## **ETH** zürich



Master's Programme in

# Health Sciences and Technology

(HST)

**Study Guidelines 2023** 

**MSc Regulation 2014** 





#### Welcome

Dear HST master's students,

Welcome to ETH Zurich, and welcome to the master's programme in Health Sciences and Technology. We are proud to have you as student in our department. We will offer you a lot of freedom in this master's curriculum – independent of your chosen major – in choosing elective modules, finding a tutor, organising internships, and working on your master's thesis. However, this also means organising yourself independently in many aspects...

These guidelines will help you in finding the right track from the beginning. I wish you an exciting and successful master's studies at ETH.

Professor Christian Wolfrum Director of Studies HST

#### **Imprint**

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Dr Roland Müller Study Programme Coordinator HST

An updated version of this document is also available as a PDF at www.hst.ethz.ch. However, these guidelines are for information purposes only. For binding rules in all cases, please see the 2014 HST study regulations (in German only).

Zurich, June 2023

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-> Study Problems, Exam Fear, Change of Degree Programme

#### **Admissions Office**

Rämistrasse 101 (HG F 21) 8092 Zurich / Switzerland Phone +41 44 632 81 00 master@ethz.ch

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-> Admission

#### Registrar's Office

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Desk hours: Mon – Fri, 11–13 Phone hours: Mon – Fri, 9–11, 14–16

-> Enrolment, Student IDs

-> https://ethz.ch/students/en/studies/administrative.html

#### **Examinations Office**

Rämistrasse 101 (HG F 18) 8092 Zurich Phone +41 44 632 20 68 pruefungsplanstelle@ethz.ch Desk hours: Mon – Fri 11–13 or by arrangement

-> Exam Registration and Cancellation

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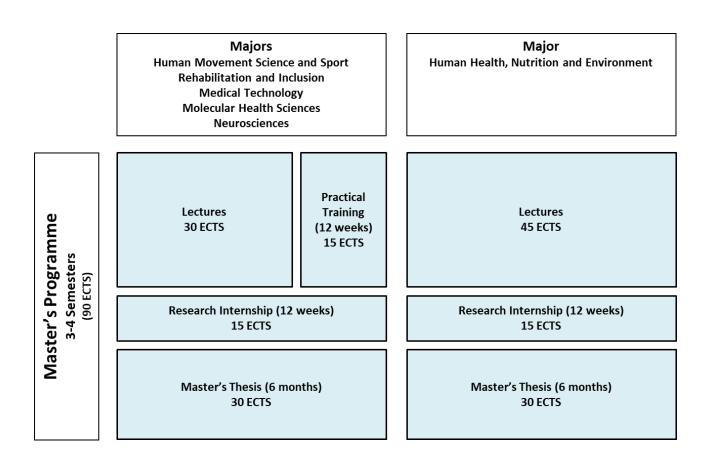
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#### **Overview**

The master's degree programme in Health Sciences and Technology trains specialists who use science and technology in the service of human health and thus create new opportunities in the prevention, diagnosis, and therapy of diseases. It allows students to concentrate on a special subject (major) within the various areas of health sciences. The programme lasts for 3-4 semesters and covers 90 credits (ECTS) including two internships and a master's thesis, proving the student's capability of independent scientific work. The master's degree prepares for entry into the labour market or a doctoral programme.

The competence gained enable graduates to delimit independent health science issues, particularly in the interdisciplinary field between biology, medicine, and engineering, to use (natural) scientific methods, to collect (experimental) data and to evaluate, interpret and communicate that data in a scientifically correct manner. Furthermore, they are able – e.g. by studying specialist literature – to quickly familiarise themselves with other areas of knowledge.



The teaching language of the master's degree programme is English.

The programmes in Health Sciences and Technology – like those for Food Science and Human Medicine – are offered by the Department of Health Sciences and Technology (D-HEST). D-HEST consists of scientists and engineers from the four areas of movement science, food science and nutrition, medical technology, and neuroscience.

#### **Job Profile**

Graduates of the Health Sciences and Technology programme are medical scientists strongly influenced by the natural sciences, who also have a technical understanding and deal with the topic of human health in an interdisciplinary manner. They build bridges between physicians/therapists and engineers, as well as between macro and micro worlds.

