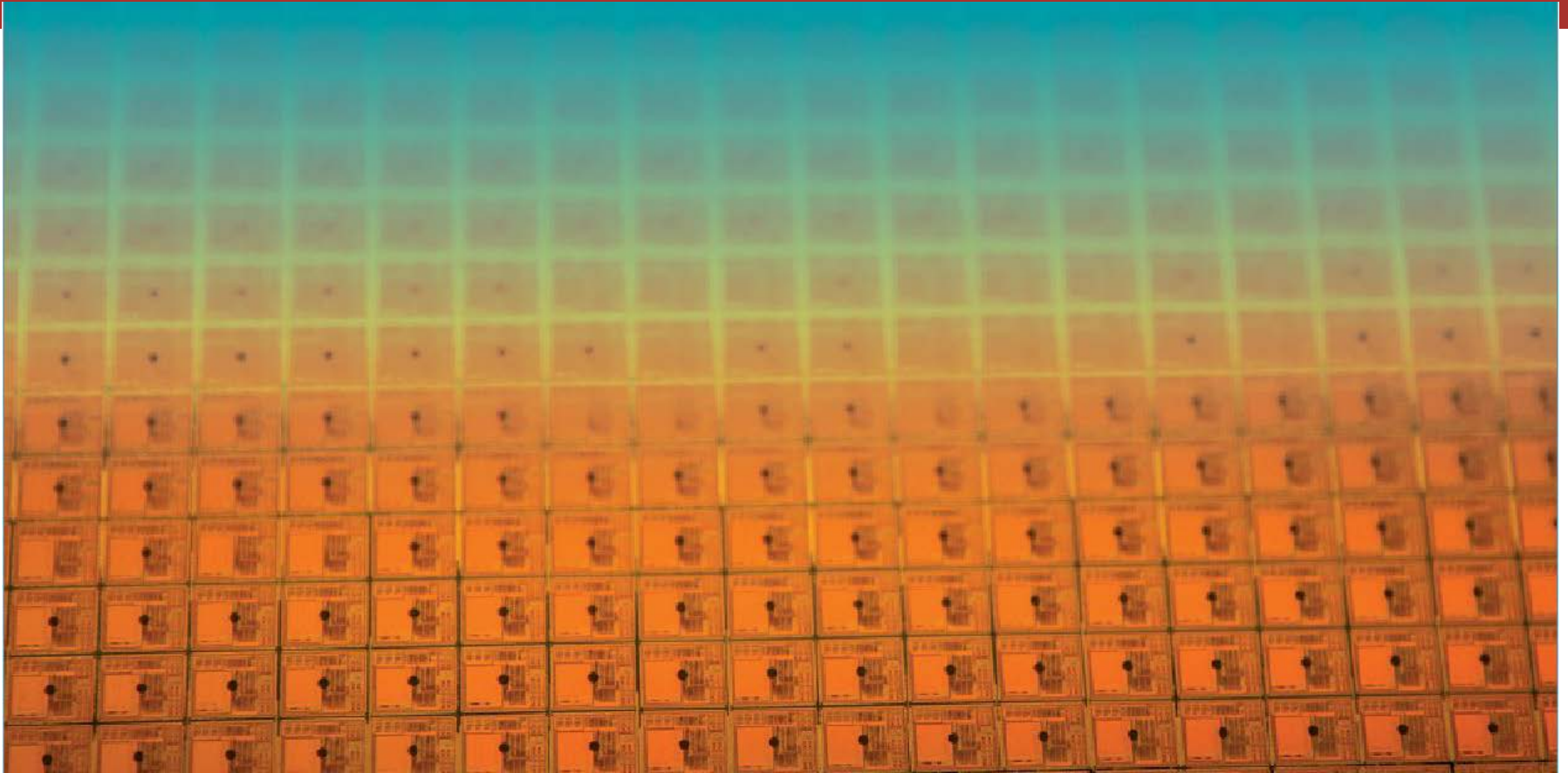




Master Program in Electrical Engineering and Information Technology

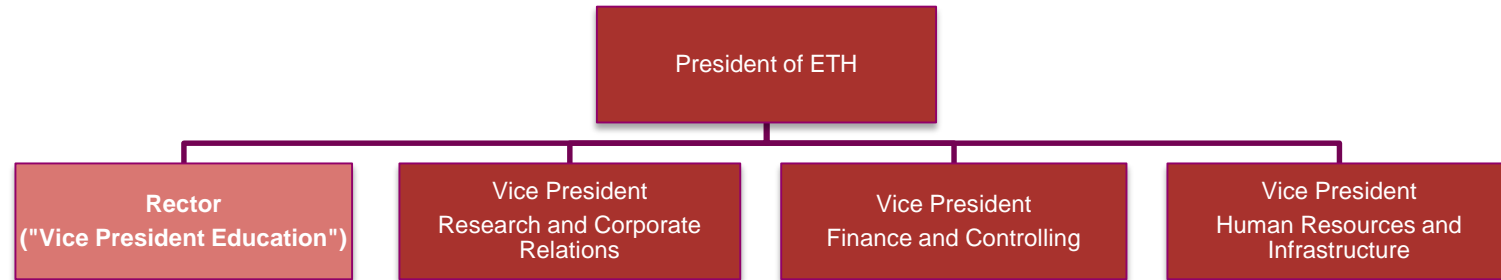
Reto Kreuzer, Coordinator of Studies D-ITET

