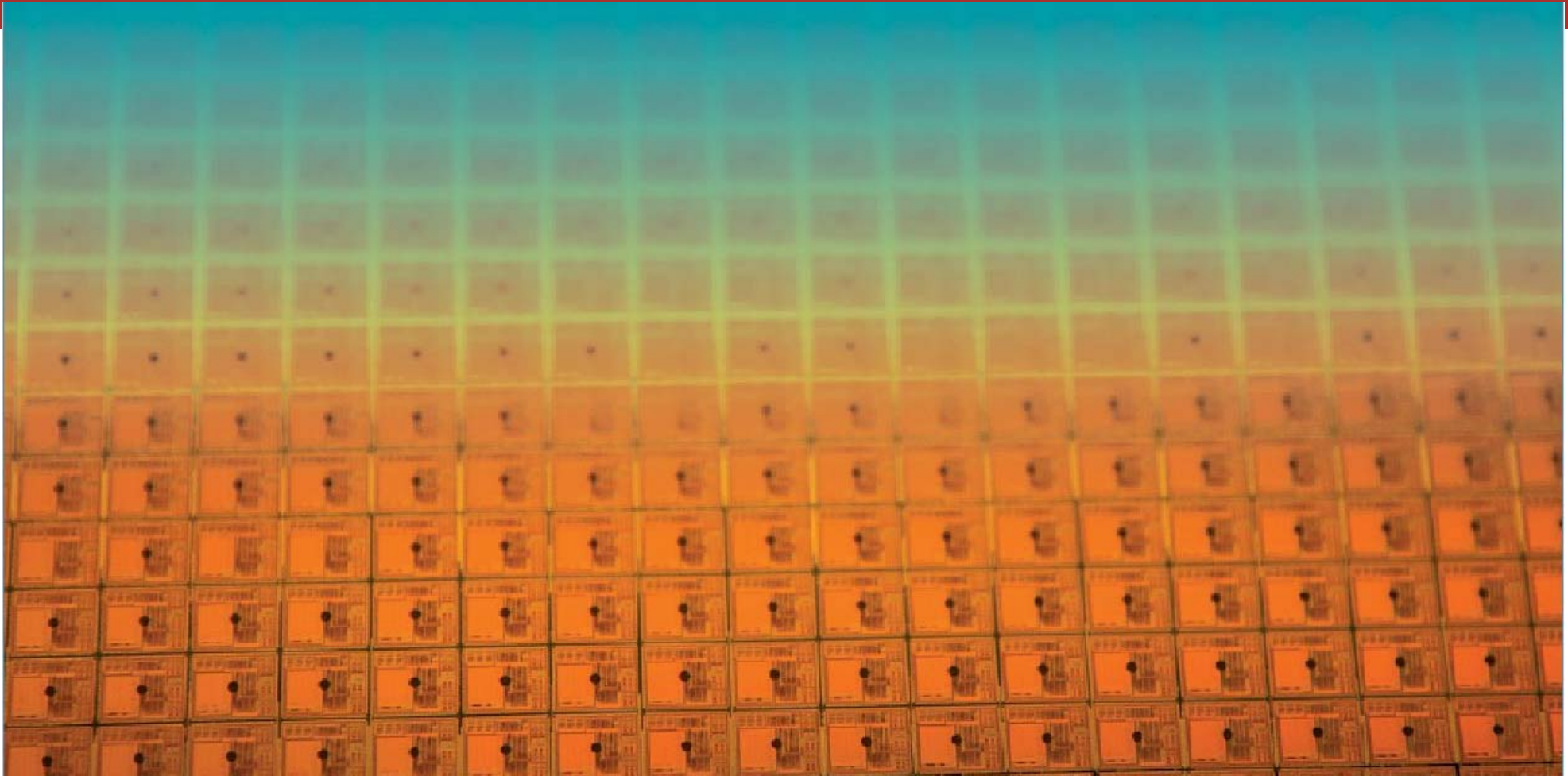# Master Program in Electrical Engineering and Information Technology
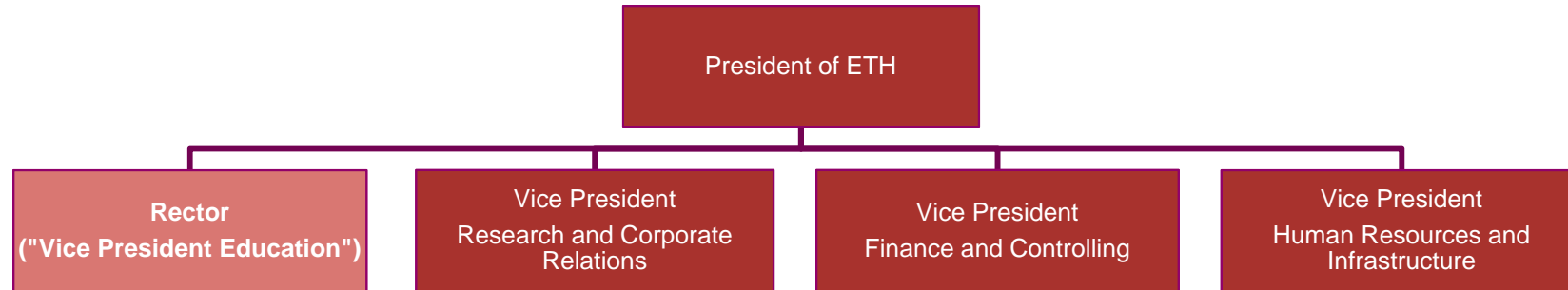
Reto Kreuzer, Coordinator of Studies D-ITET

