prof. Maryam Kamgarpour
- Prof. Ender Konukoglu
- Prof. Amos Lapidot
- Prof. Hans-Andrea Loeliger
- Prof. John Lygeros
- Prof. Onur Mutlu
- Prof. Kaveh Razavi
- Prof. Lothar Thiele
- Prof. Laurent Vanbever
- Prof. Luc Van Gool
- Prof. Roger P. Wattenhofer
- Prof. Armin Wittneben

Four core research areas in 19 labs

Energy

- **Prof. Jürgen Biela**
- **Prof. Christian Franck**
- **Prof. Ulrike Grossner**
- **Prof. Gabriela Hug**
- **Prof. Johann W. Kolar**

Four core research areas in 19 labs

Biomedical Engineering and Neuroinformatics

- Prof. Benjamin F. Grewe
- Prof. Richard Hahnloser
- Prof. Giacomo Indiveri
- Prof. Sebastian Kozerke
- Prof. Klaas P. Prüssmann
- Prof. Daniel Razansky
- Prof. Metin Sitti
- Prof. Marco Stampanoni
- Prof. Klaas Enno Stephan
- Prof. János Vörös
- Prof. Mehmet Yanik

The Department Management



Head of Department: Prof. Vanessa Wood



Deputy Head of Department: Prof. Klaas Enno Stephan



Director of Studies: Prof. Sebastian Kozerke

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Introduction VMITET

Sean Weaver, **vmitet**

Co-President



Contact Details

<https://www.vmitet.ethz.ch>

vmitet@ee.ethz.ch

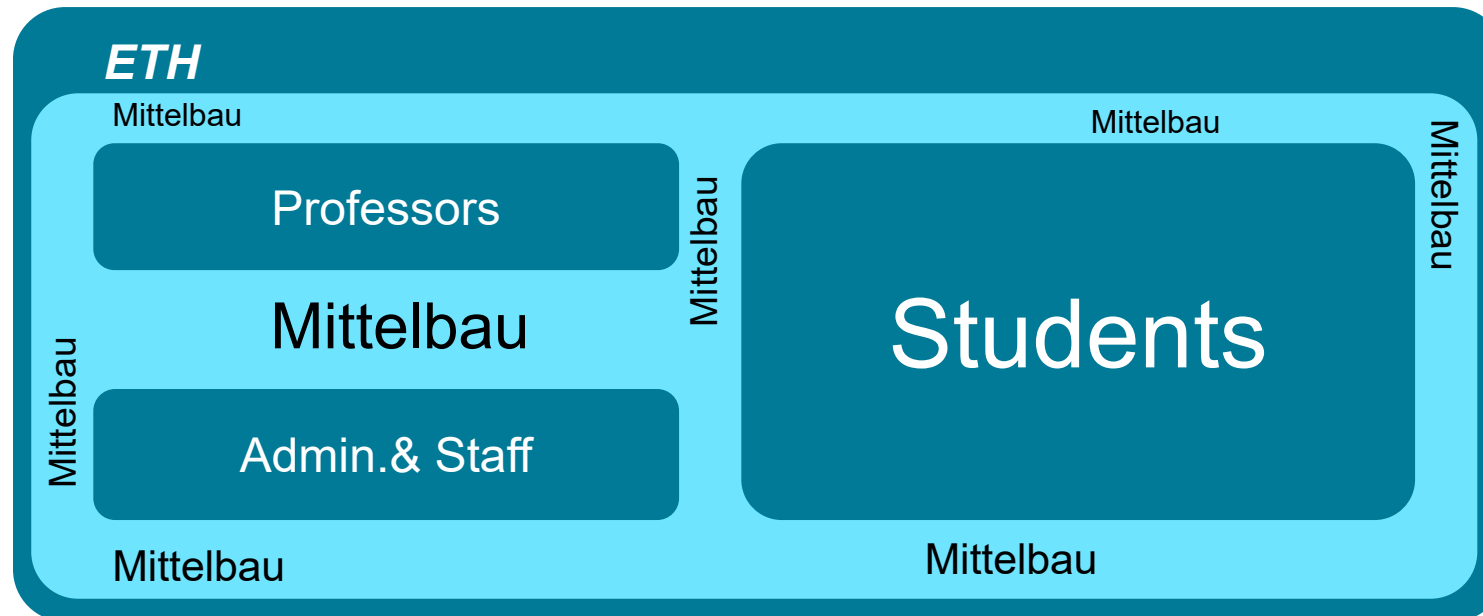
weaver@biomed.ee.ethz.ch

vmitet is the association of the *Mittelbau* at ITET

#1 What is **vmitet**?

#1.1 What is the Mittelbau?

— Doctoral Students
Post-Docs
Senior Scientists



vmitet is the association
of the *Mittelbau* at ITET






AVETH
Association of Scientific Staff ETH

#2 What do we do?

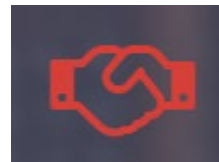
vmitet
Verein des Mittelbaus am D-ITET

About us | Representatives | Events and Pictures | Useful Links | [Join Us](#)

Welcome to **vmitet**, the association of the Scientific Staff at ITET

- **Representation**
 - of Doctoral Students
 - Post-Docs
 - Scientific Staff
- **Personal development**
 - Career-talks
 - Seminars
- **Social Events**
 - Welcome Events
 - Apéros
 - Movie-Nights

#2 What do we do? Representation in ITET Commissions



Professors
only

#2 What do we do?

Personal development events

Career Talks

- Alumni come by to tell you about their careers



Diversity events

D+ITET

#2 What do we do? Social Events

“Ours”

- **vmitet** Monthly Apéro
- Welcome event for doctoral students and PostDocs

↳ This event!



#3 What *else* can we do?

Personal development events



We take care of the beers 😊

Workshops

- Open Access Research
- Sustainable data storage
- Leadership
- ...