September 19, 2016



ETH and ITET: structure & key figures

ETH Zürich: Organization and structure



16 Departments for Education and Research

Architecture and Civil Engineering	Engineering Sciences	Natural Sciences and Mathematics	System-oriented Natural Sciences	Management and Social Sciences
Architecture	Mechanical and Process Engineering	Mathematics	Earth Sciences	Management, Technology and Economics
Civil, Environmental and Geomatic Engineering	Information Technology and Electrical Engineering	Physics	Environmental Systems Science	Humanities, Social and Political Sciences
	Computer Science	Chemistry and Applied Biosciences	Health Sciences and Technology	
	Materials Science	Biology		
	Biosystems Science and Engineering			

D-ITET: Size and members

- 11 laboratories (institutes) und 5 independent professorships
- 36 professors (4 women)
- ca. 500 scientific and administrative employees
- ca. 400 PhD students
- ca. 1'200 undergraduate and master students

36 Professors



Prof. Luca Benini



Prof. Jürgen Biela



Prof. Helmut Bölcskei



Prof. Colombo Bolognesi



Prof. Gian-Luca Bona



Prof. Florian Dörfler



Prof. Christian M. Franck



Prof. Orçun Göksele



Prof. Ulrike Grossner



Prof. Richard Hahnloser



Prof. Qiuting Huang



Prof. Gabriela Hug



Prof. Maryam Kamgarpour



Prof. Johann W. Kolar



Ender Konukoglu



Prof. Sebastian Kozerke



Prof. Amos Lapidot



Prof. Jürg Leuthold



Prof. Hans-Andrea Loeliger



Prof. Mathieu Luisier



Prof. John Lygeros



Prof. Kevan A. C. Martin



Prof. Lukas Novotny



Prof. Klaas P. Prüssmann



Prof. Markus Rudin



Prof. Marco Stamparoni



Prof. Klaas Enno Stephan



Prof. Lothar Thiele



Prof. Gerhard Tröster



Prof. Luc Van Gool



Prof. Laurent Vanbever



Prof. János Vörös



Prof. Roaer P. Wattenhofer



Prof. Armin Wittneben



Prof. Vanessa C. Wood



Prof. Mehmet Fatih Yanik

Students at ETHZ and D-ITET (2015 figures)

Students at ETH	19'754
Female Students*	31 %
International Students	37 %
Students at D-ITET	1'624
Female Students*	16 %
International Students**	45 %
Students at bachelor level (year 1-3)	
ETH	9'117 (*30%)
D-ITET	672 (*11%)
Students at master level (year 4-5)	
ETH	5'450 (*30%)
D-ITET	507 (*20%)
Electrical Engineering MSc	308 (*9%)
Biomedical Engineering MSc	81 (*48%)
Energy Science & Technology MSc	90 (*26%)
Neural Systems and Computation MSc	28 (*43%)
Exchange students	
ETH	416 (*33%)
D-ITET	42 (*19%)
PhD students	
ETH	4'031 (*31%)
D-ITET	403 (*20%)

An international program

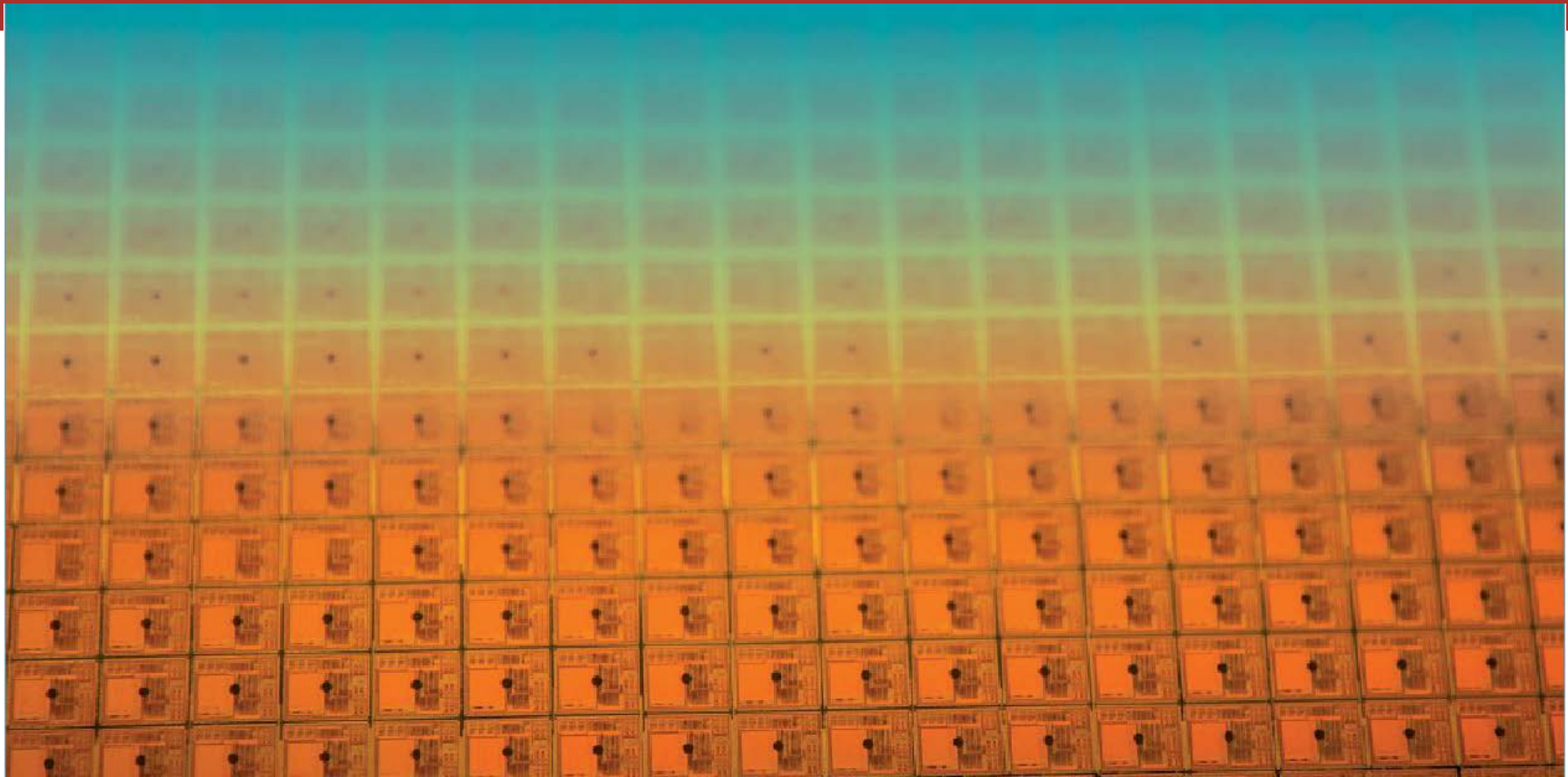
Joining approx. 100 ETH Zurich graduates, around 50 external students add to the international character of D-ITET's Master's level