September 14, 2015

ETH and ITET: structure & key figures

ETH Zürich: Organization and structure

ETH zürich

President of ETH

Rector
("Vice President Education")

Vice President
Research and Corporate Relations

Vice President
Finance and Controlling

Vice President
Human Resources and Infrastructure

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	Biologiy		
	Biosystems Science and Engineering			

DITET

Students at ETHZ and D-ITET (2014 figures)

Students at ETH	**19'175**
Female Students	31 %
International Students	37 %
Students at D-ITET	**1'547**
Female Students	15 %
International Students	44 %
Students at bachelor level (year 1-3)	
ETH	8'938 (*30%)
D-ITET	**635 (*10%)**
Students at master level (year 4-5)	
ETH	5'159 (*31%)
D-ITET	**474 (*20%)**
Electrical Engineering MSc	**294 (*12%)**
Biomedical Engineering MSc	67 (*48%)
Energy Science & Technology MSc	89 (*24%)
Neural Systems an Computation MSc	24 (*33%)
Exchange students	
ETH	346 (*33%)
D-ITET	**37 (*22%)**
PhD students	
ETH	3'975 (*31%)
D-ITET	**401 (*17%)**

An international program

Joining approx. 110 ETH Zurich graduates, 52 external students add to the international character of D-ITET's Master's level.
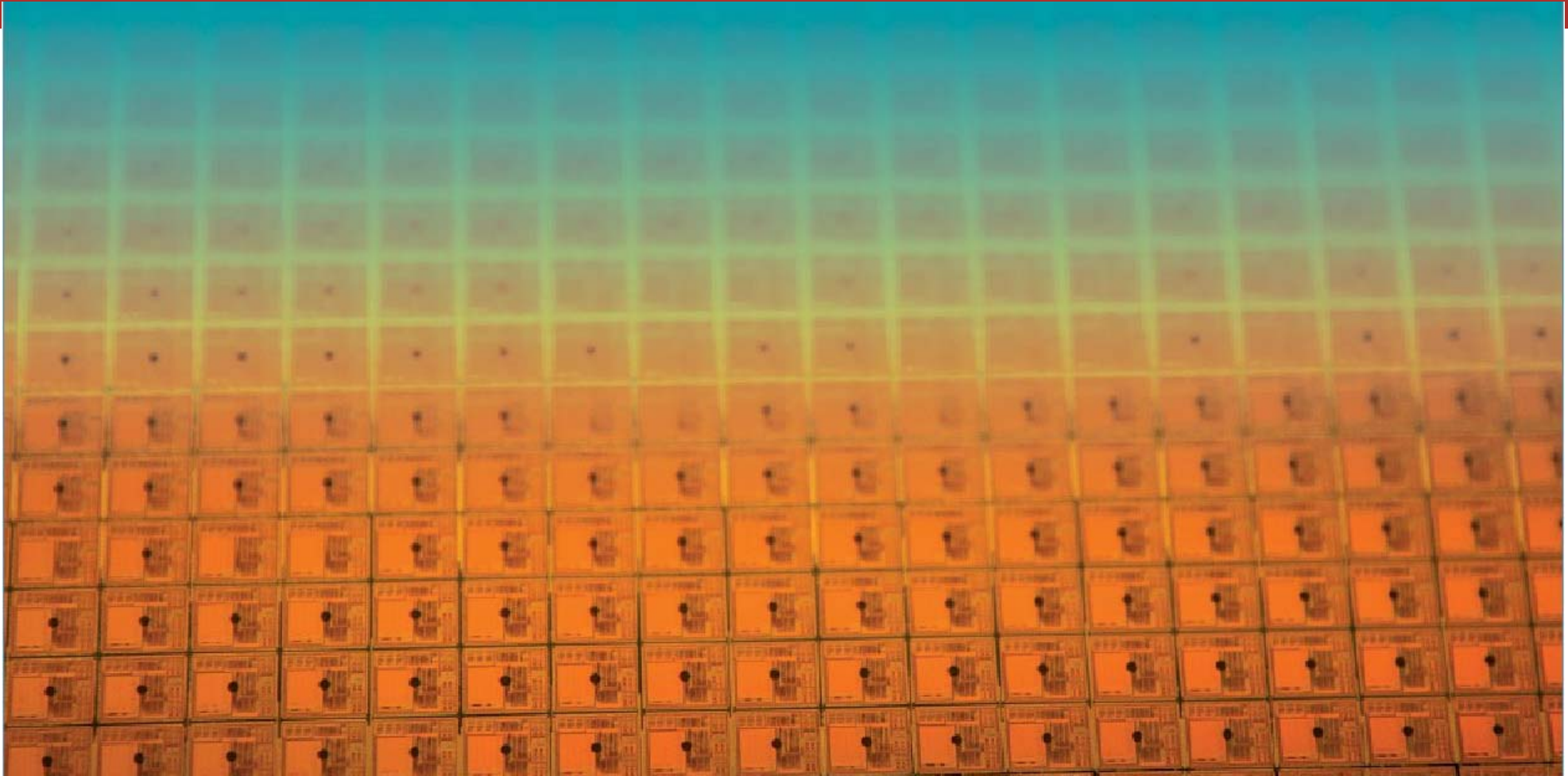
Very International:

Switzerland (9), Europe (25): Austria (1), France (1), Germany (6), Greece (3), Hungary (2), Iceland (1), Italy (5), Netherlands (2),, Poland (1), Sweden (1), Slovenia (1), Spain (1), **Asia (14):** China (4), Hong Kong (1), India (5), Iran, (1), Pakistan (1), Turkey (2), **Americas (4):** Canada (1), United States (3)

Great variety of Schools:

Alberta University, Bilkent University, BITS Pilani, Budapest University of Technology & Economics, Chalmers University, Colorado State University, Ecole Polytechnique (Palaiseau), EPFL, Escuela Superior de Ingenieros, San Sebastian, FH Technik und Informatik Biel, Burgdorf, Bern, Georgia Institute of Technology, Hochschule Luzern, IIT Bombay, Lahore University of Management Sciences, METU Ankara, NIT Karnataka, NIT Rourkela, North China Electric Power University & Edinburgh University, NTU Athens, Peking University, Politecnico di Milano, Politecnico di Torino, Polytechnic University, Southeast University, Tehran University, Tsinghua University, TU Hamburg-Harburg, TU München, TU Wien, UC Berkeley, Uni Bologna, Uni Hannover, Uni Twente, University of Iceland, University of Ljubljana, Warsaw University, ZHAW Winterthur

D-ITET: Size and members

- 11 laboratories (institutes) und 5 independent professorships

- 37 professors (3 women), one fourth in the energy field

- ca. 500 scientific and administrative employees

- ca. 400 PhD students

- ca. 1'200 undergraduate and master students

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.