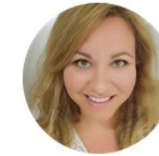
Seminars

- **vm**itet meets TIK / IfA / 'your lab name'
- Postdoc/PhD career day

Diversity and Inclusion at ITET

Mission Statement

- Create a space where people feel **emotionally, physically, and intellectually safe**
- **Transform institutional culture** so that the potential of people with diverse backgrounds can be leveraged
- Create an open **discussion culture** about difficult topics regarding discrimination



Zeta Avarikioti



Alexander
Dietmüller



Andreas
Messner



Marco
Eppenberger



Maria
Apostolaki



Eva Ahbe



Leonard
Deuschle



Nako
Nakatsuka



Dominik Bauer

Diversity and Inclusion at ITET

Implementation

- **Workshops + Talks:**
 - 16 Personalities
 - Uncovering Unconscious Bias
 - The Role of Diversity in Innovation
- **Events:**
 - Summer Food Bazaar
- **Panel Discussions:**
 - How to leverage diversity
- **Outreach**
 - Collaboration with department
 - Mentoring (planned)

D+ITET



Diversity and Inclusion at ITET

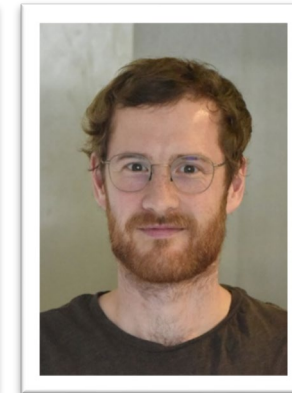
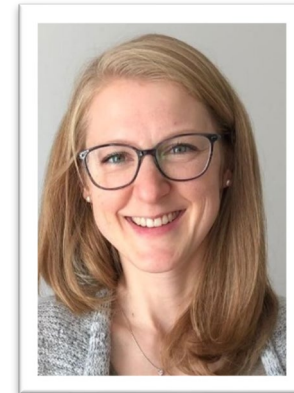
D+ITET

HelpDesk



ITET HelpDesk

- First point of contact in early state conflicts
- Trusted mediators are fellow ITET doctoral students offering a peer-to-peer contact point
- Strictly confidential



www.vmitet.ethz.ch/counseling.php

Diversity and Inclusion at ITET



Contact us  diversity@ee.ethz.ch

We meet through conference calls each week.

Currently taking part and discussing the AVETH diversity seminar series.

Next Thursday (5.11. 5-6 pm): Diversity and race in STEM

Upcoming flagship event:

We are going to announce our own virtual panel discussion this year.

- Tackling specifically (racial) discrimination within our community and within Switzerland.



<https://www.vmitet.ethz.ch/diversity.php>

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A. Research Activities and Doctoral Studies

- **Prof. Sebastian Kozerke**
- **Reto Kreuzer**

Research Activities

What is "Research"?

