



Portrait

Where the future begins



The ETH Zurich main building: designed by Gottfried Semper in 1855; the majestic dome was added in 1918 by the architect Gustav Gull. (Image: Emanuel Ammon / AURA)



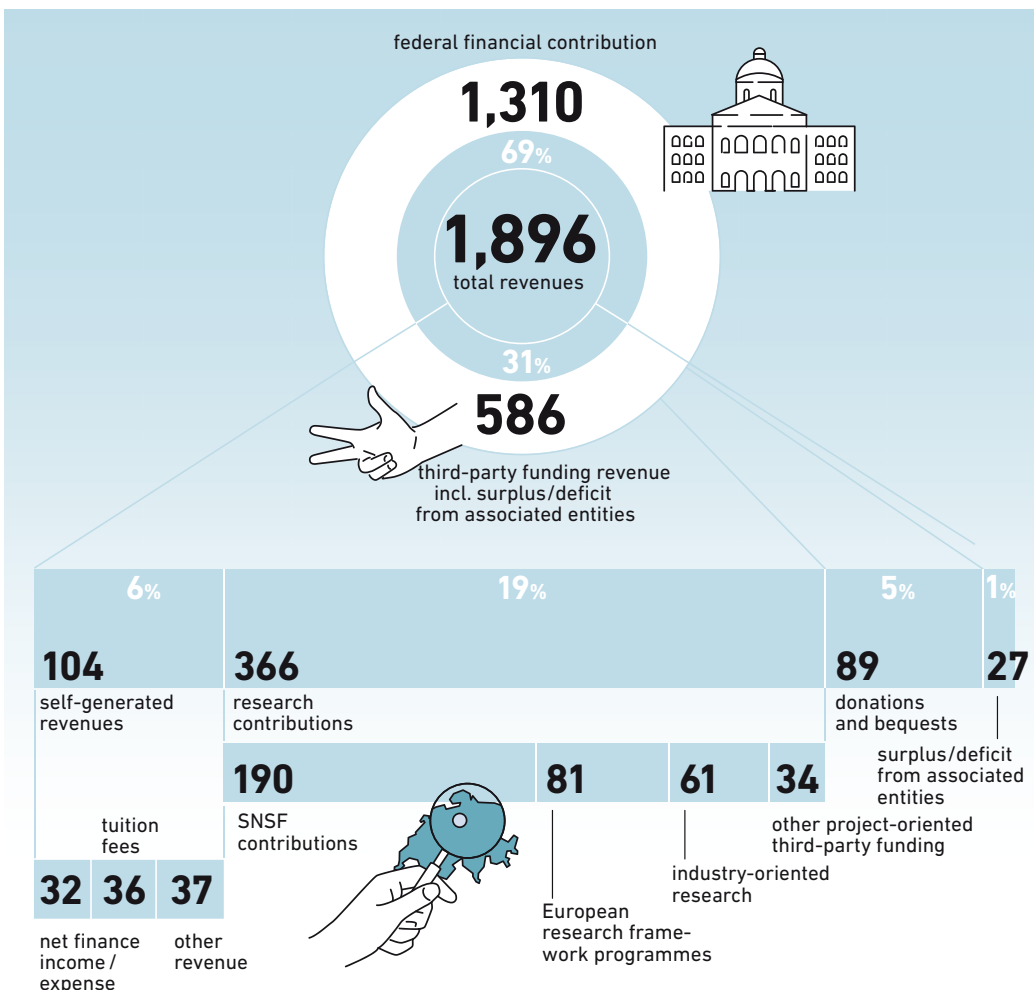
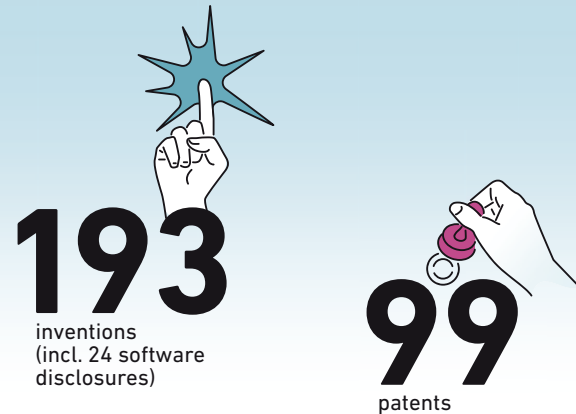
ETH Zurich – Where the future begins

Freedom and individual responsibility, entrepreneurial spirit and open-mindedness: ETH Zurich stands on a bedrock of true Swiss values. The University for science and technology dates back to the year 1855, when the founders of modern-day Switzerland created it as a place of innovation and knowledge.

At ETH Zurich, students discover an ideal environment for independent thought, researchers a climate which inspires top performance. Situated in the heart of Europe, yet connected all over the world, ETH Zurich is developing skillful solutions to the global challenges of today and tomorrow.

> www.ethz.ch/eth-zurich

Patents, licences, inventions



Composition of total revenue

in CHF million, consolidated (in accordance with IPSASs)

Prizes since 1901

The most renowned prizes awarded to ETH researchers since 1901

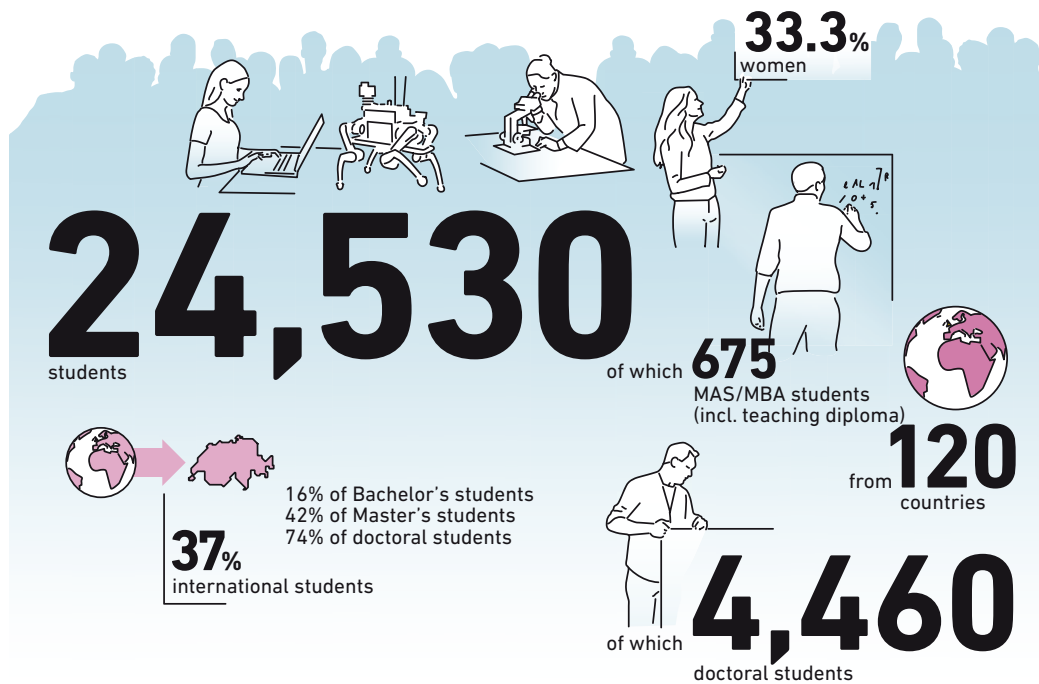


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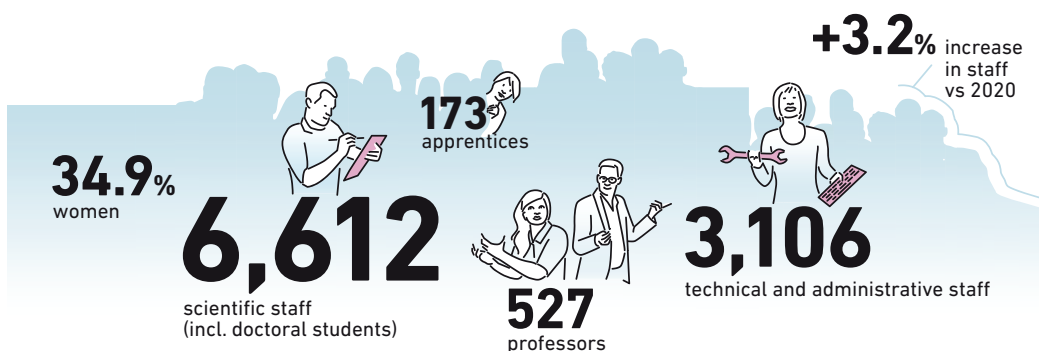
Nobel Prize winners (including Albert Einstein and Wolfgang Pauli)