D-ITET / central services

Student Admin (ETZ H 85)

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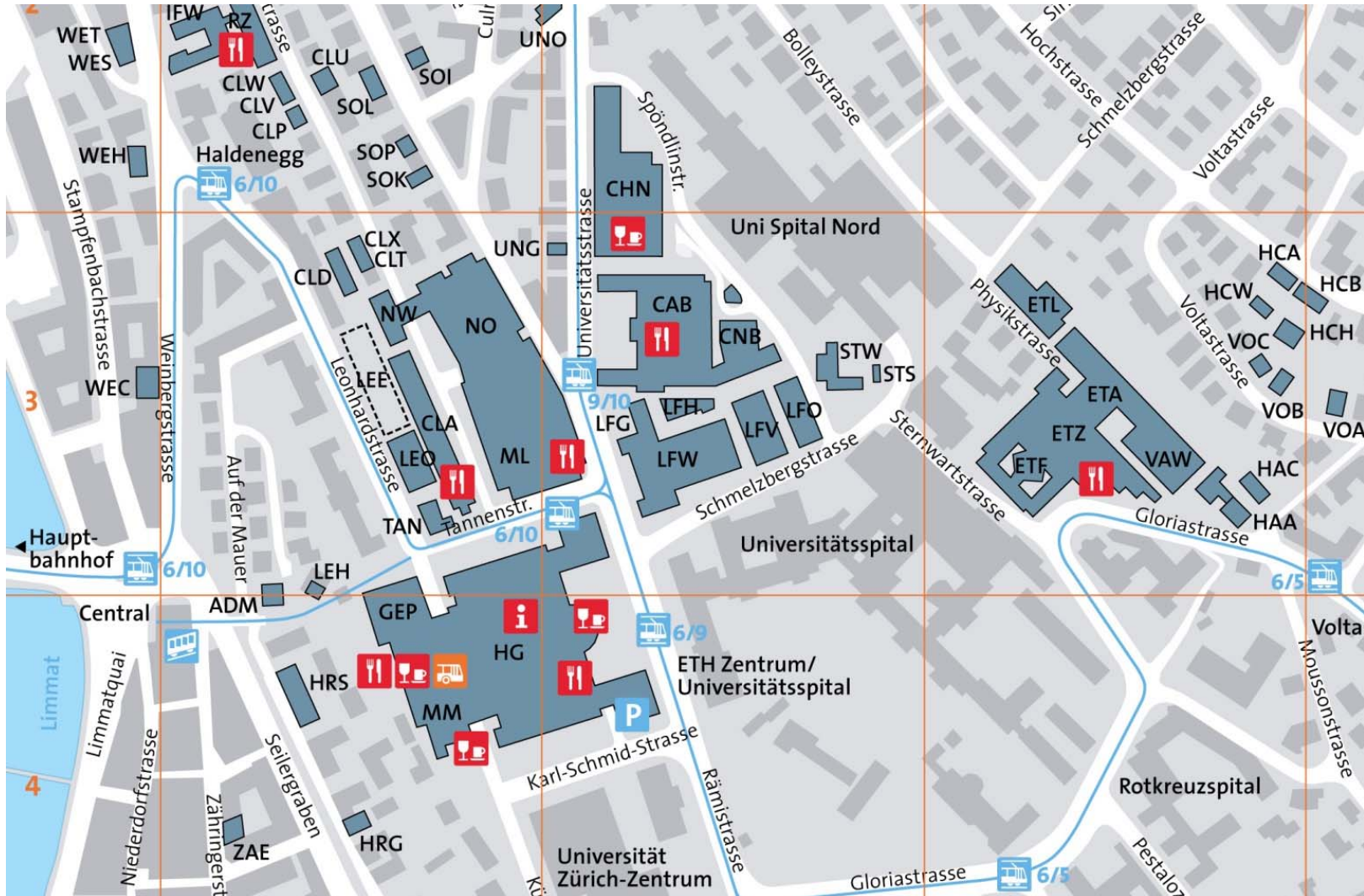
Students' association