Very International:

Austria, Belgium, Brazil, China, Egypt, Finland, France, Germany, Greece, Hungary, Iceland, India, Indonesia; Iran, Italy, Japan, Netherlands, Pakistan, Singapore, Sri Lanka, Switzerland, Turkey, United Kingdom, United States.

Great variety of Schools:

Anna University Chennai, Bandung Institute of Technology, Bilkent University, BITS Pilani, Budapest University of Technology & Economics, Centrale/Supélec, Ecole Polytechnique Palaiseau, Ecole Polytechnique Fédérale Lausanne, Edinburgh University, German University Cairo, Harbin Institute of Technology, Hebei University of Technology, Hochschule Rapperswil, Huazhong University, Jacobs University Bremen, Katholieke Universiteit Leuven, Lahore University of Management Sciences, Manchester University, Nanyang Technological University, National University of Sciences & Technology Islamabad, North Carolina State University, North China Electric Power University, NTU Athens, Osaka University, Politecnico di Milano, Reykjavík University, SUNY Albany, SUNY Binghamton, Surrey University, Tampere University of Technology, Tehran University, Tongji University, TU Delft, TU München, TU Wien, UC Santa Barbara, Uni Padova, Universidade de Brasília, University Birmingham, University College London, University of Iceland, University of Moratuwa, Xi'an Jiaotong University



ETH and ITET: find the right contact

Your most important contacts: who?

ETH / Rectorate

Registrar's Office (HG F 19)

General administrative questions
e.g. matriculation, address changes,
residence etc.

Students' association

AMIV (CAB E 37)

Social contacts,
networking



Students

D-ITET / central services

Student Admin (ETZ H 85)

Study specific admin. questions
e.g. grades/transcripts, waivers, counselling

Tutors / Lecturers / TA

Course specific questions, study plan

Where do I find information on the web?

