

Fact Sheet

Evaluation of applications to Master's degree programmes - security screening

Applications from countries that have been placed on the sanctions list by the United Nations Security Council (UN) and adopted by UN member states, such as Switzerland, in their national legislation are considered for the security screening. Also included are countries that are categorised by Switzerland as high-risk countries in terms of proliferation¹ or are sanctioned by the EU and the USA (see enclosure).

In addition, the legally applicable provisions² regarding the export of goods, technologies and services to other countries must be complied with to be admitted to a Master's degree programme at ETH Zürich, as failure to do so may result in criminal consequences. ETH is obliged to assess and minimise the risk of misuse of acquired knowledge and skills.

Admitted students have access to the resources of their degree programme and to the courses of other degree programmes. This applies to both existing knowledge and the available research infrastructure.

If sanctions are issued by foreign states, these must also be complied with by their nationals if they are abroad, e.g. in Switzerland. Non-compliance with such sanctions can lead to serious disadvantages for these nationals. ETH must therefore protect its employees from the risk and consequences of violations of foreign or international sanctions (duty of care).

For this reason, applications for Master's degree programmes from the above-mentioned countries are subject to a security screening. In addition to the applicant's nationality, place of residence and educational background, the desired Master's programme is also taken into account, as applied research in certain areas could potentially be misused for military purposes. The dual-use nature of the technologies covers the following areas:

Areas of dual-use technologies and emerging technologies³

- Additive manufacturing
- Applied Chemistry, Biochemistry and Chemical Engineering
- Applied physics
- Blockchain
- Biotechnologies
- Chemical technology
- Cyber surveillance
- Nuclear technologies
- Digital technologies
- Electrical and mechanical engineering
- Advanced and intelligent materials
- Engineering and production
- Artificial intelligence
- Aerospace technology
- Measurement technology and sensors
- Nanotechnology
- Photonics and lighting technology
- Production and process engineering
- Quantum technologies
- Telecommunications and information technology

The security screening applies to those Master's degree programmes at ETH Zürich that cover subject areas that teach or research key content and knowledge from applied research in the areas and technologies listed above.

¹ Proliferation: Prevention of unwanted further processing of armaments and weapons of mass destruction.

² Such as goods control legislation (export control) or applicable embargo laws (sanctions).

³ Manual on Export Controls and Academia, BAFA Federal Office of Economic Affairs and Export Control, Art. 1.3, page 15

Master's degree programmes for which a security screening is required:

D-BAUG	- Civil Engineering - Geomatics - Spatial development & infrastructure systems <i>excluded:</i> <i>Environmental engineering</i>	D-INFK	- Cyber Security - Data Science - Computer Science
D-BIOL	- Biology	D-ITET	- Biomedical Engineering - Electrical Engineering & Information Technology - Energy Science & Technology - Quantum Engineering
D-BSSE	- Biotechnology - Computational Biology & Bioinformatics	D-MATH	- Mathematics / Applied Mathematics - Computational Sciences and Engineering - Statistics
D-CHAB	- Biochemistry - Chemistry - Chemical & Bioengineering Sciences - Interdisciplinary Sciences - Pharmacy - Pharmaceutical Sciences	D-MATL	- Materials Science and Engineering
D-EAPS	- Earth Sciences - Space Systems <i>excluded: Atmosphere & Climate</i>	D-MAVT	- Mechanical Engineering - Micro- & Nanosystems - Nuclear Engineering - Robotics, Systems & Control - Process Engineering
		D-PHYS	- High Energy Physics - Physics

Security Screening

The published formal and qualitative standards of the ETH apply as a basic requirement for admission to the Master's programme. In addition, a security screening "sur dossier" (case-by-case examination) is carried out centrally by the Admissions Office in cooperation with the Export Control Office according to the following criteria.

Central evaluation criteria:

Do the following criteria apply?

1) Previous education relevant to admission at an institution with a security risk (see sanction search ⁴ or at a military-related organisation from countries that require a security check. The most important relevant institutions of origin are listed in the appendix).	YES	NO
2) Country of origin (nationality, place of residence) against which an embargo law (sanctions) is in force or Export Control Acts are applicable.	YES	NO
3) Funding through a scholarship from a sanctioned state, through a critical scholarship or exchange programme, or from improper or questionable sources.	YES	NO
4) Application for a Master's degree programme listed above. Is the specialised field concerned subject to increased official supervision (embargo) or does it fall under the export control regulations for dual-use goods?	YES	NO

The dossier is checked by the Admissions Office in collaboration with the Export Control Office of ETH Zürich for points 1 to 4. If there are more than one **YES**, the application will be rejected.

Enclosures:

- List of countries of origin that require a security screening (embargo and risk countries)
- List of the most important universities of origin that require a security screening

⁴ www.sanctionsearch.ethz.ch/app/en