AMIV (CAB E 37)

Social contacts, networking

Students

Tutors / Lecturers / TA

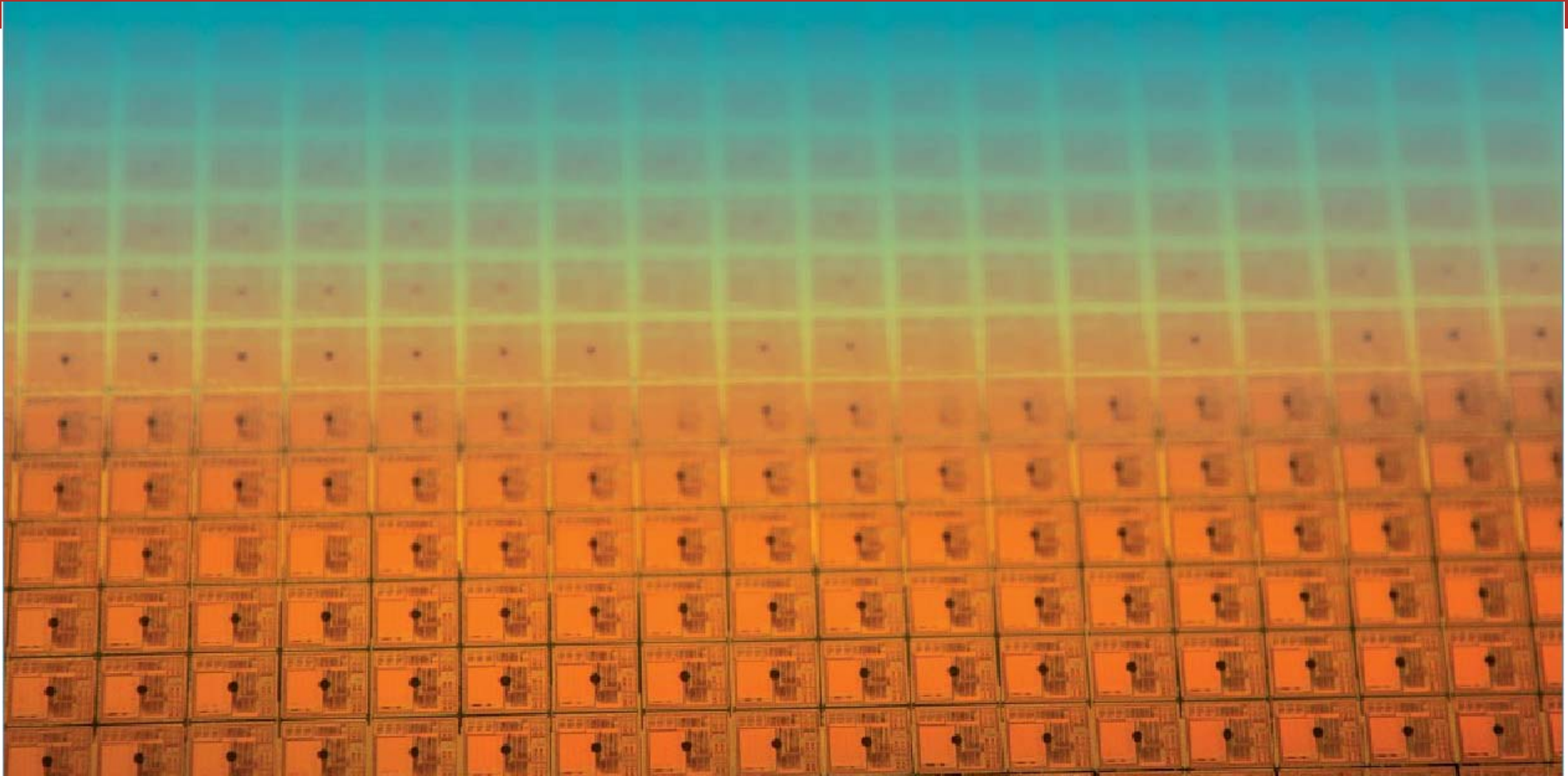Course specific questions, study plan

D ITET

Your most important contacts: where?