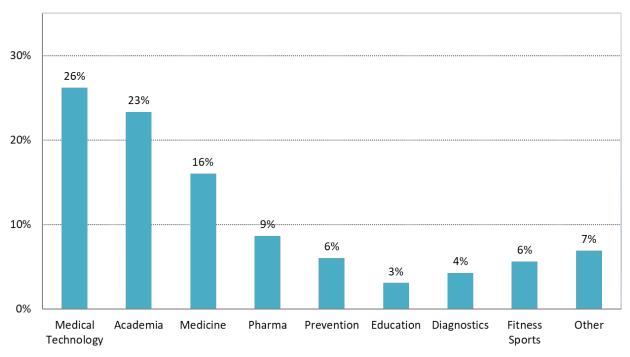
The following professional fields in research and consulting are suitable for health scientists depending on the chosen specialisation:

- Biomedical and pharmaceutical sector (research & development, clinical research, modern diagnostics and methodology)
- Medical technology sector (research and development, clinical studies, quality assurance, marketing)
- Rehabilitation research and occupational medicine, ergonomics
- Health promotion, prevention
- Health policy and health administration, insurance
- Sports (performance diagnostics, training)
- Education (sports, biology; after obtaining the teaching diploma)

In the time since the master's programme was launched in autumn 2014 with first graduates in 2016, the data on the occupational fields chosen by health scientists continues to be limited. The graph below shows the sectors of employment of the graduates from the first cohorts one year after graduation.

#### **Professional Fields HST Graduates**

ca. 1 year after graduation (n=261 of 511)



#### **Admission**

#### ETH students enrolled in the bachelor's programme in HST

Students must have earned at least 150 ECTS credits of the HST bachelor's programme before enrolling in the master's programme. No proof of language proficiency is required. Students may enrol and select a major and tutor within myStudies.

However, HST students fulfilling these criteria can also follow master's courses without officially enrolling. In this case, the print version of the learning agreement must be filled in and incorporated into myStudies after enrolment in the master's programme.

#### Students from other universities

Students from other universities must hold a university bachelor's degree comprising at least 180 ECTS credits or an equivalent university degree, whose content (including any additional academic requirements within the given context) covers the academic prerequisites listed in the requirement profile of the master's programme in Health Sciences and Technology. A bachelor's degree qualifies its holder for admission to an ETH master's degree programme only if it also qualifies said holder to enter, without additional requirements, the equivalent master's degree programme within the university system where the bachelor's degree was acquired.

Final admission may be subject to fulfilment of additional requirements (e.g. courses from the ETH bachelor's programme in Health Sciences and Technology). Additional requirements defined during admission procedure do not count towards the 90 credits of the master's degree.

For admission to the degree programme, proof of sufficient knowledge of the English language (level C1 = advanced) must be provided. The required language certificates must be submitted by the last day of the application deadline at the latest. The recognised certificates are published on the rectorate's website.

Information about admission schedule, procedures and requirements is available on the ETH website. Please note that applicants must indicate which of the master's majors listed below they intend to apply for. They may apply for more than one major.

- Human Movement Science and Sport
- Rehabilitation and Inclusion
- Medical Technology
- Molecular Health Sciences
- Neurosciences
- Human Health, Nutrition, and Environment

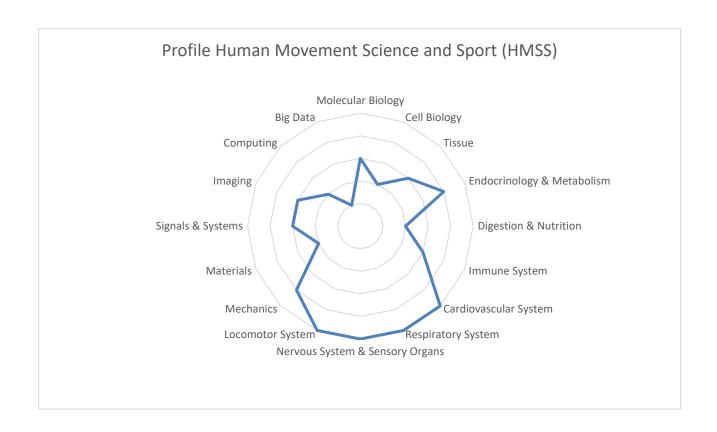
-> https://ethz.ch/en/studies/registration-application/master/application.html

## **Majors**

## Human Movement Science and Sport

At the intersection of biosciences, health sciences, medicine and technology, Human Movement Science and Sport focuses on the study of functions and systems of the human body, from childhood to old age, in health and as a result of disease. Emphasis is given to understanding all aspects of human activity by integrating basic knowledge from molecular and cellular processes, inter- and intracellular signalling, cell-cell and organ-organ communication and from biomechanical principles. This includes the understanding of acute responses of the various processes to the moving body and to specific training. This knowledge serves to advance the understanding of age and sex-dependent healthy human function, but also of common complex diseases and disabilities, e.g. metabolic, respiratory and heart diseases, neurological and orthopaedic disorders. A core component of the programme is also to develop preventive and therapeutic strategies for human diseases, disorders, and disabilities. Participants of the programme will acquire experimental skills to investigate organ and neuro-muscular function, as well as biomechanical properties of the moving human body.

The successful completion of the programme in Human Movement Science and Sport prepares the student for a career in a variety of biomedical research areas. It provides a solid scientific background for an academic career via doctoral and postdoctoral training, but it also provides graduates with a scientific and practical skill profile suitable for competitive positions in the fields of biomedicine, prevention and rehabilitation, health technologies, health organisations, as well as health and sports education.