- **General Information on studies at ETH**

ETH students' website: www.ethz.ch/students

- **Information on the Master in Electrical Engineering**

D-ITET website: www.ee.ethz.ch > Studies > Main Master Program

- **Course catalogue**

Online: www.vvz.ethz.ch > Programme > Electrical Engineering (...) Master

- **Messages from ETH and the Department**

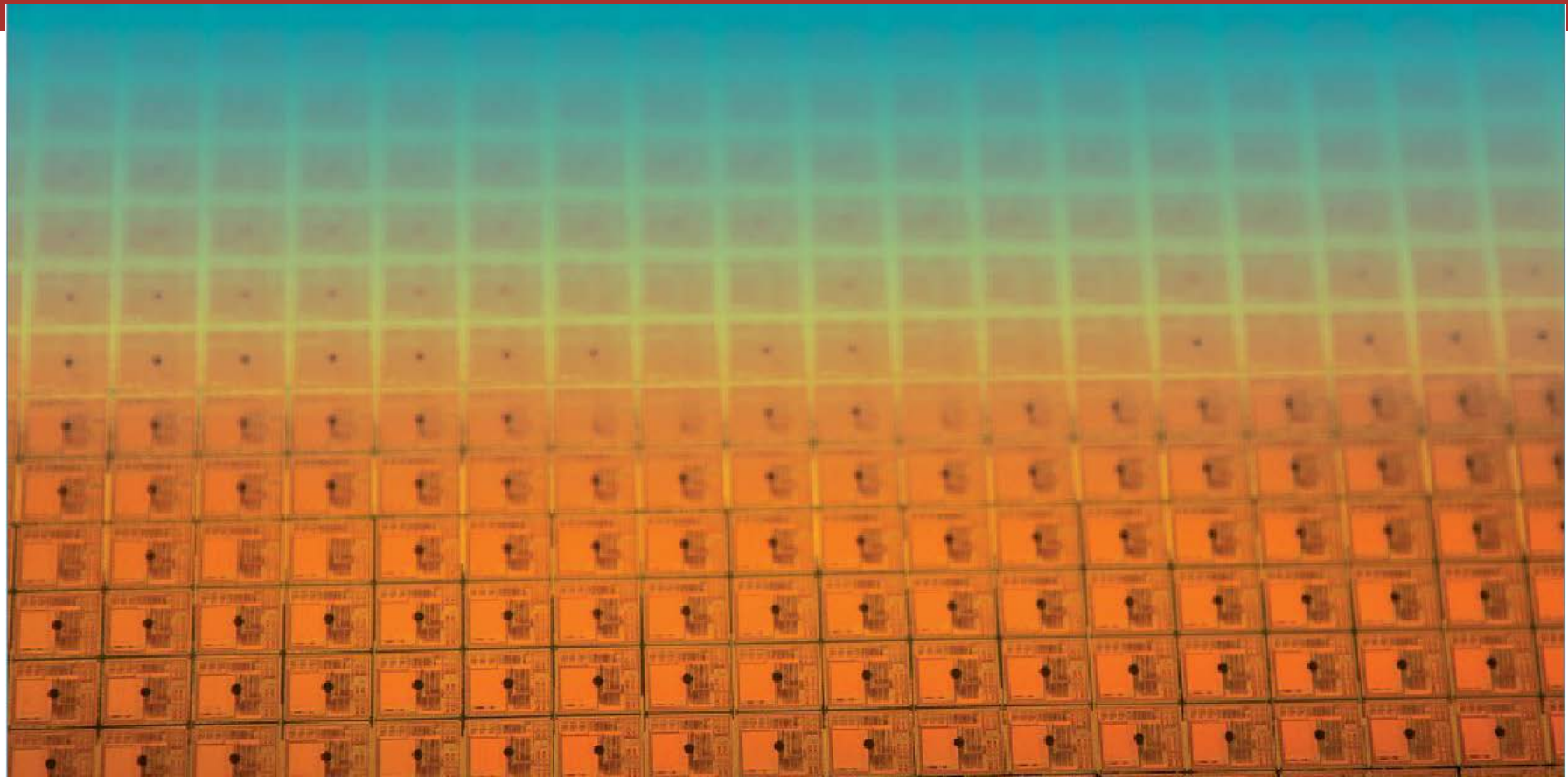
Email on your ETH-Address (username@student.ethz.ch)

→ **check your mailbox regularly and read the messages carefully!**

Your studies are subject to regulation

- **Study regulations** (mostly available in German only)
www.rechtssammlung.ethz.ch (complete collection, German)
www.ee.ethz.ch > Studies > Forms and Documents (MSc EEIT regulations in English)
- **Rector's Directives** (some available in German only)
www.ethz.ch/students > Studies > Legal basis > Directives Collection

International students, please contact Ms Annina Wanner at the Rectorate (Main Building, HG F 22.3) or D-ITET's Study Administration (ETZ H 85) for help on regulations.



Courses, Credits and Exams

The Master's Degree Program

- **Courses** (two semesters)

See the [course catalog](#) for the list courses.

Each student must find a [tutor](#) by him/herself and submit a tutor agreement in myStudies no later than **four weeks after the beginning of the first semester**.

- **Two semester projects**

Each 14 weeks half-time during the semester (or 7 weeks full-time outside the semester).

[Project offerings](#) are published on the websites of the individual labs.

We suggest to get started with the first project soon!

- **Master Project** (6 months)

After all else is done, the *masterpiece* of your studies at ETH.

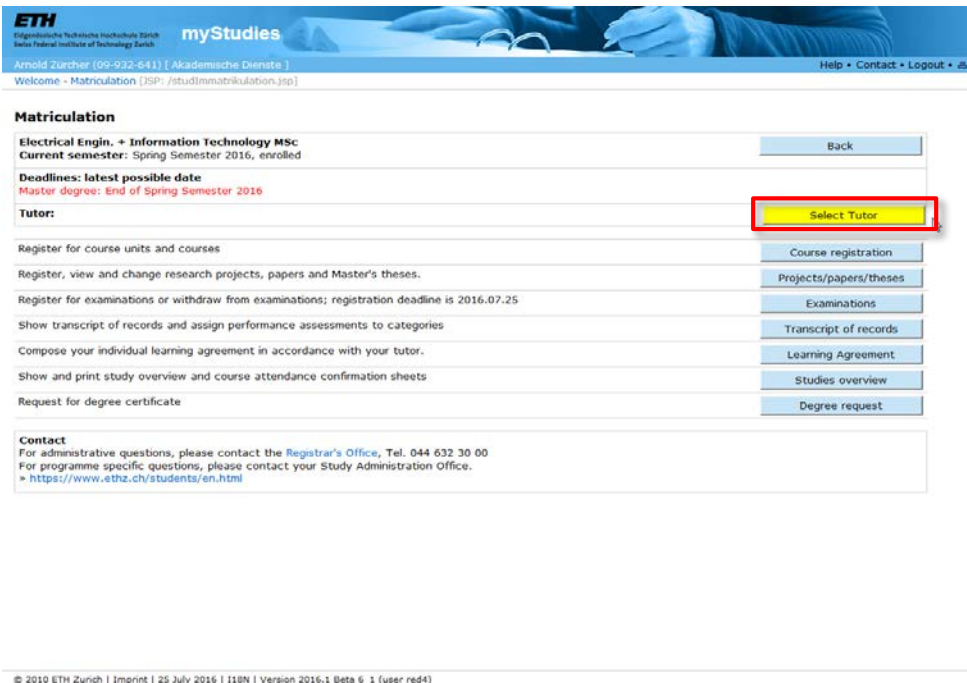
Submitting a tutor agreement: Best practice