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 (HG F 22.3) or the Department Secretariat (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 the signed tutor agreement form to the Students Administration (ETZ H 85) 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). Registration form needed.
  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.

Tutor agreement and project registration form

Left form:

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Departement Informationstechnologie
und Elektrotechnik

Tutor Agreement

Study plan for the consecutive Master Program Electrical Engineering and Information Technology

Surname	Given Name(s)	Student ID

Tutor: ....

Area of interest/specialization[1]: ....

Course list:

Course code	Course title	Autumn/Spring semester	CP ECTS
Total			min. 42

Date: .... Signature Tutor: ....

Signature Student: ....

Please return duly signed to: **Students' Administration, Gloriastrasse 35, ETZ E 64, 8092 Zurich**

Notes:
- The student chooses a tutor. This choice should reflect a general match between the area of expertise of the tutor and the student's initial plan of study.
- The student discusses his study plan with the Tutor, both must agree on the study plan.
- There are five areas of specialization with recommended courses but generally all courses across the ETH, declared as master courses, are eligible.
- This *tutor agreement* is a binding contract between the Student and his tutor. All credit points must be obtained within the stipulated time limits.
  Exception: changes to the agreement are only permitted to accommodate course changes e.g. the course is no longer offered, a new and more suitable course is introduced etc., and with the tutor's express consent.

[1] Either as described in the course catalogue (www.vvz.ethz.ch) or in agreement with the tutor.

Right form:

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Departement für Informationstechnologie und
Elektrotechnik (D-ITET)

Student Administration Office
Gloriastrasse 35, ETZ E 64
8092 Zurich, Switzerland
Phone +41 (0)44 632 5003
E-Mail info@ee.ethz.ch
Web www.ee.ethz.ch

Registration for ❏ Semester Project / ❏ Master Thesis

for the Master Degree Program in **Electrical Engineering and Information Technology**

(Student's) Name .... First name ....

Matriculation no. ....

Start date .... End date ....

Project / Thesis on the **subject** of
....

Particulars of **professor / supervisor**

Name .... First name ....

Place / Date .... Signature ....

If the Project / Thesis is **not** carried out at D-ITET

Name of institution ....

Particulars of the **person responsible** for local supervision

Name .... First name ....

Place / Date .... Signature ....

Plagiarism declaration
By signing this document, I affirm that I have read the information notice on plagiarism[1], will independently produce the project / thesis paper, and will adhere to the general practice of source citation in this subject-area.

Place / Date .... Student signature ....

Procedure
1. Fill out the form **before** the start of the Semester Project / Master Thesis.
2. Sign up for the Semester Project / Master Thesis electronically (www.mystudies.ethz.ch).
3. Obtain signature from professor / supervisor(s).
4. Send / bring the completed form to the address above.

[1] http://www.ethz.ch/students/exams/plagiarism_s_en.pdf

Courses (42 + 2 credit points)

- Each student has a <u>tutor</u>, who helps with the selection of courses. The 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 <u>course catalog</u> for the list of courses.

- At least **2 credit** points must be obtained by courses from the Department of Human, Social, and Political Sciences (<u>D-GESS</u>). These courses are **not** part of the Tutor Agreement.

Humanities, Social and Political Sciences, GESS

- The GESS "Compulsory Elective" courses are mandatory for all students at ETH, all students must earn 2 cp during their MSc 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 Vogel, viola.vogel@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 a <u>tutor agreement</u> (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);

- In particular, do not forget to enroll for the **Semester Projects** and the **Master Thesis**.