“A good university doesn't just provide students with the latest knowledge. It also inspires critical thinking and responsible action.”

Joël Mesot, President of ETH Zurich



Students headcount (rounded)



Staff headcount full-time equivalents, annual average (rounded)*

* Incl. Singapore-ETH Centre



Leading the way since 1855

ETH Zurich is a place where inventive minds produce visionary ideas and develop innovative products. Its origins can be traced back to Alfred Escher, a Swiss entrepreneur who was quick to recognise the importance of railways and the first Gotthard Tunnel for Switzerland's future. To educate the skilled labour force needed for the job, he joined forces with like-minded individuals to establish an institution to educate engineers.

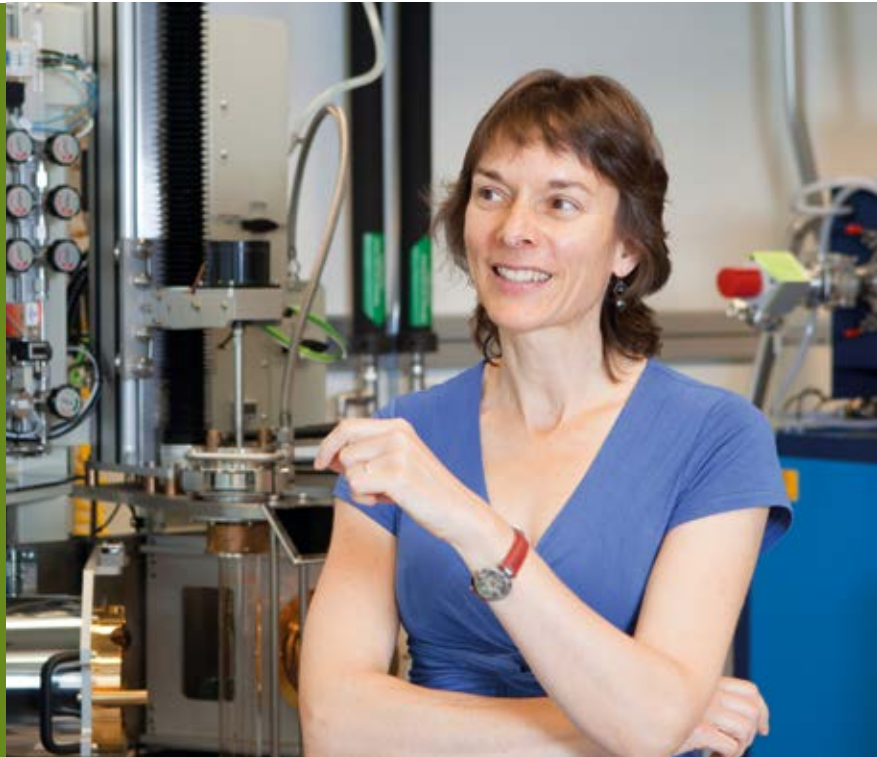
The university was founded in 1855 as the Federal Polytechnical School. The newly appointed professors included leading figures such as Francesco De Sanctis, an Italian revolutionary and later Italy's minister for education; Rudolf Clausius, who introduced the concept of entropy into physics; and the architect Gottfried Semper, who designed not only the famous opera house in Dresden, but also the university's main building.

Since then, ETH Zurich has championed the trailblazing spirit of the original polytechnic. The 22 Nobel laureates associated with the institution are testament to the quality of education it provides. Its most famous alumnus, Albert Einstein, developed the principles of his theory of relativity while at ETH Zurich. Many other ETH graduates and researchers have made a global impact with their groundbreaking work. The ETH engineer Maurice Koechlin designed the Eiffel Tower. The pharmaceutical industry has ETH chemist Tadeus Reichstein to thank for the method he developed to synthesise vitamin C – a process still widely used today. Niklaus Wirth shaped computer science with his Pascal programming language, while the high-resolution nuclear magnetic resonance (NMR) spectroscopy technique developed by Nobel laureate Richard Ernst was an important milestone in the development of modern medical imaging systems.

<< **Anne Lacaton**, Professor Emerita of Architecture and Design at ETH Zurich, and her partner Jean-Philippe Vassal have received the Pritzker Prize 2021 for their sustainable and social approach to building design. (image: Laurent Chalet)

< **Alessio Figalli** became a professor at ETH at the age of 32 and was awarded the Fields Medal in 2018 for his research on optimal transport. (image: ETH Zurich / Gian Marco Castelberg)

Nicola Spaldin has been Professor of Materials Theory > at ETH Zurich since 2011. She received the Körber Prize in 2015 and the Marcel Benoist Prize in 2019 for her groundbreaking work on multiferroics. (image: ETH Zurich / Tom Kawara)



Nobel laureates



Albert Einstein
Physics 1921



Leopold Ruzicka
Chemistry 1939



Wolfgang Pauli
Physics 1945



Vladimir Prelog
Chemistry 1975



Richard Ernst
Chemistry 1991



Kurt Wüthrich
Chemistry 2002

Responsibility
Excellence
Team spirit Diversity
Openness

A community built on trust

ETH Zurich is an institution that maintains strong regional and national roots while simultaneously being fully integrated into the international academic community. It measures itself in all respects – from teaching and research, to the way it is managed – against the world's premier universities. ETH Zurich fosters a culture of empowerment: it makes space for creativity, backs innovative and unconventional ideas and encourages critical thinking.

The University places great trust in the many and diverse skills and talents of its members, and supports them regardless of their gender, age or cultural, religious or social background. The ideas and work of ETH Zurich are characterised by sustainability, not only in education and research, but in all aspects of university life.



ETH Zurich fosters a culture of cooperation and mutual respect. (Image: ETH Zurich / Gian Marco Castelberg)

Diversity and flexibility

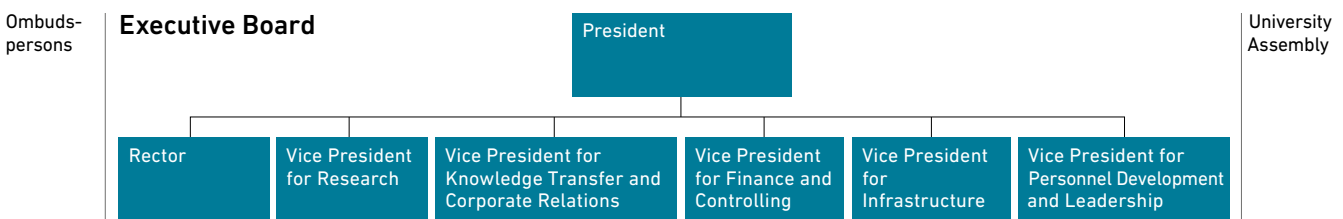
As a university of science and technology, ETH Zurich is committed to the study of a broad range of subjects, which allows knowledge to be shared and combined in innovative ways. The 16 departments cover a wide scientific spectrum, while numerous strategic initiatives, competence centres and networks encourage cross-disciplinary cooperation.