Tutor agreement forms are submitted in myStudies. However, for the sake of simplicity, we suggest the following approach.

- If you do not have a tutor yet, decide which professors' research areas best fit your study interests (see the [program's website](#)).
- Put together a list of courses in a *tentative* tutor agreement form without submitting it. Print this list out and/or take your computer to the meeting.
- Meet the potential tutor(s) and discuss your choice of courses.
- If you and the tutor agree to a list – and only then – select your tutor in myStudies, wait for confirmation and then *formally* submit the list of courses agreed upon during the discussion with your tutor.
- In any case, please **ask your tutor** for his/her favorite way of handling the tutor agreement process.

myStudies: Choosing a tutor (I)

Navigate to "Matriculation" in your myStudies account and choose "Select Tutor"



The screenshot shows the myStudies interface for the 'Matriculation' section. The page header includes the ETH logo and 'myStudies' branding. The main content area is titled 'Matriculation' and contains several sections:

- Electrical Engin. + Information Technology MSc**: A blue 'Back' button is located to the right of this section.
- Current semester**: Spring Semester 2016, enrolled.
- Deadlines: latest possible date**: Master degree: End of Spring Semester 2016.
- Tutor:** A yellow 'Select Tutor' button is highlighted with a red box.
- Register for course units and courses**: A blue 'Course registration' button.
- Register, view and change research projects, papers and Master's theses.**: A blue 'Projects/papers/theses' button.
- Register for examinations or withdraw from examinations; registration deadline is 2016.07.25**: A blue 'Examinations' button.
- Show transcript of records and assign performance assessments to categories**: A blue 'Transcript of records' button.
- Compose your individual learning agreement in accordance with your tutor.**: A blue 'Learning Agreement' button.
- Show and print study overview and course attendance confirmation sheets**: A blue 'Studies overview' button.
- Request for degree certificate**: A blue 'Degree request' button.
- Contact**: For administrative questions, please contact the Registrar's Office, Tel. 044 632 30 00. For programme specific questions, please contact your Study Administration Office. > <https://www.ethz.ch/students/en.html>

At the bottom of the page, there is a footer: © 2010 ETH Zurich | Imprint | 25 July 2016 | I18N | Version 2016.1 Beta 6_1 (user red4)

Discuss your choice with the proposed tutor **before** submitting it in myStudies.

myStudies: Choosing a tutor (II)

Choose your tutor from the list of available tutors (example list below):

The screenshot shows the 'myStudies' interface for selecting a tutor. The page title is 'myStudies' and the user is logged in as 'Arnold Zürcher (09-932-641) [Akademische Dienste]'. The selected program is 'Electrical Engin. + Information Technology MSC'. A list of lecturers is displayed with the following columns: Last Name, First Name, Title, and Organisation.

Last Name	First Name	Title	Organisation
<input type="radio"/>	Aebi	Mirjam	Prof. Dr. Physik
<input type="radio"/>	Baur	Bastian Manuel	Prof. Dr. Physik
<input type="radio"/>	Biau	Gabriele	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Botnar	Roman Emanuel Frédéric	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Brändli	Raphael Luke	Prof. Dr. Maschinenbau und Verfahrenstechnik
<input type="radio"/>	Cartayrade	Roger	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Christ	Martin	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Dallenbach	Muriel Barbara	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Ducrot	Roger Norbert Albert	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Duverney	Christian	Prof. Dr. Informatik
<input type="radio"/>	Freimann	Rolf	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Freimann	Alain	Prof. Dr. Informatik
<input type="radio"/>	Gobet	Nuria	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Graf	Lukas	Prof. Dr. Informatik
<input type="radio"/>	Grun	Adrian	Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Hahnloser	Richard Hans Robert	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Heiduschke	Dror	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Heinrichson	Mathis	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Heldstab	Thomas	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Hiltbrunner	Patric	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Horflacher-Umiker	Fabian Matthias	Prof. Dr. Maschinenbau und Verfahrenstechnik
<input type="radio"/>	Imfeld	Raphael	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Immler	Daniel Patrick	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Imthurn	Patrick Oliver	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Isler	Martin	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Klok	Lorenzo	Prof. Dr. Informationstechnologie und Elektrotechnik
<input type="radio"/>	Kotson	Elisa Maria	Prof. Dr. Informationstechnologie und Elektrotechnik

The tutor will have to **confirm** in order to make your choice effective.

myStudies: Create learning agreement

The **Tutor Agreement** is called "Learning Agreement" in myStudies, select this from the "Matriculation" page: you are now able to select courses from the course catalogue, by using the "Edit" button.

