Risk management

A systematic process

ETH Zurich's university-wide risk management system takes a holistic approach that considers both potential internal and external risks. The systematic process is based on the internationally established risk management standard ISO 31000. The purpose of risk management is to protect the tangible and intangible assets on which the success of ETH Zurich depends, in particular human capital, infrastructure and reputation.

Legal basis and governance

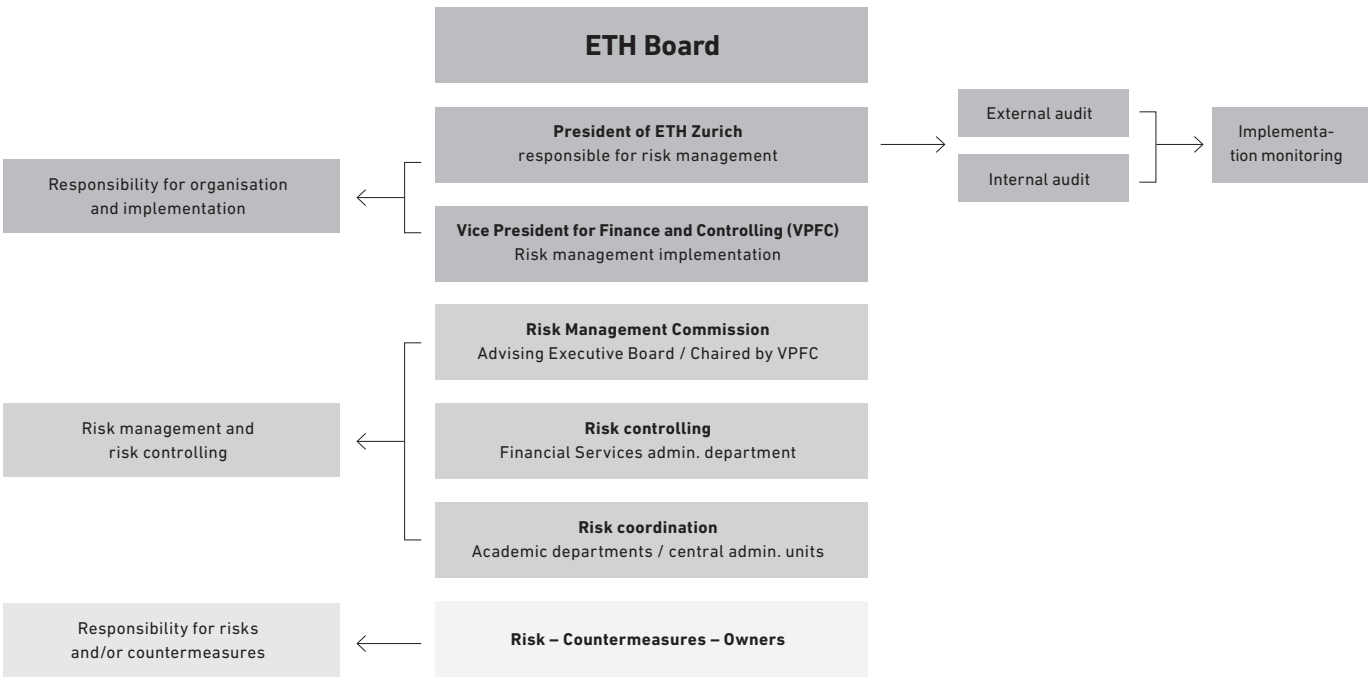
Based on the autonomy granted to each of the ETH Domain's six institutions by the ETH Act and the mandate for education, research and service provision, each institution is individually responsible for managing risks and periodically reports the current risk situation to the ETH Board in its role as the university's supervisory body. The essential parameters of risk management and risk financing are laid down in the ETH Board's directive on risk management at ETH and the research institutions. As the officeholder with overall responsibility for risk management at ETH Zurich, the ETH President informs the ETH Board on an annual basis about the core risks. The President also informs the ETH Board without delay of any exceptional changes to the risk profile or any instances of loss or damage.

Organisation and process

Whereas the President has overall accountability for risk management, responsibility for implementation lies with the Vice President for Finance and Controlling. The latter chairs the Risk Management Commission, which advises the President and the Executive Board on matters concerning risk management, risk financing and insurance. The Commission decides what action to take in relation to reporting, assessing, minimising and controlling risk, while overseeing the process as a whole. The Executive Board is informed regularly about any substantive risks. ETH Zurich has nominated one or more officers responsible for each core risk and the relevant control measures.

Internal control system

An important risk management instrument is the internal control system (ICS) that evaluates relevant financial processes and corresponding risks, assures adherence to internal and external rules, and minimises risks through appropriate control measures. The ICS encompasses those procedures and measures that ensure accurate bookkeeping and accounting, which in turn form the basis of sound financial reporting. As an independent external auditor, the Swiss Federal Audit Office verifies the existence of the ICS implemented at ETH Zurich as part of the statutory audit of the annual financial statements.



Core risks

Risks with potentially damaging impacts on the finances or reputation of ETH as a whole are designated as core risks.

ETH's highly qualified lecturers, researchers, students and support staff are a key factor for its success. The risk that persistent and structural factors could have a lasting **negative impact on academic performance in research and teaching** is therefore weighted correspondingly high.

Declining financial resources due to a significant reduction in allocated federal funding, the absence of compensation for inflation, or a sustained drop in third-party contributions would have immediate consequences for the quality and quantity of ETH's teaching and research, and therefore represents a correspondingly high level of risk.