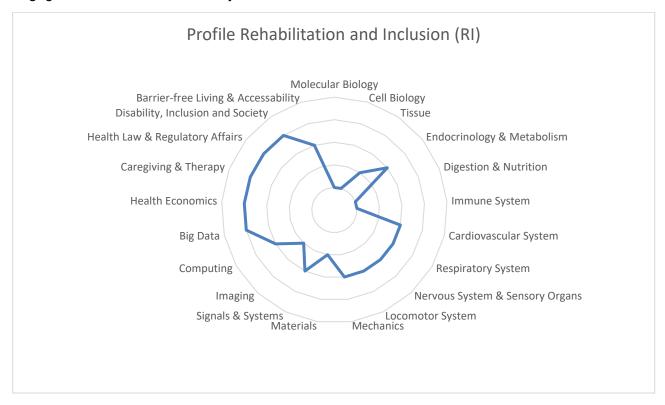


#### Rehabilitation and Inclusion

The major Rehabilitation and Inclusion focuses on the advancement of the continuum-of-care for patients and people with disabilities to address the worldwide need for rehabilitation and hence to help solving the societal and financial challenges resulting from the demographic shift and environmental changes.

Therefore, students will participate in a programme that exposes them to interdisciplinary and holistic research and development – ranging from prevention, via treatment and assistance, to inclusion. Apart from gaining in-depth expertise in one of the three focus areas (1) rehabilitation technology, (2) rehabilitation medicine or (3) inclusion, emphasis is given to strengthening a technology-driven but comprehensive view on the healthcare system considering economic, environmental, legal, and societal aspects. Hence, students will be equipped with a broad portfolio of skills, views and complementary knowledge of the latest technological solutions, most relevant clinical aspects, economy, legal and regulatory affairs, as well as behavioural and architectural aspects to advance the continuum-of-care and to tackle existing challenges comprehensively and sustainably (e.g. design of user-centred technological solutions, translation of rehabilitation technology from industry to clinics, financial modelling of reimbursement systems). To deepen the understanding of rehabilitation and inclusion, practical training will be acquired in rehabilitation hospitals or institutions related to disability and inclusion.

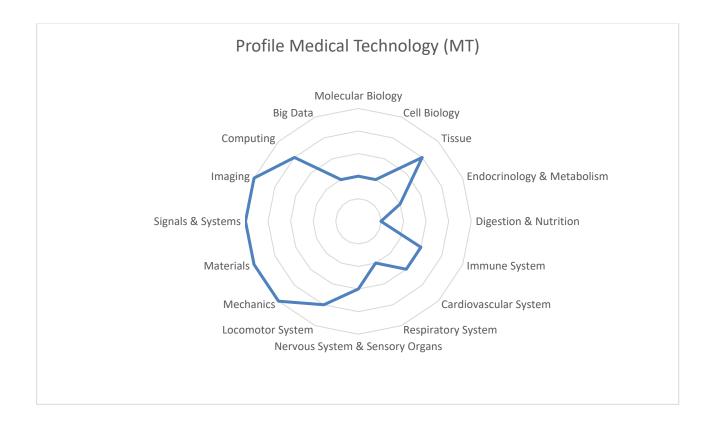
The successful completion of the programme in Rehabilitation and Inclusion prepares the students for a career that will enable them to contribute to the translation of rehabilitation technology and medical interventions towards personalized long-term prevention programmes, earliest possible and continuous treatment, as well as assistance in inclusive home and work environments. It provides a solid scientific fundament for a later academic career via PhD and postdoctoral training, but it also provides graduates with a scientific and practical skill profile suitable for competitive positions in the related fields of prevention and rehabilitation, the health industry and health organizations that are engaged in inclusion and disability.



## Medical Technology

Students with a master's focus in Medical Technology will participate in a programme that exposes them to interdisciplinary research and development and trains them to contribute to human health and healthcare. Our goal is to prepare students for project leadership roles requiring the integration of engineering and life science disciplines to address urgent societal challenges in human health. The Medical Technology programme focuses on the intersection of technology with biology and human health, providing students with broad and complementary knowledge of biomaterials, biomechanics, biomedical devices, biomedical imaging, medical instrumentation, rehabilitation technology and tissue engineering.