ETH Zurich Executive Board

The Executive Board is the supreme governing body of ETH Zurich. It ensures that the university fulfils its social, cultural and economic responsibilities.

> www.ethz.ch/organisation-en

Organisation Chart 2022



16 academic departments

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	Biology		
	Biosystems Science and Engineering			



From left to right: Detlef Günther (Vice President for Research), Vanessa Wood (Vice President for Knowledge Transfer and Corporate Relations), Ulrich Weidmann (Vice President for Infrastructure), Joël Mesot (President), Katharina Poiger Ruloff (General Secretariat), Günther Dissertori (Rector), Julia Dannath (Vice President for Personnel Development and Leadership), Robert Perich (Vice President for Finance and Controlling). (Image: ETH Zurich / Markus Bertschi)



Student life on the campus allows plenty of individual freedom. (Image: ETH Zurich / Gian Marco Castelberg)

ETH Zurich in the Swiss education system

Around a fifth of all school leavers in Switzerland pass the upper secondary school graduation examination (Maturität). This allows them to study at any Swiss university – including ETH Zurich, which enjoys a reputation as one of the world's top universities. To ensure that new students are well prepared for university, ETH Zurich is closely involved in helping to train and develop the skills of teaching staff at Swiss high schools. Particular support is provided to ensure school pupils understand key concepts in chemistry, maths and physics.

A hotbed of talent

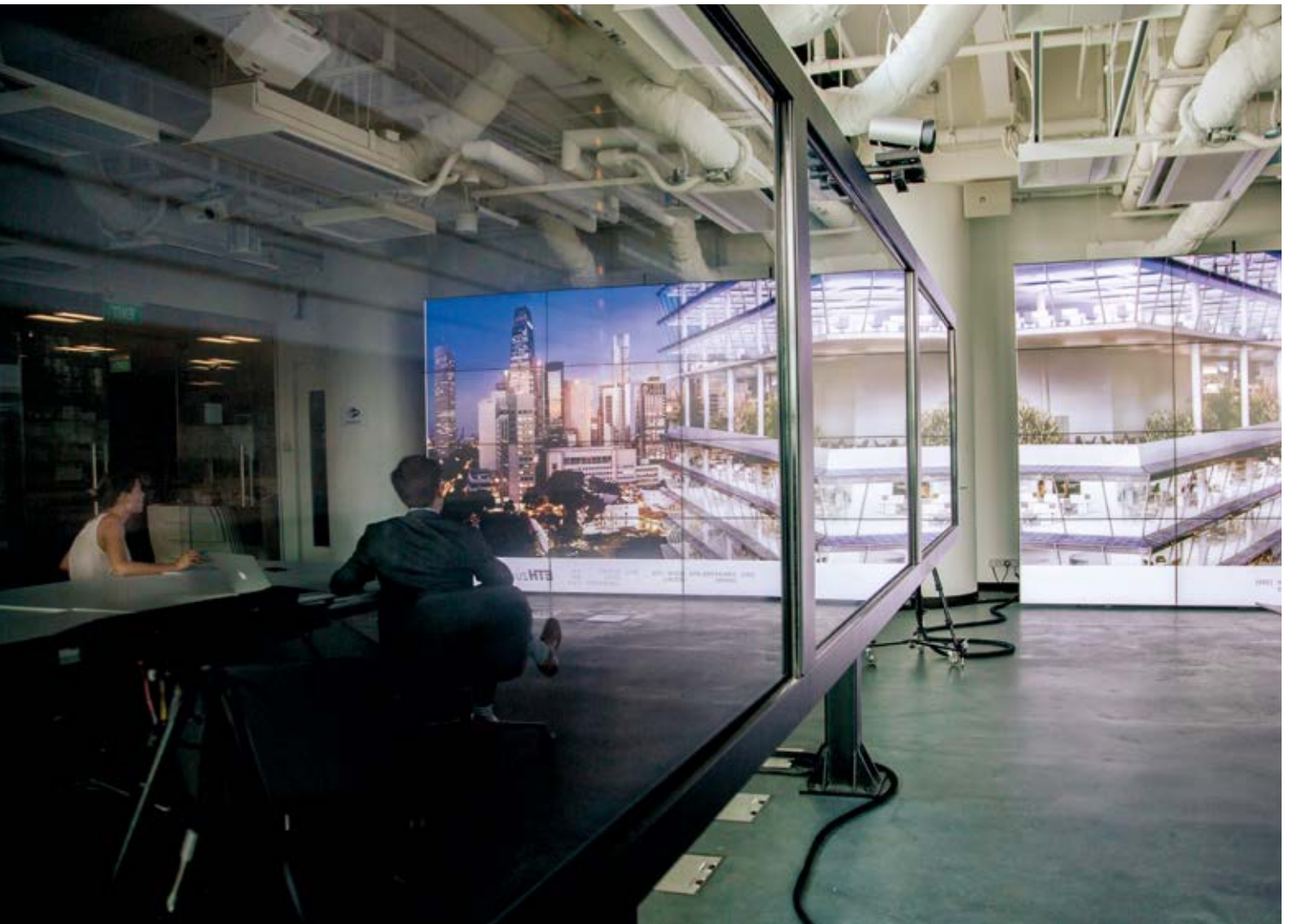
ETH Zurich is an attractive place to study, as evidenced by the steady rise in student numbers in recent years. Excellent lecturers and innovative teaching methods make the institution an ideal environment for learning – and the students also have the opportunity to interact with some of the world's leading researchers in the classroom as well as the laboratory.

ETH Zurich teaches fundamental knowledge and skills at the highest international level to ensure its students are equipped to deal with current and future challenges. As well as imparting methodological skills and disciplinary knowledge, it also encourages interdisciplinary and system-oriented ways of thinking. The students learn to think critically and act re-

sponsibly, work in international teams and express themselves in several languages. We foster a culture of personal responsibility for learning, which supports students' individual strengths.

Outstanding student performance is rewarded. Every year, ETH Zurich awards about 50 Excellence Scholarships to the best new Master's students, regardless of where they completed their Bachelor's degree. The scholarships cover their living costs and tuition fees for the entire Master's course.

ETH Zurich is constantly developing its curricula, lectures and assessment methods to ensure it offers students the best possible education. ETH degree programmes are revised at regular intervals to en-



The Singapore–ETH Centre (SEC) serves as an intellectual hub for ETH Zurich in Asia, actively networking with researchers at local universities, research institutes and industry. (Image: ETH Zurich / Lina Meisen)

sure teaching is geared towards the ever-changing demands of the labour market. Feedback from students is taken on board, along with the results of surveys of graduates and companies. The University is particularly committed to developing the teaching skills of its staff. A team of specialists supports targeted initiatives and projects to promote innovative ideas in teaching.

There is high demand for ETH Zurich graduates on the job market. The students are distinguished by their intellectual agility, critical thinking and entrepreneurial approach. At ETH, they have learned to take account of socially relevant, ethical and sustainability aspects in their activities.

> www.ethz.ch/education

Degree programmes

The structure of study programmes at ETH Zurich is aligned with international standards: three-year Bachelor's degree programmes are followed by Master's degree courses running over 18 months or two years. Achieving a doctoral degree takes an average of three to four years after the Master's degree.