Re Search

again, anew

to examine carefully, to test and try

What is new to me versus what is new to the world

School

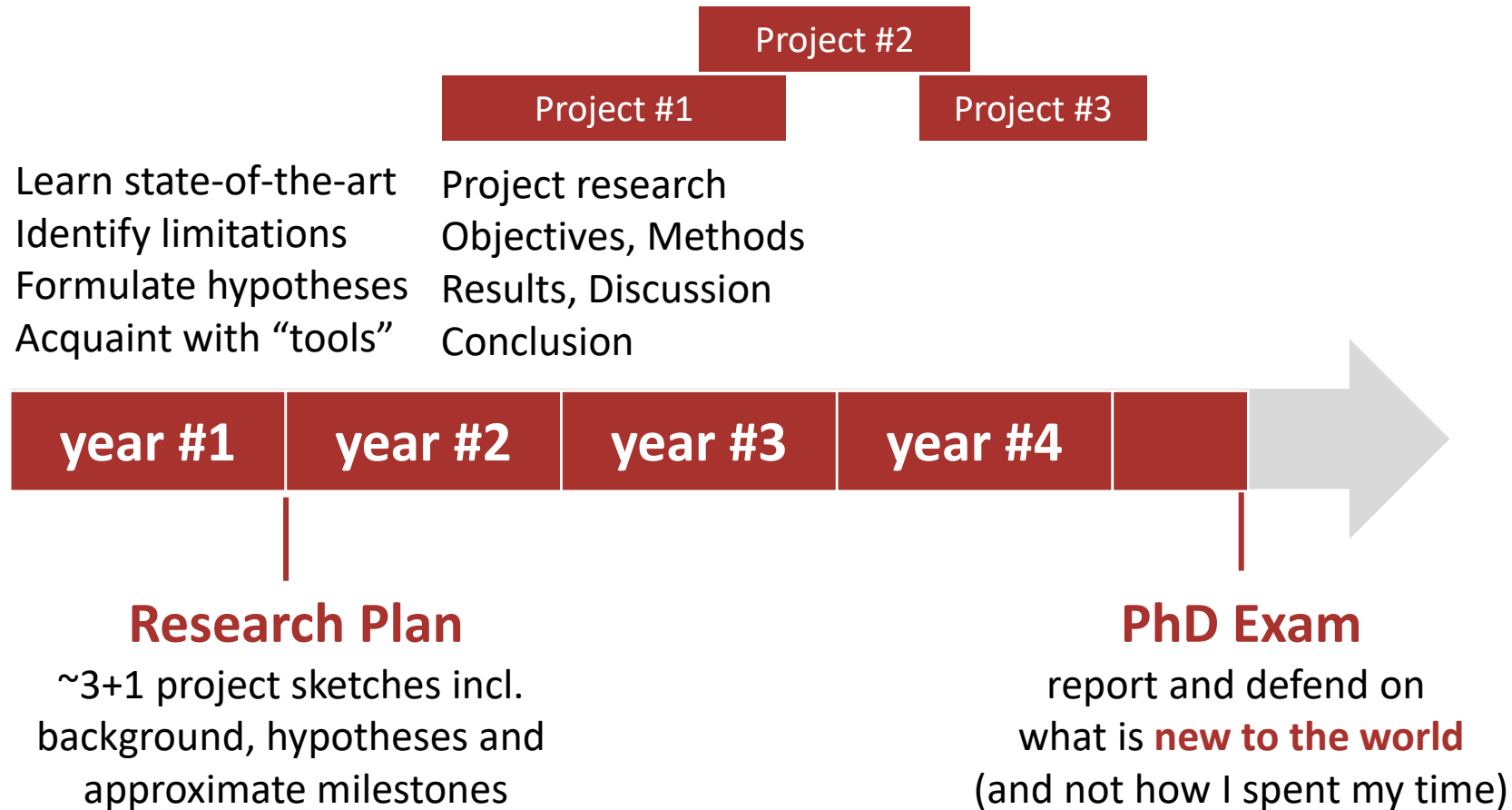
Undergraduate studies

Graduate studies

Research degree (PhD)

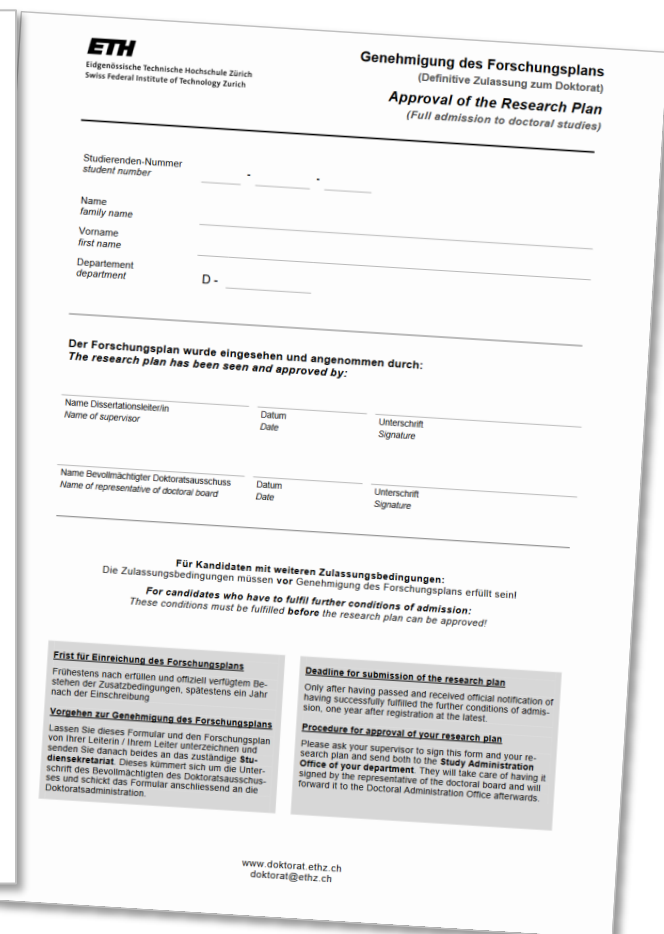
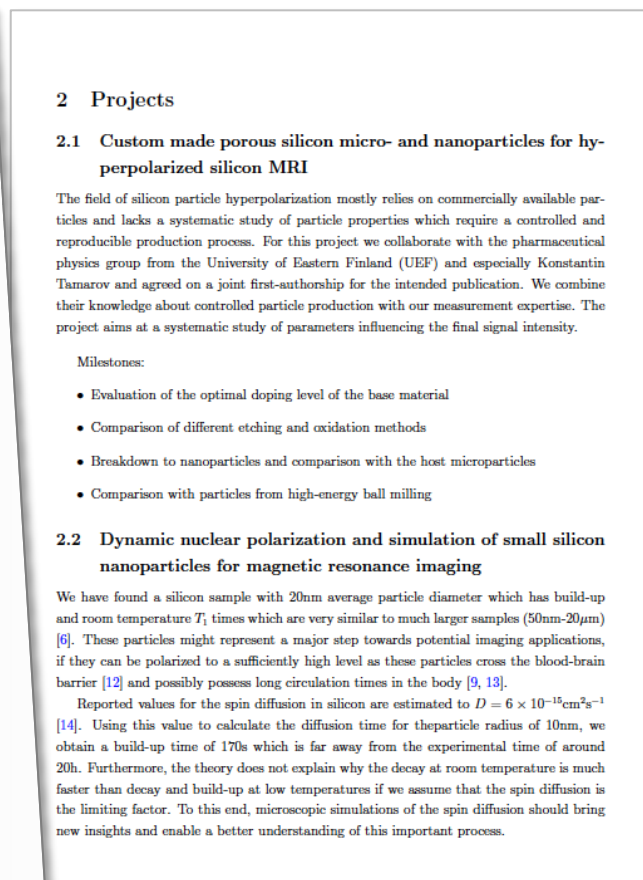
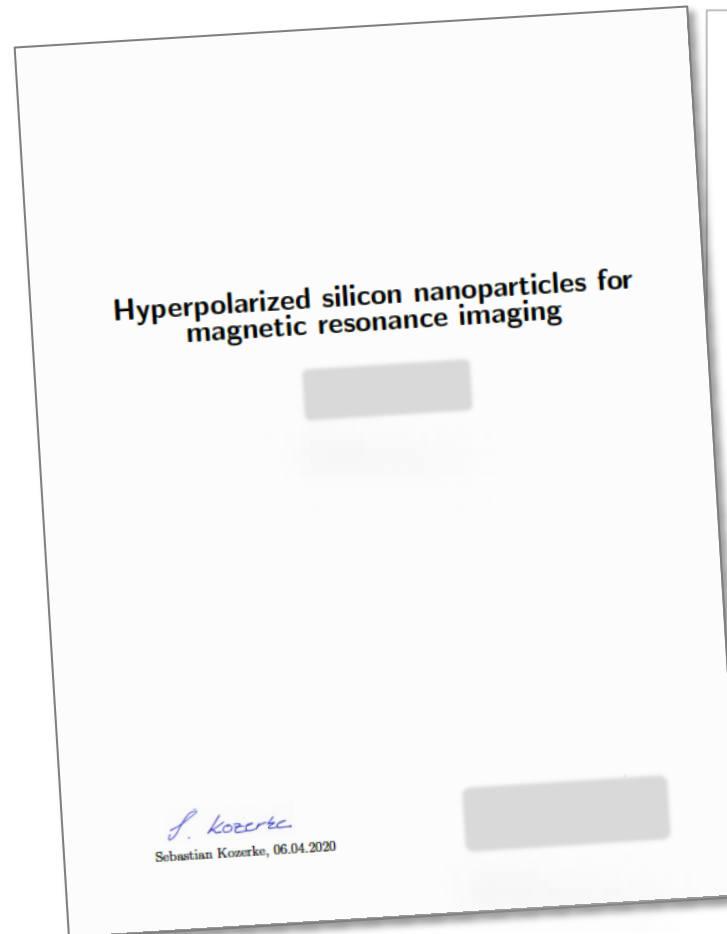
Research Activities