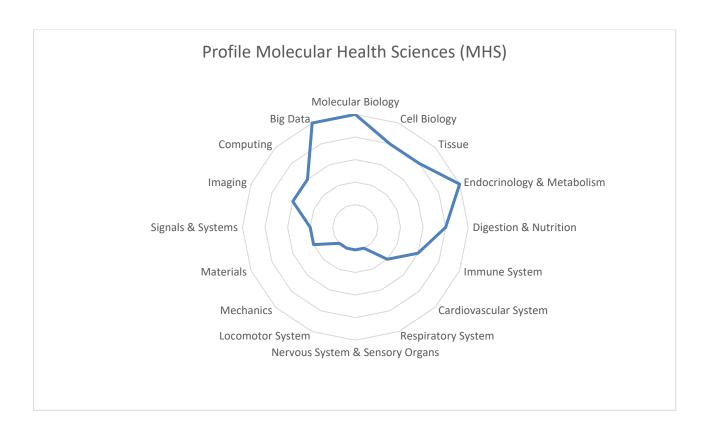
Our specific aim is to enable students to pursue a diverse range of careers in the fields of human health technology and health care. This includes research and development of biomedical devices, and more generally the translation of scientific research to clinical application. The programme is designed to enable our graduates to become leaders who are able to understand, innovate, and bring to market, making possible technologies that improve human health and health care, while allowing them to recognise the social, economic and ethical implications of their work. The curriculum also provides a strong foundation for our students that will enter graduate research programmes in medical technology, biomedical engineering, or basic sciences, as well as graduate studies in health care policy, or business.



#### Molecular Health Sciences

Residing at the intersection of biosciences, medicine and technology, Molecular Health Sciences focus on the study of the molecular basis of tissue and organ functions and their responses to stress, diet, environmental challenges and aging, on organ-organ communication principles, stem cell function and inter and intracellular signalling networks. Particular emphasis is given to integrating the knowledge derived from these studies into the context of whole-body function to advance understanding of common complex diseases such as diabetes, obesity, heart disease, cancer, neurological and inflammatory disorders. The development of the scientific basis for rational preventive and therapeutic strategies for the successful management of human diseases is another core component of the programme. Participants of the programme will acquire the experimental skills to apply tools and insights from many disciplines ranging from genetics and genomics, molecular cell biology and physiology to biological chemistry, in vivo imaging, and molecular pathology to address unsolved problems in basic and translational sciences.

The successful completion of the major in Molecular Health Sciences prepares students for a career in biomedical research areas and pharmaceutical sciences. This programme provides a solid scientific background for further academic studies towards a PhD followed by postdoctoral training, but also a scientific profile suitable for competitive positions in the fields of biomedicine, biotechnology, health technologies and health organisations.

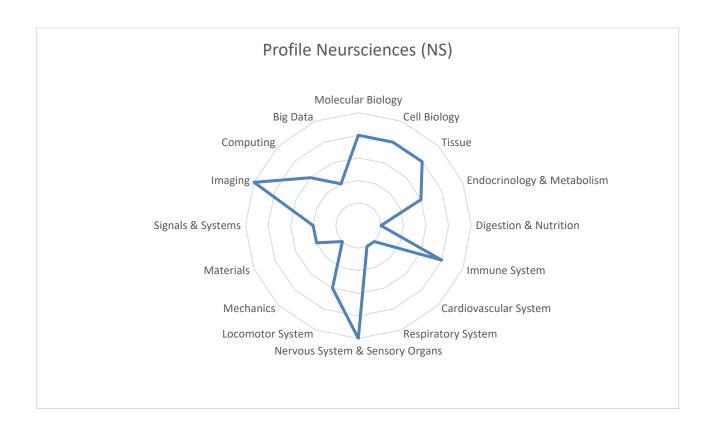


#### Neurosciences

Neurosciences focus on the development, anatomy, plasticity and diseases of the nervous system, the functions of simple and complex neuronal networks, as well as processes like memory, emotions, addiction and behaviour in animal models and humans. Computational neuroscience and neuro-informatics develop predictive theories based on experimental data of how neurons work, how brains build themselves, and how complex networks function in perception, cognition, action, and disease. These models are also used to implement key principles of brain structure and function in artificial technology.

Master's students with a major in Neurosciences receive a broad training, which makes them familiar with conceptual and methodological approaches from the cellular and molecular level to the whole organism. Within the *Neuroscience Center Zurich* (ZNZ, see www.neuroscience.uzh.ch), scientists from both ETH Zurich and the University of Zurich, as well as the University Hospital Zurich, cover this field on all levels, from basic molecular and cell biology to complex circuit analysis, model building, behavioural biology, and human studies.

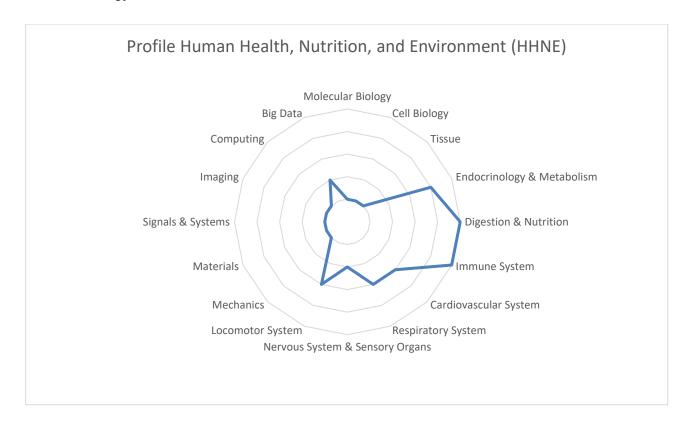
The successful completion of the major in Neurosciences prepares students for a professional career in scientific research of the function of the central nervous system. It provides a solid scientific background for further academic studies towards a PhD followed by postdoctoral training, but also provides graduates with a scientific profile suitable for competitive positions in the fields of biomedical, pharmaceutical, computer or microelectronic industry, respectively.