Bachelor's degrees

ETH Bachelor's degree programmes impart fundamental knowledge in mathematics and other basic sciences, together with the theoretical and methodological knowledge of the selected discipline. 84 percent of the Bachelor's students enrolled at ETH Zurich have been through the Swiss school system. Their initial year of study at ETH is demanding and culminates in first-year examinations. Fortunately, 90 percent of all students who sit the first-year examination successfully complete their Bachelor's degree; this corresponds to around 60 percent of all new entrants.

Master's degrees

Nearly all these Bachelor graduates go on to study for a Master's degree at ETH; they account for 57 percent of the Master's students, while 13 percent are from other Swiss universities. The re-

maining 30 percent come from foreign universities. ETH Master's degree programmes deepen students' knowledge and specialist training, and qualify them to enter a profession. Research is a significant part of the curriculum. The University offers its students a stimulating international environment at Master's level, which is an ideal preparation for their future working life or for doctoral studies. 94 percent of Master's students successfully complete their degree course. Most of the students graduating from the University take their knowledge and skills into the Swiss job market. A fifth of students take their education a stage further and pursue a doctoral degree at ETH.

Doctoral studies

Around 40 percent of all doctoral students are graduates of an ETH Master's programme; the other 60 percent come mainly from universities abroad. The doctoral degree involves independent scientific work. In addition, students are required to pursue further training in and beyond their chosen disciplines. All ETH Zurich doctoral candidates also supervise other students, gaining experience which is valuable in their subsequent careers.

> www.ethz.ch/studies

“By equipping our students with fundamental professional and methodological skills along with social and personal competencies, we prepare them for the future – for personal advancement and for the challenges of our times.”

Günther Dissertori, Rector of ETH Zurich

Degree programmes	Bachelor's	Master
Architecture and Civil Engineering		
Architecture	■	■
Civil Engineering	■	■
Environmental Engineering	■	■
Geospatial Engineering	■	
Geomatics		■ ■
Spatial Development and Infrastructure Systems		■ ■
Integrated Building Systems		■
Landscape Architecture		■ ■
Engineering Sciences		
Mechanical Engineering	■	■
Process Engineering		■
Nuclear Engineering		■
Robotics, Systems and Control		■
Electrical Engineering and Information Technology	■	■
Biomedical Engineering		■
Energy Science and Technology		■
Neural Systems and Computation		■
Computer Science	■	■
Cyber Security		■
Micro and Nanosystems		■
Quantum Engineering		■
Data Science		■
Biotechnology		■
Computational Biology and Bioinformatics		■
Materials Science	■	■
Natural Sciences and Mathematics		
Mathematics / Applied Mathematics	■	■
Statistics		■
Quantitative Finance		■
Computational Science and Engineering	■	■
Physics	■	■
High Energy Physics		■
Chemistry	■	■
Chemical Engineering	■	
Chemical and Bioengineering		■
Interdisciplinary Sciences	■	■
Pharmaceutical Sciences / Pharmacy	■	■ ■
Pharmaceutical Sciences		■
Biology	■	■
Biochemistry – Chemical Biology	■	

Degree programmes	Bachelor's	Master
System-oriented Natural Sciences		
Earth and Climate Sciences	■	
Earth Sciences		■
Applied Geophysics		■
Atmospheric and Climate Sciences		■
Environmental Sciences	■	■
Agricultural Sciences	■	■
Food Science	■	■
Health Sciences and Technology	■	■
Human Medicine	■	
Management and Social Sciences		
Management, Technology and Economics		■
Comparative and International Studies		■
Public Policy (Swiss Professional Officer)	■	
History and Philosophy of Knowledge		■
Science Education		■
Science, Technology and Policy		■
Language of instruction:		
■	German	
■	English	



In addition to the main ETH Library, members of ETH Zurich also have access to numerous special libraries, such as the one for mathematics. (Image: ETH Zurich / Gian Marco Castelberg)



A place to meet up or just chill out: green oases on the Hönggerberg campus. (Image: ETH Zurich / Alessandro Della Bella)



The Zurich Academic Sports Association (ASVZ) offers all university students, staff and alumni an attractive and varied sports programme. There are over 120 types of sport to choose from, an excellent infrastructure, the latest sporting equipment and professional support from qualified staff. (Image: ETH Zurich / Alessandro Della Bella)



The Akademisches Orchester Zürich was founded at the start of the 20th century and currently has around 80 members. Any student or assistant at the University of Zurich or ETH Zurich can join. (Image: ETH Zurich / Oliver Bartschlagler)

Wide-ranging research

As one of the world's leading technical universities, ETH Zurich makes an indispensable contribution to Swiss society and also towards securing Switzerland's international competitiveness. The University focuses its research activities on the areas of architecture and civil engineering, engineering sciences, natural sciences and mathematics, system-oriented natural sciences, and management and social sciences. ETH research scientists are world leaders in many specialist fields such as robotics, computer science, earth sciences and quantum physics.

ETH Zurich is mainly involved in fundamental research, with an open-minded approach driven by natural curiosity. In this capacity, it expands our society's knowledge base, provides an important stimulus to develop future applications and lays the foundation for future innovations. At the same time, ETH Zurich enriches Switzerland as a workplace by collaborating with industry on application-oriented research projects.

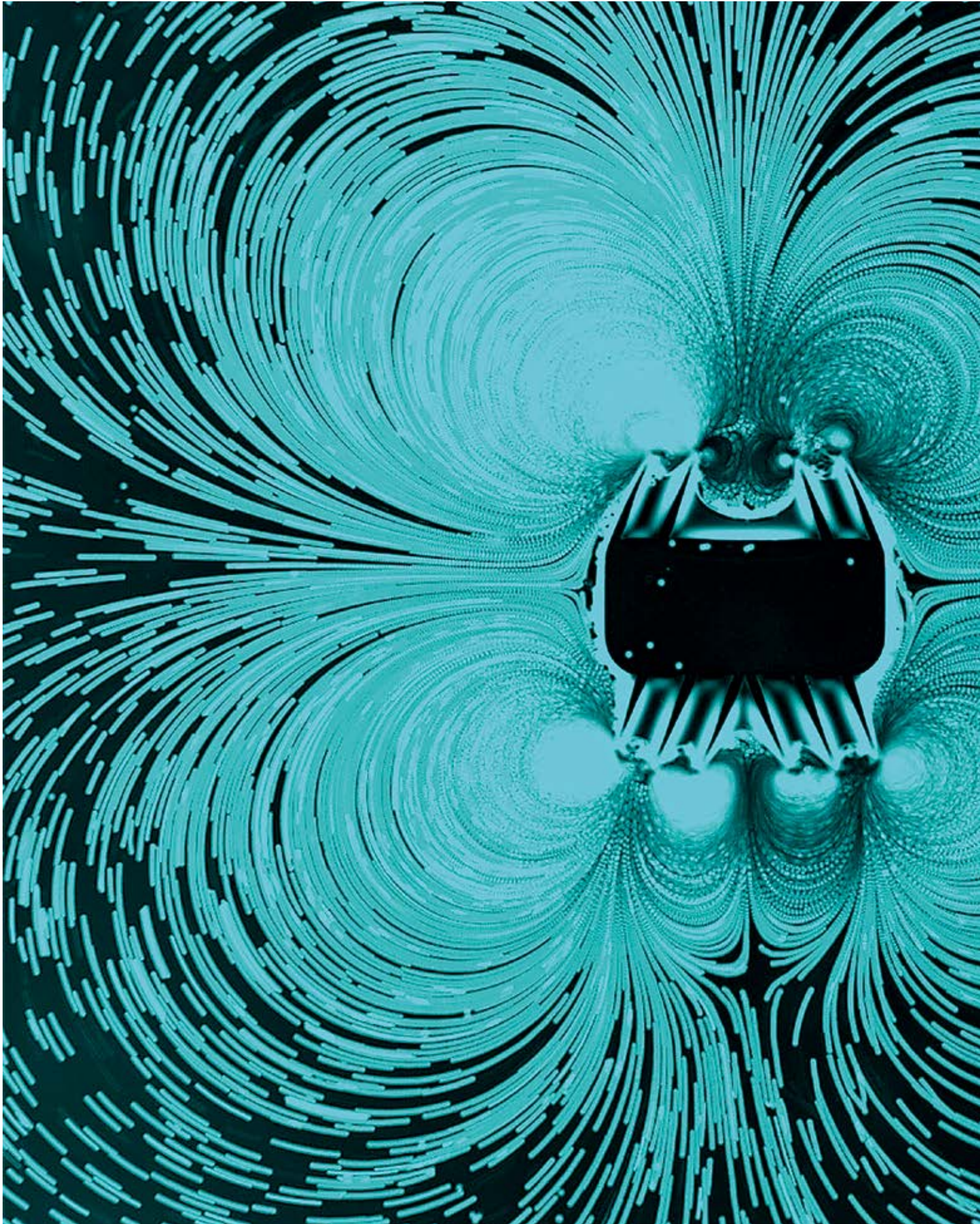
Besides research in specific disciplines, ETH Zurich is also active in many areas which can only be mastered through interdisciplinary teamwork. ETH scientists work in multidisciplinary teams to research topics in the areas of health, data science, sustainability and manufacturing technologies.