How is "Research" structured?



Research Activities

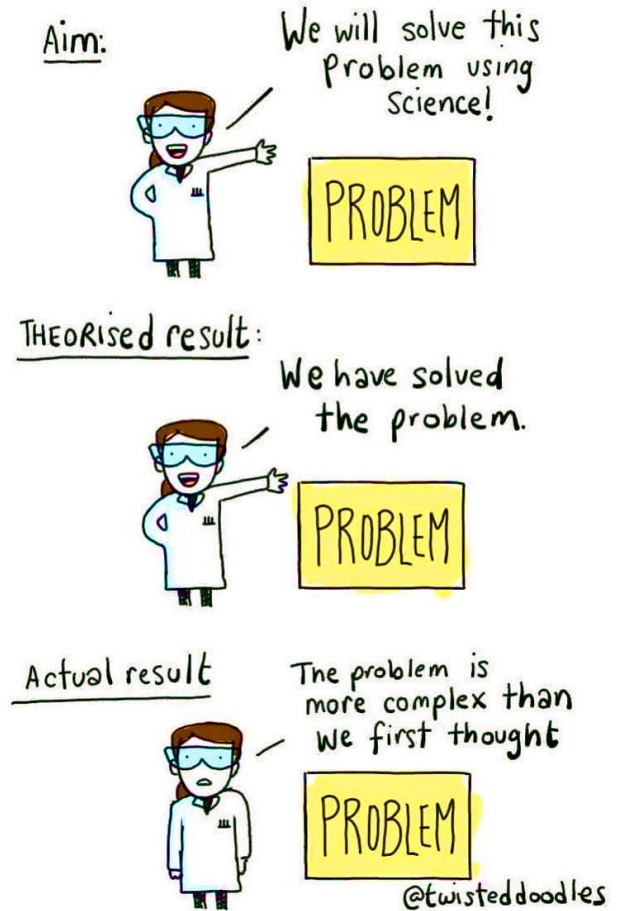
What is a "Research" plan?



Research Activities

Any "Research" advice?

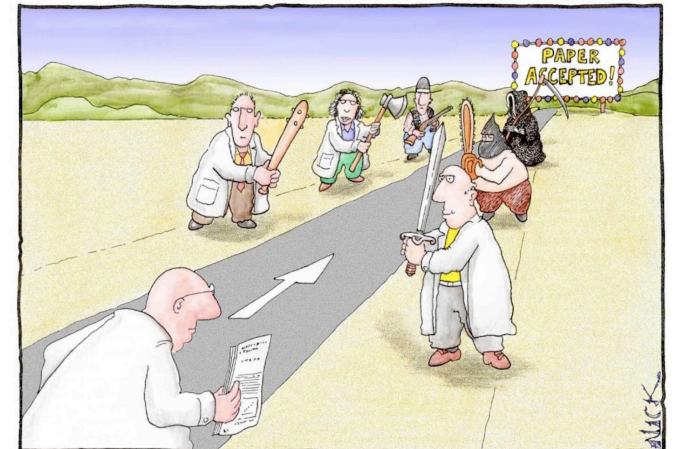
- **Be pilot and driver of your projects**
- **Take ownership and communicate**
- **Seek feedback and advice from your advisors**
- **Arrange for regular personal meetings**
- **Keep work-life balance (despite bumpy roads)**



Research Activities

Why "Research" papers?

- **A research project is never finished** – a paper forces you to report, discuss and conclude your current results and relate them to overall progress in the field
- **You learn to defend your work objectively and critically** during review process
- **Papers document your progress relative to your peers** and hence allow you to gauge your performance
- **Papers make your data & results accessible to outside world** (PhD theses hardly do)



Non-Research Activities

What is “Annual Feedback Meeting”?

- **Non-research focused discussion between supervisor and doctoral student about his/her experience, perceived strengths and weaknesses**
- **Recommended to all doctoral students once per year**
- **Have first Annual Feedback Meeting around time of submission of Research Plan**
- **www.ee.ethz.ch/studies/forms-and-documents.html**

Annual Feedback Meeting for Doctoral Studies

Supervisor _____
Doctoral student _____
currently in her/his 1st 2nd 3rd 4th 5th 6th year
has started his/her doctoral studies in _____ (year/month, or semester)
Expected date of thesis submission (provisional) _____ (year/month, or semester)

Both parties are aware that they can reach out (confidentially if desired) to contact persons from the department, ETH, or student and staff associations.
All contacts can be found at www.ee.ethz.ch/the-department/code-of-conduct/Support.html

“Both parties confirm that they had the opportunity to openly exchange feedback (summarized on the back of this form) and discuss the (provisional) expected date of the doctoral thesis submission.”