ETH Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zürich

myStudies

Arnold Zürcher (09-932-641) [Akademische Dienste] Help • Contact • Logout • ☰

Welcome - Matriculation - Display Learning Agreement [JSP: /showLearningAgreement.jsp]

Learning Agreement of Arnold Zürcher (In process)

Programme regulations Master's Programme in Electrical Engineering and Information Technology

Tutor Prof. Dr. J. Reymond

The student has to discuss the Learning Agreement (also known as "Tutor Agreement") with the tutor/track advisor before submitting it in myStudies. The Learning Agreement must be submitted in myStudies and approved by the tutor/track advisor no later than 4 weeks after the start of program (usually the fall semester).
The Learning Agreement can be updated during the study period, but needs to be in the final version before the start of the Master thesis.

Note: The fields concerning the "Mentor" (see next step) must be left empty.

Completion of mandatory courses Treatment of mandatory courses.

Not regular Category assignment disagrees with official Course Catalogue.

Changes **New:** Newly added, **Moved:** Moved to another category, **Modified:** Text modified, for external courses only.

Category	Registered	Title	ECTS credits			Completion of mandatory course	Not regular	Changes
			Planned	Needed	Missing			
	Number							
Major Courses			42	42				

Print Delete Edit Submit Back

myStudies: Edit learning agreement

Once **all the courses** you wish to enrol for during the upcoming year are entered, your learning agreement is ready for discussion with your tutor.

ETH myStudies
 Arnold Zürcher (09-932-641) | Akademische Dienste | Help • Contact • Logout • de

Welcome - Matriculation - Edit Learning Agreement [ISP: /editLearningAgreement.jsp]

Edit Learning Agreement

Programme regulations Master's Programme in Electrical Engineering and Information Technology

Tutor Prof. Dr. J. Reymond

Mentor **Email**

Completion of mandatory courses Indicates for each mandatory course whether it will be completed in this programme (yes), at another university, within another programme, or not at all.

Change category Each course must be put into a category of the programme. If a course is assigned to another category than listed in the Course Catalogue, it will be marked in column 'Not reg' by 'X'. Courses without category must be assigned to a category or deleted - otherwise the learning agreement cannot be submitted.

Completion of mandatory courses Treatment of mandatory courses. Other courses can be assigned to another category.

Not regular Category assignment disagrees with official Course Catalogue.

Category	Number	Title	ECTS credits		Completion of mandatory course	Not regular	Delete
			Planned	Needed			
Major Courses			42	42			
	227-0120-00L	Communication Networks	6		<input type="button" value="Change category"/>		<input type="button" value="X"/>
	252-0408-00L	Cryptographic Protocols	5		<input type="button" value="Change category"/>		<input type="button" value="X"/>
	252-0407-00L	Cryptography Foundations	7		<input type="button" value="Change category"/>		<input type="button" value="X"/>
	227-0436-00L	Digital Communication and Signal Processing	6		<input type="button" value="Change category"/>		<input type="button" value="X"/>
	227-0434-00L	Harmonic Analysis: Theory and Applications in Advanced Signal Processing	6		<input type="button" value="Change category"/>		<input type="button" value="X"/>
	227-0558-00L	Principles of Distributed Computing	6		<input type="button" value="Change category"/>		<input type="button" value="X"/>
	112	Distributed Operating Systems	6		<input type="button" value="Change category"/>	X	<input type="button" value="X"/>

Note: Please do not fill in the "Mentor" field, this does not apply to students of the D-ITET.

myStudies: Submit learning agreement

Note: the learning agreement can only be submitted if you have a tutor; only if you do not, an error warning (see above) will appear.

ETH myStudies
 Eidgenössische Technische Hochschule Zürich
 Swiss Federal Institute of Technology Zürich
 Arnold Zürcher (09-932-6431) | Akademische Dienste | Help • Contact • Logout • 55
 Welcome - Matriculation - Display Learning Agreement [ISP: /showLearningAgreement.jsp]

Learning Agreement of Arnold Zürcher (In process)

Error:
 • The learning agreement can be submitted only if a tutor is definitely assigned.

Programme regulations: Master's Programme in Electrical Engineering and Information Technology

Tutor:
 The student has to discuss the Learning Agreement (also known as "Tutor Agreement") with the tutor/track advisor before submitting it in myStudies. The Learning Agreement must be submitted in myStudies and approved by the tutor/track advisor no later than 4 weeks after the start of program (usually the fall semester). The Learning Agreement can be updated during the study period, but needs to be in the final version before the start of the Master thesis.
 Note: The fields concerning the "Mentor" (see next step) must be left empty.

Completion of mandatory courses: Treatment of mandatory courses.

Not regular: Category assignment disagrees with official Course Catalogue.