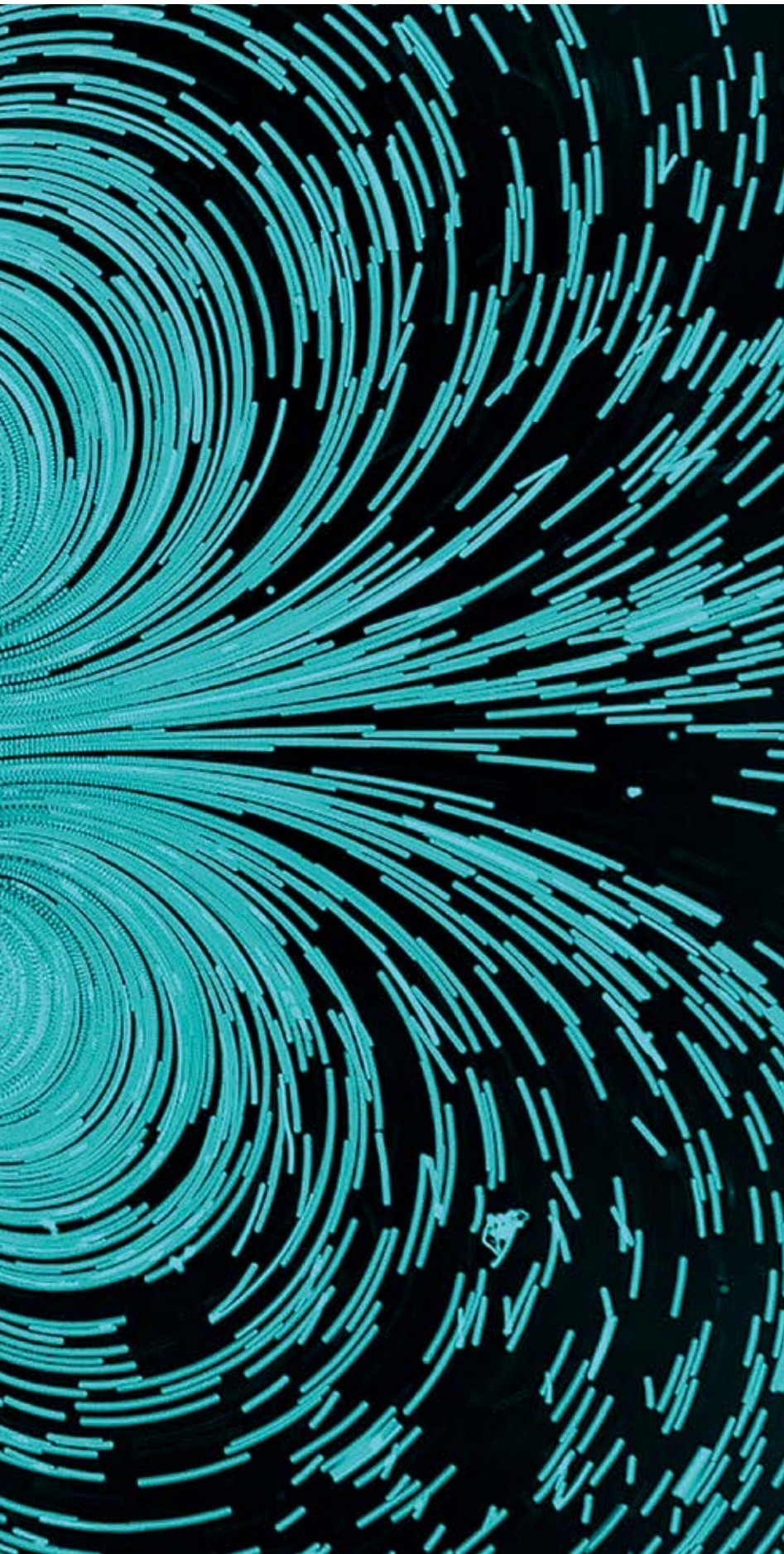
Modern research is largely technology-based. Thanks to its modern infrastructure and highly qualified employees, ETH Zurich performs at world-class level. One of the university's key strengths is the technology platforms that make specialist tools and techniques available to ETH researchers. These include the Binnig and Rohrer Nanotechnology Center (BRNC), the FIRST Center for Micro- and Nanoscience, the Scientific Center for Optical and Electron Microscopy (ScopeM), the Functional Genomics Center Zurich (FGCZ) and the ETH Phenomics Center (EPIC). The digital Trial Intervention Platform (dTIP) is designed to assist ETH researchers and spin-offs in transferring scientific discoveries into clinical practice. Finally, all Swiss universities and research institutes have access to the Swiss National Supercomputing Centre (CSCS) in Lugano, which is operated by ETH Zurich. This offers a powerful infrastructure for performing simulations that require massive computing capacity and have now become an indispensable tool in scientific research.

> www.ethz.ch/research



ETH already performs quantum research at world-class level and in future aims to position itself even more firmly at the cutting edge of this technology. (Image: ETH Zurich / Daniel Winkler)





A commitment to health

Not only is life expectancy increasing, but a good quality of life can now be maintained well into old age. The possibilities of modern medicine are expanding as well, leading to greater expectations and demands on the healthcare system – with inevitable cost consequences. Working at the intersection of medicine, technology and natural sciences, ETH Zurich makes full use of its wide-ranging expertise to drive forward medical research and training, and to ensure that the latest findings in fundamental research are transferred effectively into medical practice.

To this end, ETH works closely with the medical faculties of a number of universities, university teaching hospitals and other clinics. For example, ETH Zurich plays a significant role in the Swiss Personalized Health Network and in the ETH Board's Personalized Health and Related Technologies Initiative. By developing individually tailored preventive measures and treatments, these initiatives aim to improve the quality and efficiency of clinical medicine. ETH has a particularly close partnership in this field with the University of Zurich and the Zurich university hospitals.