ETH Zurich is tasked with providing innovative, research-based and skills-oriented education, training and development at the recognised international level. A shift in priorities in the government's education budget, followed by declining financial resources and rising student numbers, would increase the risk of a deterioration in the quality of teaching. This would lower the level of education that ETH Zurich is able to provide, with a detrimental effect on academic standards and on Switzerland as a place to work. The university's reputation would suffer over the long term, as it would no longer be able to fulfil its mandate.

Adequate premises, in terms of both quantity and quality, are crucial for teaching, research and transfer and allow growth targets to be implemented. Partial or total loss of infrastructure in terms of rooms or an entire building can impair ETH Zurich's teaching and research activities or render them impossible. The lack of space, viable building plots and financial and human resources jeopardises change, the achievement of growth targets and the recruitment of highly qualified staff.

Research integrity is a key prerequisite for robust and subsequently sustainable scientific success. Lack of integrity can lead to data manipulation, plagiarism, non-disclosure of conflicts of interest and dereliction of duties of care towards junior scientists. The broad embedding of integrity in teaching, support from professors or confidants, a rigorous approach to professional misconduct and the work of ETH's delegates for good scientific practice promote integrity in research and its implementation in everyday practice.

The freedom of research enshrined in the Federal Constitution enables researchers to explore their own scientific questions and work on them independently within the scope of legal freedom. However, freedom of research is not unconditional. Given this freedom, their knowledge and their experience, researchers have a special **ethical responsibility, particularly with regard to security-relevant research**. Such research includes scientific work where there is a possibility of it producing knowledge, products or technologies that could be misused to harm human dignity, animal dignity, life, health, freedom, property, the environment or peaceful coexistence. Researchers must be aware of the danger of misuse of research and must weigh up the opportunities against the risks.

Ethical issues arising from collaboration with countries where fundamental rights and academic freedom are not respected must also be prioritised. It is important for universities and research institutes to be aware of the threat of espionage and proliferation, and to handle sensitive knowledge and technologies with caution. The aim is to avoid negative consequences for national and international security and for Switzerland's innovative capacity.

All of ETH Zurich's business processes are reliant on a fully functioning data network and secure data storage media. **Data losses, network failures, cyber attacks or unauthorised data access** present considerable risks to ETH's business processes. Specialist teams and the Chief Information Security Officer continuously review the measures implemented to achieve the protection targets defined as part of IT security, and adapt them to the ever more challenging threat situation.

Threats and/or violence against the person are not limited to actual physical aggression, but are also manifested in threats of violence, abuse of power or dependent relationships, or any forms of sexual harassment, or even sexualised violence. Through constant assessment of the level of threat in specific cases using standardised instruments, the ETH Threat Management team defuses problems and conflicts at an early stage before they escalate into violence. The university has a threat management concept that covers building-related, technical and organisational measures. The focus is on preventive measures such as training, information and counselling for various target groups. In addition, the Respect advice and conciliation service is always on hand to address tensions and situations involving sexual harassment.

Large-scale damage to the real estate used by ETH Zurich but owned by the federal government entails the risk that the infrastructure necessary for research, teaching, transfer and the management of the university may be unavailable for an extended period or that important research and teaching activities are wholly or partially cancelled completely or in part. Measures to safeguard and increase the safety of buildings are an integral part of every new-build or modernisation project, with the aim of averting major incidents.

A prolonged power failure (blackout) or a power shortage (e.g. too little power available, contingent or voltage and frequency irregularities) means that critical business processes can no longer be carried out in part or in full. This includes research, teaching (time dependency during examination sessions in winter) and administration. This can result in material damage and loss of reputation (depending on the timing).

Significant impairments of ETH operations due to exceptional circumstances (e.g. pandemic) entail the risk of ETH's core business being completely or partially impaired (e.g. general obligation to work from home; teaching, research, knowledge transfer and/or management moved online or suspended). To ensure operations can be upheld, ETH has risk management (preventive) and crisis management (reactive) processes in place to preserve the most important categories of resources.

To ensure the **early detection of conflicts** arising from incorrect management and supervisory behaviour, ongoing training and support for supervisors is provided in the area of prevention as well as the structured onboarding and supervision of doctoral students, postdoctoral researchers and other staff. Worth special mention here is ETH Zurich's Reporting Office. This is an independent external body of specialists who deal with formal reports, involve all the relevant parties and coordinate meetings to clarify the situation.

The continued non-association with European research framework programmes has far-reaching consequences for ETH Zurich and Switzerland as a whole – such as greater difficulty recruiting high-calibre scientists, the risk of losing current talent and, given the lack of access to internationally important strategic research areas, potentially more difficult cooperation with European companies, not to mention the threat of reputational damage. Researchers need to find alternative sources of funding and be supported by EU GrantsAccess, which takes up a lot of time and resources.

Multiple crisis situation

In 2023 the overall economic, geopolitical and social conditions remained extremely challenging. As the federal government has been obliged to reduce expenditure in the current economic situation due to a series of crises and the debt brake, ETH Zurich, which is mostly financed by federal funds, also has a responsibility to help balance the federal budget. The university therefore faces several major challenges affecting its financial stability and growth: the reduced level of the total federal contribution, inflation and the consequences of Switzerland's continuing status as a non-associated third country in Horizon Europe.

To make matters worse, the funding provided by the government has not kept pace with the rapid growth in student numbers over many years, while ETH only has limited ability to control this growth. In response, the university introduced various measures in 2023. A task force is currently working on a new strategy for admissions and a vision for teaching for 2040. A project has also been launched to simplify exam arrangements and devise computer-based examinations, which could take the pressure off assistants, for example.