Signature(s) of the supervisor(s) _____
Signature of the doctoral student _____
Date _____

Return this page to the Department Administration
Send a scan to: doktorat@ee.ethz.ch

The complete form must be archived by the professorship at least until one year after dematriculation of the doctoral student.
Doctoral students may also retain a complete copy of their ‘Annual Feedback Meeting’ forms.
V1.0 – Released by: DK D-ITET, May 30, 2018.
The ‘Annual Feedback Meeting for Doctoral Students’ is meant to be a non-research focused discussion between the supervisor and doctoral student about his/her experience in the group (e.g., what amount and type of feedback is most helpful to him/her, how additional responsibilities outside of research such as teaching and mentoring are going), perceived strengths and weaknesses of the doctoral student, and career goals and development opportunities for the doctoral student.
It is recommended that all doctoral students from D-ITET and their main supervisors have such meetings once per year. It is up to each group to define when during the year these discussions take place; however, it is recommended to have the first ‘Annual Feedback Meeting’ around the time of the submission of the doctoral student’s Research Plan and then yearly after that date.

Doctoral studies

- **What are "doctoral studies"?**

A. Doctoral Studies - Credit points

Important:

During your doctoral studies, **a total of at least 12 credits ECTS** must be acquired.
At least **one third** must be acquired **outside the field of research**.

For more information and details see: www.ee.ethz.ch/doctoral-studies

Preparing the exam – co-examiners and date

- **3 years after start of your doctorate:**

The department's doctoral committee must have approved to of **at least one co-examiner** (if they are not professors of ETH Zurich).

- **About 6 to 3 months before the exam:**

Define the examination date, the examiners and the thesis topic

NOTE

- In case of **external co-examiners**, you need approval of department's doctoral committee. The committee meets irregularly (see [upcoming dates](#)).
- The (main) **supervisor** must make the request **no later than three months** before the examination date.

Preparing the exam – thesis copy and invitation

- **About 2 months before the doctoral exam**
 - Agree on an (exact) examination date with the examiner and the co-examiner(s)
 - Notify the department's doctoral administration of the desired date
- **At least 12 working days before the doctoral exam** the following must be submitted to the **ETH doctoral administration**
 - The completed [registration form](#) with all necessary confirmations
 - A copy of the thesis (bound, spiral or adhesive binding), see the [Doctoral Regulation](#)
 - (Annex 1 of the [Implementation Provisions](#)).
 - A separate CV of the author.

B. Education at ETH and your role in it

Reto Kreuzer

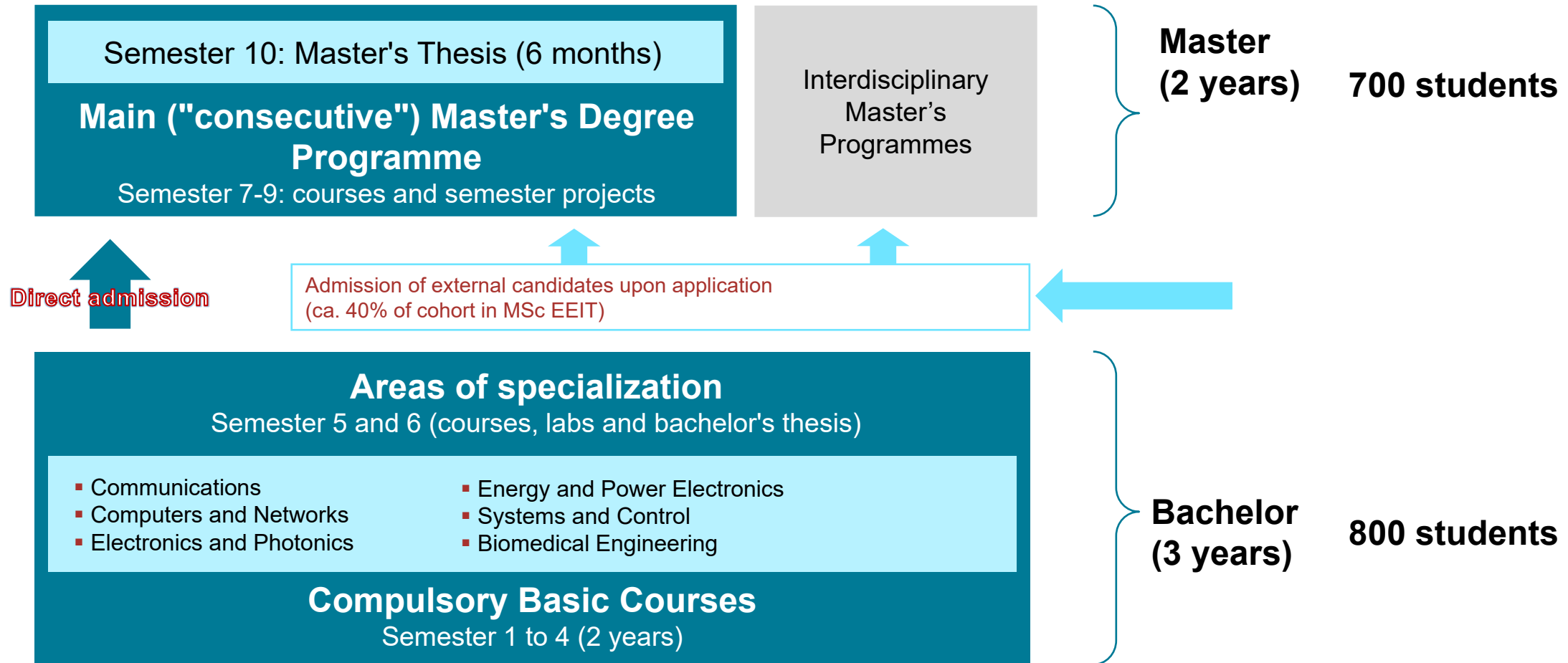
- 1. Education at ETH: BSc/MSc study programmes**
- 2. Your interaction with BSc/MSc students**
- 3. Teaching as an opportunity**

1. Education at ETH Zurich

- **A large offer:** currently 23 Bachelor's and 47 Master's Degree Programmes.
- **Compact** study programmes:
 - **Bachelor's Degree Programme:** 6 semester (3 years), teaching language **mainly German** in 1st + 2nd year; partially English in 3rd year
 - **Master's Degree Programme:** 3 to 4 semester (1.5 to 2 years), teaching language **mainly English**
- **A research university:** Teaching at ETH is a combination of sound scientific foundations and practical application in industry and research.