#### Human Health, Nutrition, and Environment

Human health is determined by complex interactions between hereditary predispositions – the genes, individual lifestyles, and environmental influences, as well as societal aspects. The major in Human Health, Nutrition and Environment focuses on noxious substances, infectious diseases, and diet as examples of important factors affecting human health. The aim of this programme is the understanding of the influence of these factors on human health under changing environmental conditions. The mechanisms are studied by taking an integrative, systemic approach, from the molecular through the cellular to the organismic and societal level. This approach provides the basis to map out strategies to improve human health on a societal level.

This programme is offered as part of a collaboration between D-USYS and D-HEST in the context of the MSc in Environmental Sciences, the MSc in Food Sciences, and the MSc in Health Sciences and Technology.



## **Learning Agreement**

#### General Rules

After admission to the master's programme, students define their individual study programme (i.e. learning agreement) together with the chosen tutor of the major (see next chapter). The learning agreement must be filled in within myStudies. Courses and internships listed in the learning agreement must also be registered in myStudies under "course registrations" (no automatic transfer!). In the case of any disagreement, the director of studies will make the final decision regarding the study programme.

The learning agreement may also be submitted incomplete and completed later; it must be finalised before submitting the master's degree request. Any changes to the study programme must be approved by the tutor. Paper-based templates of the learning agreements for different majors can be found on the HST website and may be used for preparation or for ETH students not yet enrolled in the master's programme.

-> https://hest.ethz.ch/en/studies/health-sciences-and-technology/master-hst.html

Learning Agreement	all other majors		Health, Nutr. & Environm.
Mandatory Course Units	6 CP		12 CP
Electives I	≥ 22 CP	≥ 10 CP	≥ 10 CP
Electives II	2 22 OF	≥ 12 CP	≥ 21 CP
Practical Training	15 CP		-
Science in Perspective*	≥ 2 CP		≥ 2 CP
Research Internship	15 CP		15 CP
Master's Thesis*	30 CP		30 CP

<sup>\*</sup> not listed in the learning agreement within myStudies; CP = credit point (ECTS)

The different elements of the master's programme may be taken in any order. HST bachelor's students fulfilling the criteria to enter the master's programme may follow courses and carry out projects while still enrolled in the bachelor's programme only. However, the HST bachelor's degree must be completed at the latest before starting the master's thesis.

The students are responsible for finding a position for the practical training, research internship, and master's thesis. A list of institutions in Switzerland and abroad where former HST students have carried out projects is provided on the HST website. Students can check the websites of ETH research groups for open internship and master's thesis positions, and advertisements sent in by external institutions and industries are also published in a weekly newsletter by the Study Administration Office. However, unsolicited applications are also possible. Further projects are listed on the SiROP website. All these projects are not bound to the academic calendar.

#### **Mandatory Course Units**

Mandatory course units provide in-depth methodological knowledge in the area of translational research, which is important for the field of Health Sciences and Technology, and conclude in a group outline of a scientific project ready for submission to a funding agency. In addition, the Good Clinical Practice course allows students to work with human subjects.

Course Number	Course Title	Semester	
376-0300-00L	Translational Science for Health and Medicine	Autumn	
376-0302-00L	Practicing Translational Science	Spring	
376-0302-01L	GCP Basic Course (Modules 1 and 2)	Autumn or Spring	

In the major Human Health, Nutrition, and Environment, a term paper on a proposed topic must also be developed and presented (701-1701-00L; Autumn Semester).

## Electives (I & II)

Electives provide in-depth knowledge in specific subject areas of the chosen major and are offered to students as optional subjects for individual selection. The list of electives (I & II) per major is detailed in the course catalogue and in the printed versions of the learning agreements. In agreement with the tutor, courses not listed as electives in the chosen major may also be added (e.g. from other majors, from the University of Zurich, etc.).

## Science in Perspective

These courses in the area of Humanities, Social and Political Sciences allow students at ETH Zurich to develop new perspectives on their core subjects' scientific and technological issues. There are general courses (type A) for enhancement of reflection capability and specific courses (type B) which cover topics and methods more related to HST. Language courses may also be chosen (only those listed in the course catalogue).