Changes: **New:** Newly added, **Moved:** Moved to another category, **Modified:** Text modified, for external courses only.

Category	Registered	Title	ECTS credits			Completion of mandatory course	Not regular	Changes
			Planned	Needed	Missing			
Major Courses			44	42				
		227-0111-00L Communication Electronics		6				
		227-0120-00L Communication Networks		6				
		252-0408-00L Cryptographic Protocols		5				
		252-0407-00L Cryptography Foundations		7				
		227-0436-00L Digital Communication and Signal Processing		6				
		227-0438-00L Fundamentals of Wireless Communication		6				
		227-0434-00L Harmonic Analysis: Theory and Applications in Advanced Signal Processing		6				
		851-0734-00L Recht der Informationssicherheit		2				

Print Delete
 Edit **Submit** Back

myStudies: Change learning agreement

If you have not discussed your learning agreement before submitting it and the tutor requires you to change it or if the initial tutor agreement must be changed for any reason at a later point in time (with the agreement of the tutor) you may be invited to change it:

ETH myStudies
 Arnold Zürcher (06-932-641) | Akademische Dienste | Help • Contact • Logout •

Welcome - Matriculation - Display Learning Agreement [SP: /showLearningAgreement.jsp]

Learning Agreement of Arnold Zürcher (Changes requested by tutor)

Programme regulations Master's Programme in Electrical Engineering and Information Technology

Tutor Prof. Dr. J. Raymond

Changes required as discussed in my office earlier today.

Completion of mandatory courses Treatment of mandatory courses.

Not regular Category assignment disagrees with official Course Catalogue.

Changes New: Newly added, Moved: Moved to another category, Modified: Text modified, for external courses only.

Category	Registered Number	Title	ECTS credits			Completion of mandatory course	Not regular	Changes
			Planned	Needed	Missing			
Major Courses			42	42				
	227-0120-00L	Communication Networks	6					
	252-0408-00L	Cryptographic Protocols	5					
	252-0407-00L	Cryptography Foundations	7					
	227-0436-00L	Digital Communication and Signal Processing	6					
	227-0424-00L	Harmonic Analysis: Theory and Applications in Advanced Signal Processing	6					
	227-0558-00L	Principles of Distributed Computing	6					New
	112	Distributed Operating Systems UZH	6				X	New

Deleted Course Units

Number	Title	from Category
227-0111-00L	Communication Electronics	6 Major Courses
227-0438-00L	Fundamentals of Wireless Communication	6 Major Courses
851-0734-00L	Recht der Informationssicherheit	2 Major Courses

Print Edit Submit Back

Courses (42 + 2 credit points)

- The [tutor](#) helps with the selection of courses, these courses permit a specialization in one of the following areas:
 - Communications
 - Electronics and Photonics
 - Computers and Networks
 - Systems and Control
 - Energy and Power Electronics
- However, courses can be selected **freely**, subject to approval by the tutor. See the [course catalog](#) for the list of courses.
- At least **2 credit** points must be obtained by courses from the Department of Human, Social, and Political Sciences ([D-GESS](#)). These courses are **not** part of the Tutor Agreement.

Humanities, Social and Political Sciences GESS

- The GESS "Science in Perspective" courses are mandatory for all students at ETH, all students must earn 2 cp during their Master's degree studies.
- For language courses, special rules apply (see [directives collection](#)).
- GESS courses are selected and offered by the Department of Humanities, Social and Political Sciences (D-GESS).

Contact: Study Admin D-GESS, Viola Gloor, viola.gloor@gess.ethz.ch

On the web: www.gess.ethz.ch

How to choose / enroll for your lectures

- **Consult your tutor!**
www.ee.ethz.ch > Studies > Main Master Program > Tutors
- **Course catalogue:**
www.vvz.ethz.ch > Programme > Electrical Engineering (...) Master
- **Enrollment through the online-portal:**
www.mystudies.ethz.ch

Students online portal – Reminder

Your administrative duties (on www.mystudies.ethz.ch):

- **Enrollment to courses and exams**
 - Register for each semester until the end of the second week.
 - Register for **courses** (early in the semester; you need to be registered for a course to enroll for an exam)
 - Submit the **tutor agreement** (until the **end of the 4th week**).
 - Enroll for **exams** – please enroll during the **3rd and 4th week** of the semester (withdrawal possible until very late).

- **Notify us of your address changes**

- **Read your E-Mails**

Enrolling for courses – Reminder

- All courses you wish to **count** towards your Master **Diploma** must be **enrolled** for (both the course and the exam);
- Only **courses agreed upon** by your **tutor** will count for the degree, other courses go on a separate sheet, attached to the final transcript.
- In particular, do not forget to enroll for the **Semester Projects** and the **Master Thesis** (special section in myStudies "Projects/Papers/Theses). Note the list of