Bachelor's and Master's Curriculum at D-ITET



The Master's Degree Programmes at D-ITET

Programmes offered

- The D-ITET currently offers four MSc programmes (one consecutive and three interdisciplinary): MSc Electrical Engineering and Information Technology, MSc Biomedical Engineering, MSc Energy Science and Technology, MSc Quantum Engineering

Common to all Master's Degree Programmes at D-ITET

- Tutor based programmes: a professor helps students select courses
- 1-2 academic projects (14 weeks, part-time during the semester): Training for master thesis.
- **1 Master's thesis** (6 months, full-time): culmination of master's programme

2. Your interaction with undergraduate (BSc/MSc) students

Semester	Course type	Specifics
All	Lectures	Ex-cathedra, usually held by a professor (graded exams)
All	Exercises	Solving exercises, usually in smaller groups, supervised by teaching assistants – doctoral students or senior undergraduate students (teaching assistants)
All	Exams	Various types (written, oral) and schedules (end-of-semester, session), correction mostly by doctoral students
1 to 6	Lab courses	1 compulsory lab per semester (1 st / 2 nd year), afterwards free choice of lab courses. Most labs offered by doctoral students .
3 to 6	Projects & Seminars	Various type of small projects or seminars ranging from a few meetings to all-semester offers, various groups, usually supervised by doctoral students or self-supervised by student TA.
5 and 6	Group Projects	Small third year BSc projects in groups, usually supervised by doctoral students .
7 to 9	Semester Projects	Compulsory at the MSc level, <u>alongside courses</u> , 14 weeks, ca. 25h per week, routine, day-to-day supervision by doctoral students . Official supervision and grading by professor, projects finish with a written report and presentation
9 or 10	Master's Theses	Final project, sometimes at very advanced academic level. Supervision, grading and presentation as in semester projects (doctoral students + professors)

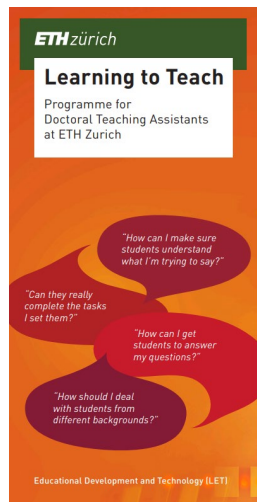
In a nutshell

- Teaching at **ETH is interdisciplinary**, courses offered in various programmes / students with different backgrounds – keep in mind when addressing students' questions
- Admission of **students without an ETH-Bachelor's degree** further diversifies student body
- Students' **workload** in first two years of Bachelor programme is **very high** but varies largely in third year and higher
- **Final exams** play a very important role at ETH (few midterms), particular care in grading exams is important
- Semester projects and master's theses are the culmination of each programme, **different students need different levels of supervision**
- If you encounter problems **don't hesitate to ask!**

Contact: info@ee.ethz.ch

3. Teaching Responsibilities *and Opportunities!*

- Teaching is a **steppingstone** in any **academic career**. Consider it an opportunity!
- There are **many levels of teaching**, starting at rather informal lab courses (P&S), managing exercises, supervision of projects/theses and regular teaching in ex-cathedra classes.
- For **teaching in classes** you should get a [teaching assignment](#) and **appear** in the course catalogue **as lecturer**.
- You want to **get better at teaching**?
Check out the [offers](#) of the group for **educational development** like didactic courses, teaching labs, refresh teaching etc.