Researchers at ETH Zurich have developed a tiny robot that mimics the movement of a starfish larva. It is driven by sound waves and equipped with hairs, just like its natural model. In the future, such microswimmers could deliver drugs to diseased cells with pinpoint accuracy. (Image: Cornel Dillinger/ETH Zurich)





Valuable data

Our modern digital world is now producing unprecedented amounts of data. Harvesting this data – and analysing it productively – is not only a major challenge, but a great opportunity, as it opens up entirely new possibilities in many areas. This is particularly true in the world of science, where big data and artificial intelligence now play a vital role. ETH has risen to the challenge by launching the Swiss Data Science Center, which ETH Zurich operates as a joint venture with EPFL, and the ETH AI Center.

In a series of interdisciplinary projects, ETH researchers are developing new approaches to processing and analysing large volumes of data efficiently. The Max Planck ETH Center for Learning Systems is conducting cutting-edge research: scientists from ETH Zurich and the Max Planck Society are studying the fundamental mechanisms of complex systems and developing techniques for learning systems that process data in new ways. ETH Zurich is also focusing on the increasingly important area of information security. Here it is working closely with leading industrial partners at the Zurich Information Security and Privacy Center.

Finally, quantum technology is revolutionising the methodology for solving specific numerical problems, transmitting data and measuring the tiniest signals. ETH has been at the forefront of both quantum information science and quantum technology since their inception.

Fibre-optic cables are emerging as a valuable tool for ETH geoscientists and glaciologists as they can be used to collect vast quantities of data. They offer a relatively inexpensive way of measuring even the tiniest glacial earthquakes – plus they can also be used to obtain more accurate images of the geological subsurface in earthquake-prone megacities. (Image: Wojciech Gajek)





All-round sustainability

The sustainable design of our living spaces, prudent management of natural resources, food security, energy supply and climate change: these are undoubtedly the biggest global challenges we face over the coming decades. ETH Zurich has been deeply involved in these themes for many years and has built a reputation as an international centre of excellence and a major hub for energy, environmental, climate and nutritional research.

Most ETH departments, along with a growing number of competence centres, are involved in a broad range of themes relevant to sustainability. At the Energy Science Center, researchers from engineering, natural and social sciences work together to investigate renewable energies and how they can be integrated into the energy infrastructure, and to develop sustainable business models for the energy sector. Working closely with industry partners, ETH Zurich is developing innovative approaches in the World Food System Center for securing enough food for the world's growing population. Finally, ETH researchers based at the Singapore-ETH Centre are studying how sustainable urban development can look under different cultural, climatic and economic conditions and how critical infrastructures in modern, innovation-driven societies can be better protected against risks.

Researchers at ETH Zurich have developed a condenser for countries where water is in short supply. Theirs is the first zero-energy solution for harvesting water from the atmosphere throughout the 24-hour daily cycle. It relies on a self-cooling surface and a special radiation shield. (Image: ETH Zurich / Iwan Hächler)





Manufacturing technologies

In the long run, the commercial success of a company depends to no small extent on its ability to develop innovative products and produce them cost-effectively. It is precisely in this area that ETH Zurich makes major contributions to the Swiss economy, by developing cutting-edge production processes and manufacturing technologies. These include computer-assisted design methods and material flow planning, along with the integration of complex materials and systems, the efficient organisation of all operational processes, and recycling.

With its Manufacturing across Scales initiative, ETH Zurich combines its specialist expertise in many areas and leverages suitable industry partnerships to promote fundamental research. The aim here is to develop innovative solutions that allow reproducible and scalable processes and manufacturing techniques to be developed while optimising resource consumption. ETH Zurich is also encouraging interdisciplinary research and advancing the development of new materials and processes through the Competence Centre for Materials and Processes (MaP). In addition, it is setting up a robotics and mobility hub in the Switzerland Innovation Park Zurich.

NEST's HiLo unit demonstrates how attractive architecture can be when combining energy- and resource-saving construction and operation. The unit brings together innovative planning and design methods for efficient structures in concrete with self-learning and adaptive building technologies. The unit was realized by ITA's professorships Architecture and Structure (Block Research Group) and Architecture and Building Systems in cooperation with numerous industrial partners. (Image: Roman Keller)



“ Transfer between academia and industry is a key driver of Switzerland’s innovative strength. ”

Vanessa Wood, Vice President for Knowledge Transfer and Corporate Relations

During ETH Week, students from all departments develop ideas for a sustainable future with the support of ETH lecturers and industry partners. (Image: ETH Zurich / Alessandro Della Bella)

Inspiring partnerships

ETH Zurich serves as an important partner for industry and business, and a driving force for innovation in Switzerland. The university’s excellent technical infrastructure and world-class research facilities help it come up with pioneering solutions which its partners then work up into commercially viable products and services. Here ETH Zurich targets not only large corporations; it is also interested in partnerships with small and medium-sized enterprises (SMEs). Guaranteeing the independence of all research and teaching is a top priority.

ETH Zurich provides the initial impetus but sees these partnerships with industry as a matter of give-and-take on both sides. In this relationship, the university

receives valuable feedback from practical applications, which in turn has a positive influence on its own scientific research. Effective collaboration with leading companies is therefore very important for ETH Zurich. The Partnership Councils, which bring together key individuals from academia and industry, and the regular Industry Days held by the university, are excellent vehicles for promoting this mutual exchange.

> www.ethz.ch/industry-partner



Using the technology developed at ETH by Climeworks, excess carbon dioxide is filtered out of the atmosphere. ETH spin-off Climeworks is a so called unicorn, i.e. a start-up with a market valuation in excess of CHF 1 billion. (Image: Climeworks)



“ The ETH spirit will help to keep Switzerland at the top of its game. ”

Dr Severin Schwan, CEO Roche

Cyathlon is a unique competition in which people with disabilities compete to carry out everyday tasks with the aid of state-of-the-art assistive technology. Here is an exoskeleton developed by ETH Zurich. (Image: ETH Zurich / Urs Matter)

A driving force for the economy

ETH Zurich is a driving force for industry on many different levels. The University educates highly qualified professionals and works closely with industry partners to research technologies and techniques which often feed directly into new products. The fruits of the efforts are plain to see: every year, ETH research results lead to the filing of numerous patent applications.

Many of these inventions are commercially exploited by the researchers themselves. Each year, members of the University use the results of their work to set up around 25 spin-off companies, many of which then develop into successful new businesses. The innovative spirit of these young entrepreneurs is also reflected in the fact that ETH spin-offs regularly win top prizes in competitions for young businesses.

ETH Zurich has a diverse range of instruments to support the transfer of academic research to industrial applications. These include Pioneer Fellowships and the ieLabs, where the University provides budding young entrepreneurs with close support in the early phase of their new venture.

> www.ethz.ch/industry



Quadrupedal robot ANYmal developed at ETH Zurich on the stony trail leading up to 1,098-metre-high Mount Etzel. (Image: Takahiro Miki)

From theory to practice

ETH Zurich's continuing education offering aims to ensure that the results of its innovative research benefit Switzerland as a whole, on both a theoretical and practical level. The university's School for Continuing Education brings first-hand knowledge not just to alumni, but to other highly qualified professionals working in Swiss industry and society.

The same professors responsible for educating students also teach the MAS, DAS and CAS study programmes, as well as the shorter continuing education courses and online modules. They develop the contents of the continuing education courses in collaboration with partners from Swiss industry and administration, and design them with practical needs in mind.

Because our world is changing so swiftly, and knowledge is a central competitive factor in the global market-

place, the continuing education of high qualified specialists is becoming increasingly important, as reflected in the rapidly growing number of courses we offer.