- For the **Semester Project**, you will also need to submit a registration form at the students administration (ETZ H 85).
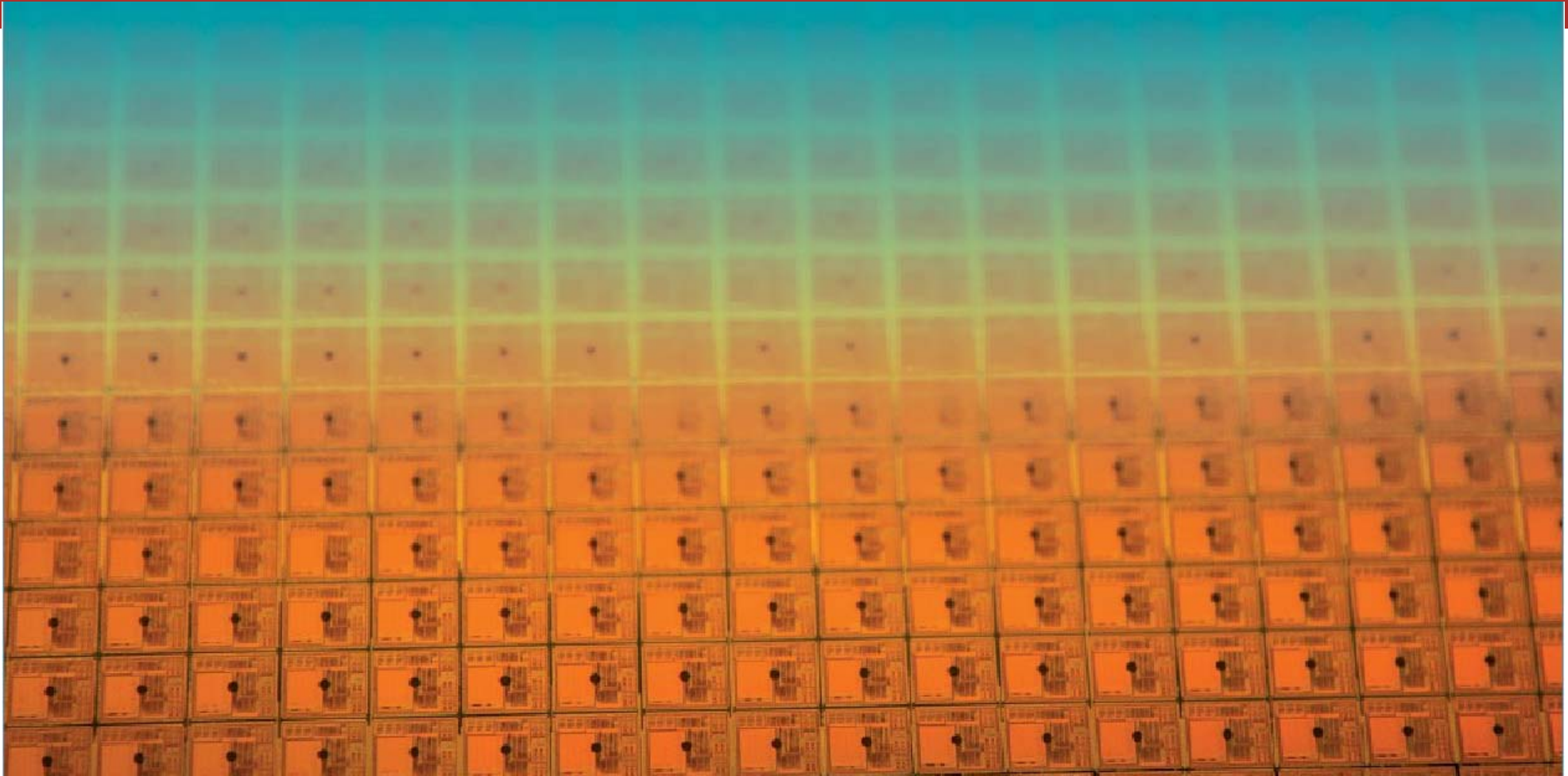
Performance Assessments (examinations)

Three types of performance assessments:

1. Session examinations (Note registration/deregistration deadlines)
   (Winter session: January/February – Summer session: August)

2. End-of-semester examinations (Note registration/deregistration deadlines)

3. Graded/ungraded semester performance (e.g. semester project or internship in industry) (Note minimum/maximum allowed time)

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 September 24), 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 stud-ides.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, Ms. A. Wanner, HG F 22.3.

- **Time management** et al.: ETH coaching services.

DITET

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!