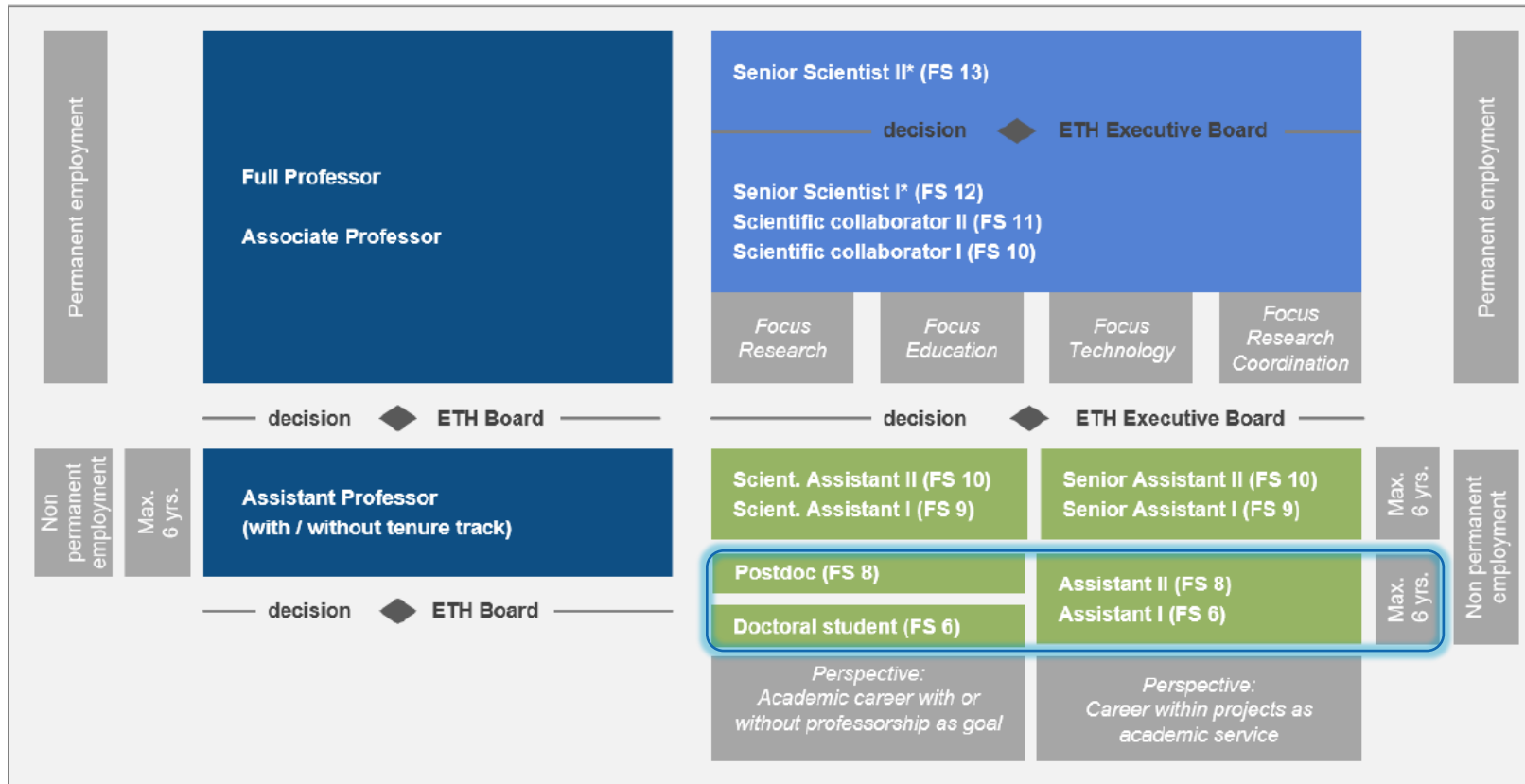
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4. Some employment information

Maja Bügler

Development opportunities in science and time constraints



[Scientific Functions at ETH Zurich](#)

- ✓ **6 years max.** as Doctoral Student and Postdoc
- ✓ **6 years max.** as Senior Assistant or Senior Collaborator

(Defined in: [Ordinance governing scientific employees of the Swiss Federal Institute of Technology Zurich](#))

Salary

- ✓ Fixed rates for Doctoral students / Postdocs / Assistants
 - ✓ Set by Executive Board of ETH / ETH Council / Swiss Federal Council to be aligned with SNF
- ✓ Payment is in 12 monthly instalments
- ✓ Automatic increase every year until 3rd-year-rate

- **Policy D-ITET:**
 - Each Institute or Professorship can select the fixed rate(s)
 - This must be applied consistently for all group members

- ✓ Employees with children of minor age or children in education receive a family allowance

Legal and contract details

Contract type	Fixed-term
Contract duration	Generally 1 year, renewable
Probation period	Probation period of 3 month (if contractually specific)
Employment level	100% (part-time employment only in special cases)
Termination of contract	On contract end Early termination by mutual agreement

Specifics: Matriculation and employment are two different legal situations

[Ordinance governing scientific employees of the Swiss Federal Institute of Technology Zurich
https://ethz.ch/services/en/employment-and-work/employment/employment-salary.html](https://ethz.ch/services/en/employment-and-work/employment/employment-salary.html)

Vacation and Absences Regulation



- ✓ Duty to register absences in [ETHIS](#)
 - ✓ Obligation for Scientific Personnel: Negative time management only (vacation and absences)
- ✓ 5 weeks for employees up to age 49
- ✓ Vacation days has to be taken in the year the entitlement arises, at least once 2 weeks in a row
- ✓ You supervisor is allowed to decide when vacations can be taken
 - Plan your vacations early and get the OK in advance!
- ✓ Vacations are for recovery
- ✓ Supervisors are not allowed to reduce vacation days of their employees
- ✓ Employees must submit a doctor's certificate from the 4rd day of absence as a result of illness or accident

[Regulations for the recording of working time and absences](#)
[Personnel Law ETH domain](#)

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5. Further information and contact persons

- **Maja Bügler**
- **Reto Kreuzer**

ETH Welcome Center

<p>Before arrival and starting work</p> 	<p>Arrival in Switzerland</p> 	<p>Living/Housing</p> 	<p>Family</p> 
<p>Working contract and salary</p> 	<p>Insurance and Pension Fund</p> 	<p>Living in Zurich</p> 	
<p>Language</p> 	<p>Job search Job applications</p> 	<p>Departure</p> 	<p>Services und Downloads</p> 

More infos on:
www.welcomecenter.ethz.ch

Human Resources



Maja Bügler (ETZ H86)
personnel manager D-ITET
maja.buegler@hr.ethz.ch
044 633 94 98 (Tuesday – Friday)

Contact person for: personnel matters, labour law issues, development, conflicts, consulting



Denise Siegrist (TUR D17)
personnel administration D-ITET
denise.siegrist@hr.ethz.ch
044 632 09 48 (Monday – Thursday)

Contact person for: residence and work permits, family allowance, social insurance, accident and sickness

Doctoral administration



Reto Kreuzer (ETZ H 83)
Head of student administration D-ITET
reto.kreuzer@ee.ethz.ch
044 632 0815 (upon appointment)

Contact person for: Student counselling, curricula questions and regulations



Yasemin Tomaschett (ETZ H 85)
Doctoral administration D-ITET
doktorat@ee.ethz.ch
044 632 3336 (Monday, Wednesday, Thursday)

Contact person for:

All administrative steps regarding doctoral programme from official application to doctoral exam

→ Ask your supervisor and the administration/secretary of your lab for inside knowledge!