At the start of 2022, the School for Continuing Education offered 22 MAS/MBA, 9 DAS and 43 CAS programmes in four areas – Public Policy & Governance; Health, Life & Natural Science; Environment, Infrastructure & Architecture; and Technology, Management & Innovation. These include stimulating programmes in the field of medicine: as from autumn semester 2022, D-HEST will offer the MAS ETH in digital Clinical Research as a comprehensive, modular package in forward-looking areas of medicine. ETH is also expanding its range of courses in Regenerative Materials, thereby setting a focus on sustainability.

> www.sce.ethz.ch/en/

Excellent national networks

Creating clear areas of strategic research and exploiting synergies: this is the principle underlying the partnership that ETH Zurich fosters with numerous research and educational institutions across Switzerland. In the greater Zurich area, for example, ETH Zurich and the University of Zurich, along with university and private hospitals, universities of applied sciences and commercial research institutions, form a network for medical education and research that is unique in Switzerland.

ETH Zurich is also heavily involved in the National Centres of Competence in Research (NCCRs). It currently acts as the home institution for ten centres and as the leading house for five of these: automation, catalysis, digital fabrication, molecular ultrafast science and technology, quantum science and technology. In addition, ETH Zurich runs numerous interdisciplinary research initiatives, some of which with other universities or outside partners.

Together with the Swiss Federal Institute of Technology Lausanne (EPFL) and four research institutions – the Swiss Federal Institute of Aquatic Science and Technology (EAWAG), the Swiss Federal Institute for Forest, Snow and Landscape Research (WSL), the Swiss Federal Laboratories for Materials Science and Technology (EMPA) and the Paul Scherrer Institute (PSI) – ETH Zurich forms part of the ETH Domain under the control of the federal government.

The special role that ETH Zurich plays is reflected not only in its vital contributions in the core areas of research and education, but also the other important services it delivers for Switzerland. On behalf of the federal government, the University performs tasks that promote security and improve the quality of life in Switzerland, as well as fostering its cultural heritage.

- The Swiss Economic Institute (KOF) at ETH Zurich supports Switzerland's economic and political development, and the forecasts it provides are an important aid in the decision-making processes of the federal government and the private sector. It also works closely with experts from other countries.
- The Swiss Seismological Service (SED) at ETH Zurich is an internationally renowned institution. It is responsible for monitoring earthquake activity in Switzerland and neighbouring countries, and draws up hazard maps to evaluate seismic risk.
- The main library, the ETH Bibliothek, is the largest scientific library in Switzerland and one of the leading scientific and technical libraries in Europe. As a public library, it serves not only university staff and students, but also companies and any interested members of the public.

Some 20 national collections and archives at ETH Zurich help to preserve the scientific and cultural heritage. They are open to the public and include some significant works such as the Thomas Mann Archive, the Max Frisch Archive and the Graphische Sammlung ETH Zürich collection of prints and drawings.



Around 20 research groups are pooling their exceptional expertise in order to create a fully implantable artificial heart. Partner institutions include ETH, the University of Zurich and University Hospital Zurich, the German Heart Center Berlin and Empa. (ETH Zürich / Paper Art: Katrin Rodegast, Image: Ragnar Schmuck; Map: Hallwag Kümmerly+Frey AG)



The Department of Biosystems Science and Engineering is located in Basel. Its proximity to local biochemical and pharmaceutical companies offers scientists the perfect conditions for interdisciplinary research projects. (Visualisation: Nickl & Partner)



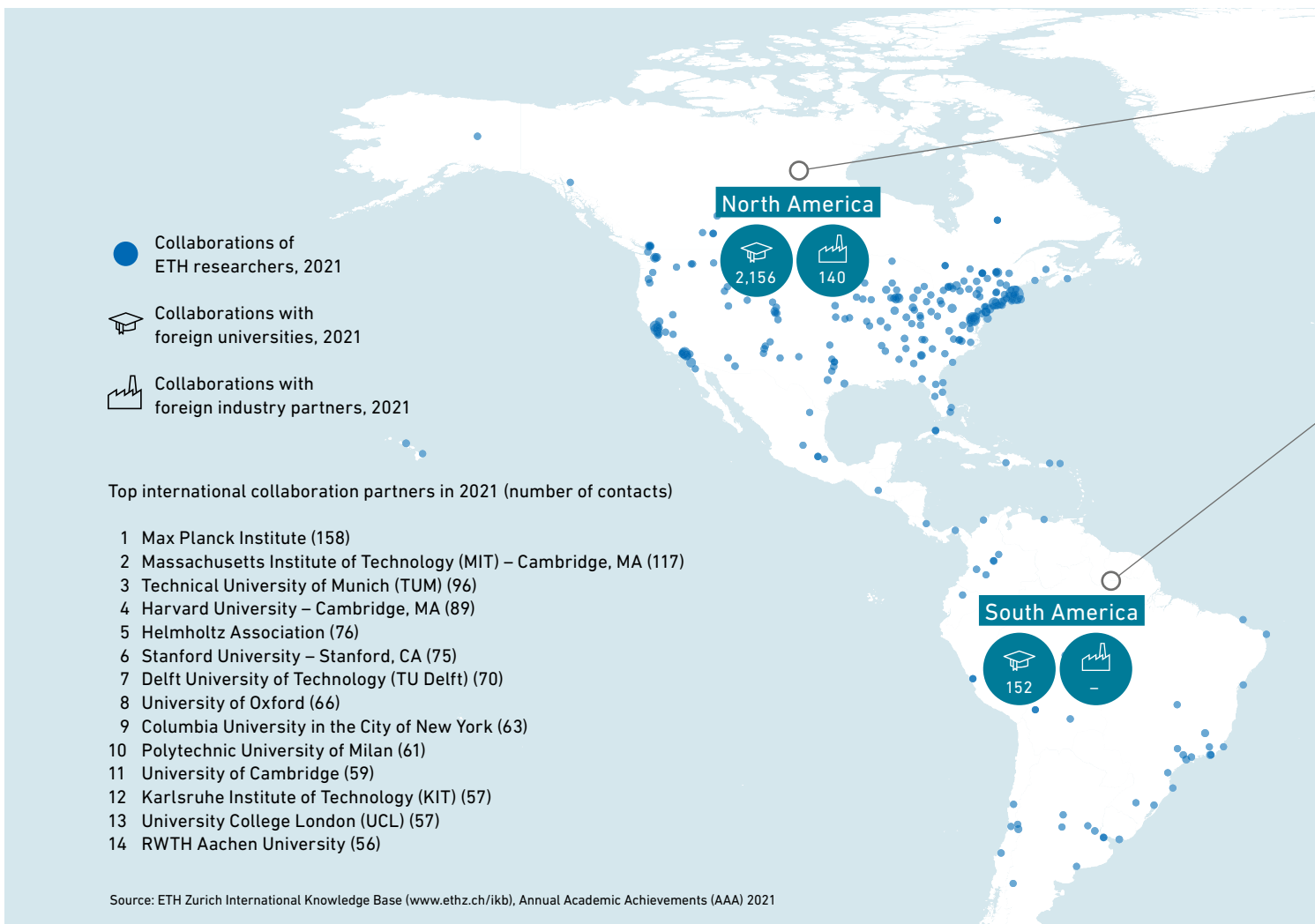
The Hönggerberg campus set against the Zurich skyline, with Lake Zurich and the Alps in the background. (Image: ETH Zurich / Alessandro Della Bella)



In the canton of Ticino, ETH Zurich runs the Swiss National Supercomputing Centre (CSCS). Its ultra-modern supercomputers are available to all Swiss universities and research institutions. (Image: ETH Zurich / Marco Carocari)