## **Practical Training**

The practical training can be job-oriented for giving insights into the future professional world in the industrial, service or education sectors, or research-oriented for scientific method experience. It can either be completed as one 12-week internship (full-time equivalent; interruption possible) or in smaller parts (e.g. internships of 4 weeks at minimum) adding up to 12 weeks (full-time equivalent) or 480-500 hours. After completion, a report must be handed in to the tutor. Further details are laid out in the "Guidelines for Internships" found on the HST website.

The practical training can be combined with the research internship for an internship of at least 6 months, but only if the master's thesis is carried out within another research group.

Note: This practical training is not part of the major in Human Health, Nutrition, and Environment.

#### Research Internship

The research internship is intended for (independent) scientific work experience. It must contain elements of scientific work (e.g. literature search, scientific data collection, (statistical) analysis, reporting, etc.), and scientific supervision must be assured. The topic and supervision of the research internship must be approved by the tutor. The research internship lasts for 12 weeks (full-time equivalent, interruption possible) or 480-500 hours. After completion, a report must be handed in to the tutor. Further details are laid out in the "Guidelines for Internships" to be found on the HST website.

The research internship may be combined with the master's thesis, so that the student can stay in the same place for 9 months, but only if the practical training is carried out in another place. Nevertheless, the research internship and master's thesis are graded separately.

#### Master's Thesis

By conducting a master's thesis, the students demonstrate their ability to carry out a structured, scientific piece of work independently. In general, this includes the study of existing literature, specification of the research issue, selection of a methodological approach, collection, analysis and interpretation of data, and reporting of the findings. In addition to experimental work, a systematic review may also be performed. The ETH library offers a Moodle course 'Ready for take-off: how to start your bachelor's and master's thesis'.

The written report of the master's thesis must be submitted within 28 weeks; the oral presentation and defence may take place shortly before or after this deadline. Part time execution is possible only in special cases. The grade consists of execution of thesis (67%), written report, oral presentation, and defence (33%). Further details are laid out in the "Guidelines for Conducting a Master's Thesis" to be found on the HST website.

At the moment, payment for conducting a master's thesis outside of ETH Zurich may not be agreed on with third parties. However, compensations paid to students to cover expenses incurred during a master's thesis are allowed.

Formal requirements for a master's thesis are:

- Students must have been awarded the bachelor's degree.
- Any additional requirements for admission to the master's programme must have been fulfilled.

#### **Tutor**

#### **General Rules**

The students may choose their tutor within the selected major (see list on the HST website). The tutors cannot reject a student unless they are overburdened, in which case the director of studies will assign the tutor.

The tutor should be contacted before starting with elective courses or research projects. At the latest, the learning agreement should be submitted in myStudies and signed by the tutor four weeks after beginning of the first master's semester. HST students enrolled only in a bachelor's programme must submit the printed version until master's enrolment. No approval of the tutor is required for the practical training, as long as it is in the field of Health Sciences and Technology. No approval by the tutor is necessary for the courses in Science in Perspective either.

#### **Tutor Duties**

In general, a tutor is one of the professors or senior scientists of D-HEST. The duties of a tutor are:

- Advise students in the selection of the elective courses
- Approve elective courses not listed in the chosen major
- Accredit practical trainings
- Approve and accredit research internships (especially in case of external internships: quality control of scientific content and supervision)
- Approve and grade master's thesis work (especially in case of external thesis work: quality control of scientific content and supervision)

Tutors may take responsibility for more than one major if their field of expertise covers several research areas.

The tutor may be, but must not necessarily be the supervisor of the master's thesis. If the supervisor is another ETH professor, grading responsibility will move to the supervisor. In this case, HST master's thesis grading rules must be communicated to the supervisor if they are not familiar with HST regulations (2/3 execution, 1/6 written report, 1/6 oral presentation and defence; see "Guidelines for Conducting a Master's Thesis" on the HST website). If the master's thesis is external, the tutor remains responsible for grading together with the external supervisor.

## Studying at ETH Zurich

#### **Degrees**

ETH degree programmes are based on the three-stage Bologna model: bachelor's, master's, doctorate. In Health Sciences and Technology, there is no short track after the bachelor's degree directly into a PhD position. Only the master's degree forms the gateway to industry or to further scientific training in a doctorate.

#### Study Plan, Limitation on Duration of Studies

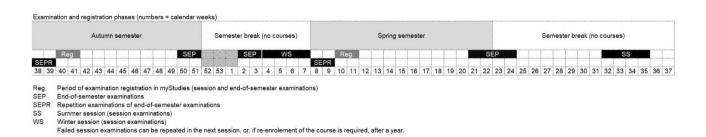
The master's programme in Health Sciences and Technology at ETH is designed to be completed by full time students in 3-4 semesters. The maximum allowed study time for the HST master's programme is 6 semesters; in special cases an extension can be asked for.