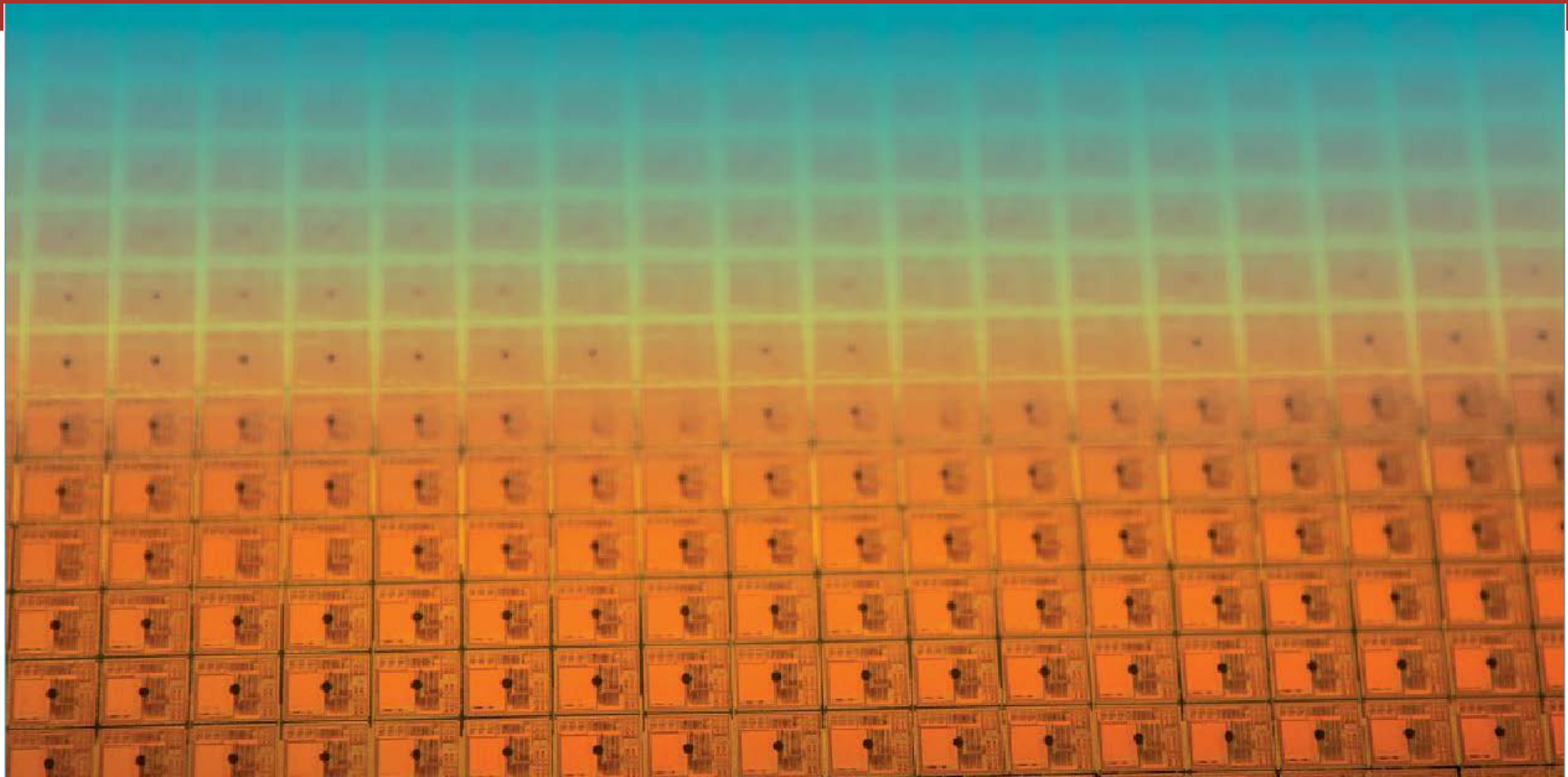
Performance Assessments (examinations)

Three types of performance assessments:

1. **Session examination** (Attention to registration/deregistration deadlines)
(Winter session: January/February – Summer session: August)
2. **End-of-semester examination** (Attention to registration/deregistration deadlines)
3. Graded/ungraded **semester performance** (e.g. semester project or internship in industry) (Attention minimum/maximum allowed time/deadlines)

Where to find the type of examination and allowed (written) aids?

- Course catalogue > see "Performance assessment"
- Personal exam schedule in myStudies (for session examinations)
- Lecturer/examiner



Useful information

Computer infrastructure at ETHZ / D-ITET

- All ETH Computers (e.g. Main Building HG D 11, or ET-Building ETZ D 61.1) require your **n.ethz** password (same as used for myStudies).
- Only ITET students can access the computer infrastructure in the ET-building area, should you encounter a problem, contact support@ee.ethz.ch (IT support office ETF D 106).
- **Project Neptun:** During a short period (until October 3), laptops may be purchased through ETH (see www.projektneptun.ch).
- **IDES:** ETH also offers software at very low cost, some products even for free (see <http://idesnx.ethz.ch>).

Counselling at D-ITET and the rectorate

- **Course selection:** your tutor.
- **Studies at D-ITET in particular** (deadlines, failures at examinations etc.): the [coordinator of studies](#).
- **Studies at ETH in general:** the [international student support](#).
- **Time management et al.:** ETH [student coaching](#).

More details?

- **My Office**

Reto Kreuzer, Study Coordinator D-ITET, ETZ H 83

Please send an E-mail to fix an appointment (reto.kreuzer@ee.ethz.ch)

- **This presentation (with links)**

Available tomorrow morning on www.ee.ethz.ch > News & Events

Enjoy your studies at ETH!