Support, Contact and Advice Services

Support

- ❖ As a first point of contact, you can always turn to our [designated D-ITET contact person](#)

Psychological Counselling Service

- ❖ Free of charge [service](#) open to all students and doctoral students at the University of Zurich or ETH Zurich

External / ETH advice and conciliation service respect

- ❖ Provides all members of ETH with advice and support regarding bullying, harassment and discrimination

Ombudsperson and confidants

- ❖ General contact point for conflicts and issues concerning integrity and scientific misconduct

further contacts: <https://respekt.ethz.ch/en/kontakt-und-fachstellen.html>

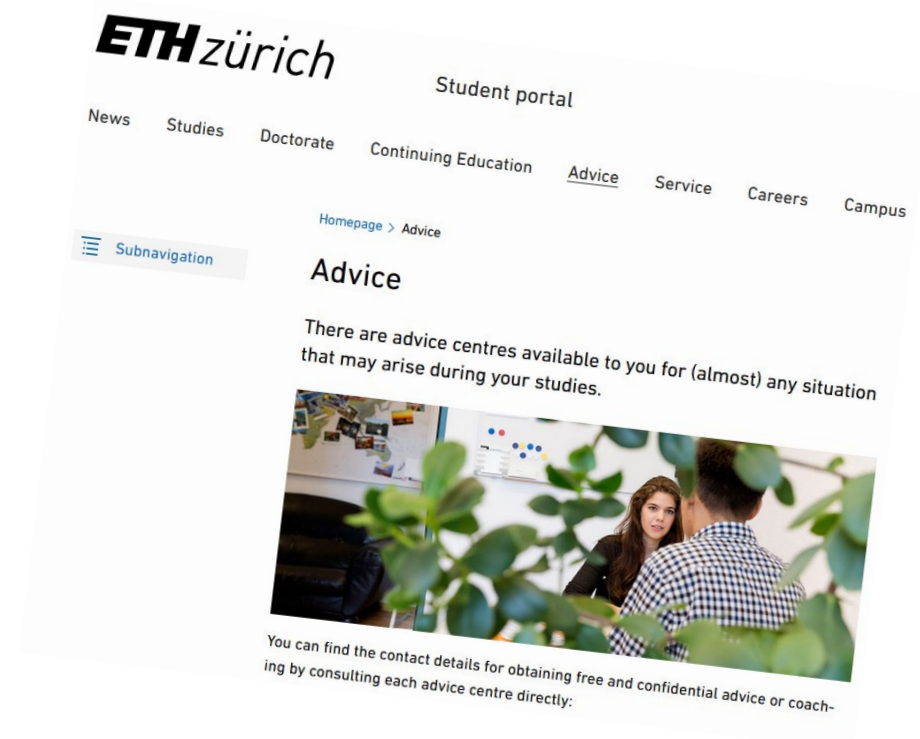


More contacts for advice

- Student advisory service/Coaching
- Studies and health
- Disability advisory service
- Studying as a parent
- Studying and professional sports
- Legal advice
- etc.

More information:

>>>>> <https://www.ethz.ch/students/en/advice.html>



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6. Code of Conduct

Prof. Vanessa Wood

Code of conduct

"At D-ITET, we maintain an inclusive, open and friendly environment, where our students, employees and faculty can thrive and achieve their highest potential, based on mutual respect. To preserve this cordial environment, we do not tolerate misbehavior of any kind, including threats, violence, bullying, sexual harassment, discrimination, or dishonesty in study and in research."

Prof. Vanessa Wood, Head of Department

Information on our website, flyer

- Our principles, what is "inappropriate behavior" etc.
- How to react to inappropriate behavior
- Support, contact people



ETH zürich

Departement Informationstechnologie und Elektrotechnik

News & Events [Das Departement](#) Forschung Studium Doktorat Weiterbildung D-ITET erleben

[Startseite](#) > [Das Departement](#) > [Code of Conduct](#)

Subnavigation

Code of Conduct

Die ETH Zürich und das Departement Informationstechnologie und Elektrotechnik setzen sich zum Ziel, in einem positiven und offenen Umfeld höchste Qualität in Lehre und Forschung zu bieten.



Am D-ITET pflegen wir ein integratives, offenes und freundliches Umfeld, in dem Studierende, Mitarbeitende und Lehrende in gegenseitiger Wertschätzung zusammenarbeiten und ihr höchstes Potenzial erreichen können. Um diese positive Umgebung zu bewahren, tolerieren wir keinerlei Fehlverhalten, wie z.B. Drohungen, Gewalt, Mobbing, sexuelle Belästigung, Diskriminierung oder Unredlichkeit in Studium und Forschung.

Prof. Vanessa Wood, Departementsvorteherin

Unsere Grundsätze

Wir garantieren ein respektvolles und professionelles Umfeld für alle Angehörigen des D-ITET. Dazu gehören Professorinnen und Professoren, Studierende, Dozierende, wissenschaftliche sowie administrative und technische Mitarbeitende.

Gegenseitiger Respekt und verantwortungsvoller Umgang

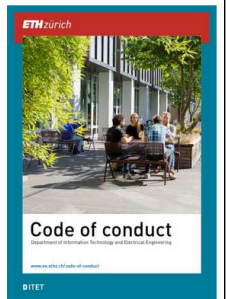
Wir pflegen einen unterstützenden Umgang, unabhängig von Herkunft, Religion, Weltanschauung, Geschlecht und sexueller Identität.

DITET

Der ITET Code of Conduct ist abgestimmt mit dem Bundesgesetz über die Gleichstellung der Geschlechter, dem Schweizer Obligationenrecht sowie mit der Respektkampagne der ETH Zürich und ähnlichen Initiativen.

Unterstützung

[Kontaktliste](#) →



[Code of Conduct \(PDF, 1.5 MB\)](#) ↓

Thank you!