Candidates who are admitted, subject to the fulfilment of additional requirements, must acquire the required additional knowledge and competencies during the master's programme by attending classes (or in special cases via self-study). The corresponding individual performance assessments must take place by the end of the first year of the master's programme at the latest. All additional requirements, including any assessment repetitions, must be fulfilled within 18 months of the start of the master's programme at the latest.

#### Academic Calendar

Lectures are given during the Autumn Semester (mid Sept. – late Dec., calendar weeks 38-51) and Spring Semester (mid Feb. – late May/early June, weeks 08-22 with one week Easter holidays). Single block modules may also take place in one of the semester breaks. The session examinations take place at the end of the semester break in the winter session (WS; Jan./Feb., weeks 04-07) and in the summer session (SS; Aug./Sept., weeks 32-35). End-of-semester examinations (SEP) take place during the transition from semester to semester break.

-> https://ethz.ch/services/en/news-and-events/academic-calendar/dates-deadlines-students.html



#### **Credits and Course Units**

Credit points (CP), more commonly called 'credits', are awarded according to the European Credit Transfer System (ECTS). Credits are a measure of the total time and effort required by a student to reach a given educational goal. The calculation is based on a total of 1800 working hours per year for 60 credits (1 CP corresponds to 25-30 hours of work).

At least 90 credits must be earned for the HST master's degree. The curriculum is designed so that full-time students can acquire an average of 30 credits per semester. The current list of course units, including schedules, short descriptions, information about contents and goals, lecturers, credits, and performance assessment procedures, including written aids, is published in the electronic course catalogue at www.vvz.ethz.ch (for the English version, click on the "en" button on the right upper corner of that webpage). -> <a href="https://www.vorlesungen.ethz.ch//vorlesungsverzeichnis/sucheLehrangebotPre.view?lang=en">https://www.vorlesungen.ethz.ch//vorlesungsverzeichnis/sucheLehrangebotPre.view?lang=en</a>

#### **Performance Assessments**

Credits are only awarded for course units that have been completed with a sufficient level of performance. The performance assessment may take various forms (oral and written exams; written reports and papers; presentations). Performance assessments are defined as follows:

- Session examination (in summer or winter session)
- End-of-semester examination (from two weeks before to two weeks after the end of the semester)
- Semester performance (during or after semester, often at the end of the semester)

Session exams and end-of-semester exams are always graded; semester performance can be graded or ungraded (= pass/fail). In the Swiss grading scale, 6 is the highest, 1 is the lowest grade; pass mark is 4. A failed performance assessment can be repeated once. Failure to pass compulsory course units or mandatory additional course units twice will result in exclusion from the master's programme and related curricula at ETH and other Swiss universities.

For session examinations and end-of-semester examinations, exam registration in myStudies is mandatory in addition to the course unit registration in myStudies. This registration is binding and an absence without excuse will result in failing the assessment. The time schedule for registration and deregistration is communicated by the Examinations Office of the rectorate. No such rules apply to semester performance.

#### Language, Attendance

Master's course units at ETH are held almost exclusively in English; the language used is specified in the course catalogue.

In most subjects, there is no attendance required. However, there are also course units with performance evaluations such as laboratory exercises, presentations or intermediate exams that require attendance. Details are listed in the course catalogue and are communicated by the lecturers at the beginning of the course unit.

#### **Survival Guide**

#### Communication from the Rectorate, Study Administration Office, and Lecturers

All communication is sent only to the personal ETH student email addresses. The rectorate and study administration office each send information by email about the necessary activities regarding enrolment and exam registration, as well as available exam results.

Lecturers also provide information by email. Lecture notes are usually available for download on a learning platform and are not sent out. Access to these documents is only possible if you are enrolled in the course unit.

#### **Lecture Duration and Start**

A lesson lasts 45 minutes, followed by a 15-minute break. The start of lectures varies:

Lecture start at ETH Zentrum: xx:15 (i.e. 08 = 08:15)

Lecture start at ETH Hönggerberg: xy:45 (i.e. 08 = 07:45!) or xx:00 (i.e. 08 = 08:00) Lecture start at UZH Irchel: 08/09 and 13/14/15 always xx:00; otherwise: xx:15

#### **Enrolment, Attending Lectures, Registering for Exams**

All student administrative activities are carried out via the 'myStudies' web application. Semester enrolment and registration for course units should be done as early as possible, but at the latest by the end of the second week of the semester. -> https://ethz.ch/applications/teaching/en/applications/mystudies.html

You cannot register for exams without being registered for the course. Registration for session examinations and end-of-semester examinations takes place via myStudies, whereas for semester performance – unless the lecturer requires it – no special examination registration is required (the type of performance assessment can be seen in the course catalogue).

For enrolment in courses at the University of Zurich, an application to Swiss Mobility: Incoming -> Module Mobility must be submitted before the semester starts.

-> https://www.uzh.ch/en/studies/application/apply.html

#### Exams and Exam Results, Exam Cancellation, Disability Compensation

The type and duration of the examination and the written aids permitted are listed in the course catalogue. The results of the exams are listed in myStudies in the transcript of records.