The Polyterrasse is a popular meeting place for ETH students and staff, and also offers a panoramic viewing point for visiting school classes and tourists. (Image: ETH Zurich / Gian Marco Castelberg)

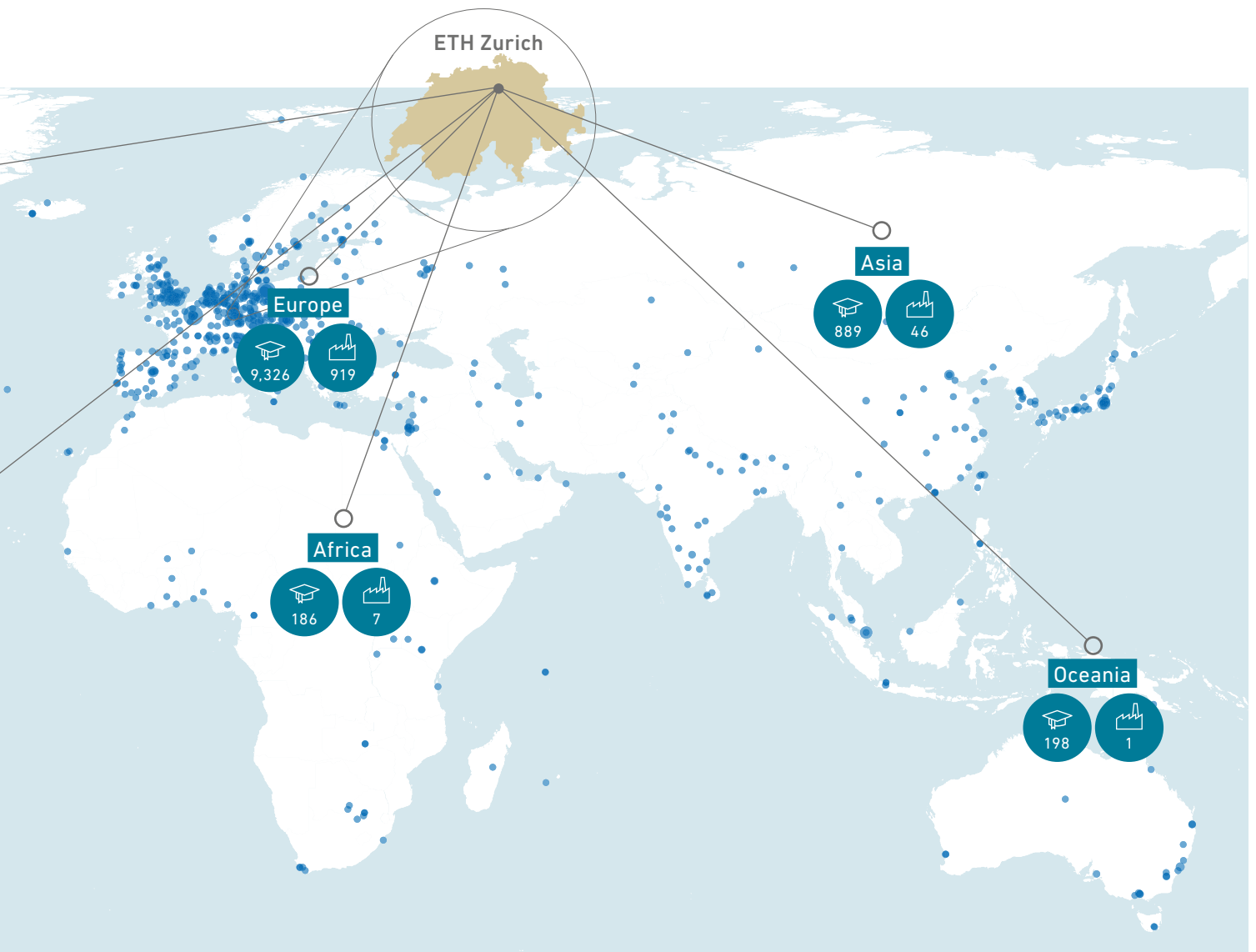


Connected to the world

The complex problems facing modern society can no longer be solved by individual research groups and institutions working in isolation. Research is therefore increasingly centred around international cooperation. Teaching also benefits from cross-border exchange. The ETH researchers come from all over the world. The connectedness of ETH scientists is reflected in the more than 14,000 individual contacts and collaborations with academic and industrial partners around the globe, the most important being MIT, the Technical University of Munich and Harvard University.

ETH Zurich also fosters international cooperation on an institutional level, for example through its links to networks of leading universities in Europe and worldwide. Furthermore, ETH Zurich acts on behalf of the federal government as a Leading House for Switzerland's bilateral research alliances with the Asia Pacific region. ETH Zurich is also involved in various research programmes that support developing countries and transition economies.

> www.ethz.ch/global



Sustainability in Singapore

As an intellectual hub, the Singapore–ETH Centre (SEC) not only acts as a conduit for the enormous scientific and technological potential of the Asia Pacific region, but also serves as a clear statement by ETH Zurich of its commitment to environmental sustainability. The SEC was established in 2010 as a collaboration between ETH Zurich and the National Research Foundation of Singapore. The SEC enables Singapore and Switzerland to strengthen their research capacity in order to find long-term sustainable solutions to global challenges.

“ Science is inherently international. But at the same time, it must also be rooted locally. ”

Joël Mesot, President of ETH Zurich

Supporting ETH

Whether you are a professor, researcher, student or member of the administrative staff: your passion and tireless commitment make ETH what it is today – an exceptional university. Over 80,000 alumnae and alumni worldwide are also proud to count themselves as part of the ETH community, along with all the donors who support ETH Zurich.

Whether you are a company, foundation, public organisation or private individual: the support you provide as a donor makes an enormous difference. Your financial contribution gives ETH Zurich the flexibility to swiftly extend fields of research and encourage outstanding students. We invite you to support our university by donating to the ETH Zurich Foundation.

Whether by contributing to the Excellence Scholarship and Opportunity Programme, making a donation to set up a new chair, or helping fund a new centre for enthusiastic students and ETH's entrepreneurial community: your generosity will help us to realise exceptional research and education projects. Your gift will inspire impressive performances and help the university expand into new areas of research. Private funding gives talented researchers the flexibility they need to follow through on promising ideas and pursue potentially life-changing discoveries.

> www.ethz-foundation.ch/en/

Lasting connections

The ETH Alumni Association fosters lifelong ties between ETH alumni and their alma mater. It unites almost 60 locally or professionally oriented member organisations with 35,000 active members worldwide in the network of some 80,000 alumni.

By offering excellent opportunities for a lively exchange of knowledge and experience, the ETH Alumni Association gives members a head start in their

careers and in society. In turn, through intensive networking, personal commitment and enthusiasm for technical innovation, the alumni extend ETH Zurich's sphere of influence as a world-leading research and educational institution. They act as global ambassadors, energetically carrying ETH Zurich values into society and the economy.

> www.alumni.ethz.ch/en/



Pioneer Fellow Lukas Ambühl is developing a tool that he can use to simulate the traffic systems of any town or city. ETH Pioneer Fellows – researchers with entrepreneurial ambitions who are in the process of developing market-ready products – are supported by donors and partners via the ETH Foundation. (Image: ETH Foundation / Alessandro Della Bella)

ETH Zurich
Rämistrasse 101
8092 Zurich
Switzerland

+41 44 632 11 11
info@ethz.ch
www.ethz.ch

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Cover photo: This test facility of ETH spin-off Synhelion on the roof of the Machine Laboratory building at ETH Zurich produces liquid hydrocarbon fuels from sunlight and air. (Image: ETH Zurich / Alessandro Della Bella)