Exam registration can be cancelled for session exams via myStudies up to one week before the start of the exam session, and for end-of-semester performance until the start of the end-of-semester period. The Examinations Office must be contacted immediately in the event of later cancellations due to illness, accident, etc.

Students with disabilities or chronic illnesses can apply for disability compensation, i.e. they can take equivalent examinations under other conditions (no content-related relief). Leaflets, application forms and deadlines can be found at the Disability Advisory Service.

-> https://ethz.ch/en/the-eth-zurich/organisation/departments/student-services.html

#### Study Abroad

In consultation with the departmental exchange coordinator, it is possible to complete part of the studies at another university and to receive the corresponding credits – either courses or the master's thesis – as mobility credits (max. 30 credits for the master's). Course exchange and accreditation is not possible for students not holding an ETH bachelor's degree. Internships may be completed abroad without mobility credit restrictions. -> https://ethz.ch/students/en/studies/study-abroad.html

#### **Workstations, Information Centres**

Workstations for students can be found at ETH Zentrum, especially in the various libraries, in the libraries of the Hönggerberg campus and in the *Chemistry-Biology-Pharmacy Info Center*. There are also niche workstations at various locations. You can also work in the cafeterias outside lunchtime. There are also various computer workrooms for students with computers running Windows or Linux.

#### Catering

There are various dining halls with discounted menus for students. Lunch is available in the large canteens from 11:00 to 14:00, the smaller catering establishments have slightly different opening hours. Opening hours, menus, prices, and queues, as well as information on other catering establishments can be called up online.

-> https://ethz.ch/en/campus/getting-to-know/cafes-restaurants-shops/gastronomy.html

#### **Study and Living Expenses**

Tuition and mandatory semester fees (ASVZ, scholarship fund, VSETH) at ETH Zurich amount to CHF 800 per semester. In addition, the cost of living is particularly important. According to the Financial Aid Office, you should expect to need approximately CHF 16,000-26,000 each year for study and living expenses.

ETH Zurich can grant students scholarships if their own funds and those of their closest relatives are insufficient and if their academic performance is good. A scholarship application must first have been submitted to the canton of residence as a prerequisite. First semester applicants may submit the application by the end of the second week of the semester; for students of higher semesters the closing date for entries is June 30. A new application must be submitted for each academic year.

-> https://ethz.ch/en/studies/financial.html

There is a special performance-related scholarship programme for the master's: the Excellence Scholarship & Opportunity Programme (ESOP). Application to this scholarship must be submitted before the indicated deadline and before registration for the master's programme.

#### Insurance

Students are responsible for adequate private insurance coverage (mandatory: health care insurance; recommended: personal liability, household items).

#### Studying as a Parent or Top-Class Athlete

Parents and top-class athletes are offered support to balance parental life or top sport and study. No cutbacks in study-related achievements can be made. On the other hand, there are options for making examination dates more flexible or prolonging the maximum duration of the study.

-> https://ethz.ch/students/en/advice.html

#### **Swiss Military Service**

The military accepts postponement requests when military service falls within the exam or exam preparation period. The application must be submitted to the applicable agency at least 14 weeks before the start of the service (signature from the Student Administration Office required). The military requires that a period be specified for pre-service or post-service. The service may not be postponed for more than one year. New requests for postponement will be checked again.

#### **Crediting of Earlier Achievements**

No courses from earlier studies at other universities can be accredited for the master's programme. Credits from ETH courses can only be accredited if they have not been used for another degree.

#### **Request for Degree Conferral**

Students may apply for the master's degree after having obtained the minimum number of credits allocated to each category according to the study regulations. The degree certificate is issued by the rectorate and sent directly to the graduate. It contains an academic record with ranking and a diploma supplement describing the content of the programme and the course units taken. The official academic title awarded is "Master of Science ETH in Health Sciences and Technology" (MSc ETH HST), and the chosen major is also listed in the certificate.

The master's degree ceremony takes places once per year, usually in May/June. The ceremony is given in German.

#### Regulations, Guidelines, Timetables

All formal details of the master's programme in Health Sciences and Technology are defined in the study regulations. Like the guidelines and the current timetables, it can be found on the HST website.

-> https://hest.ethz.ch/en/studies/health-sciences-and-technology.html

## **Additional Training Programmes**

#### **Teaching Diploma in Sport**

The additional teaching programme in sport entitles students to teach physical education at the baccalaureate school level. Knowledge of the German language on advanced level is mandatory. The diploma can only be awarded after the student has been awarded a master's degree. For details on the Teaching Diploma Sport (LD Sport), see regulations and specific guidelines.

-> https://ethz.ch/de/studium/didaktische-ausbildung/studienangebot/lehrdiplom-fuer-maturitaetsschulen.html

#### **Teaching Diploma in Biology**

The additional teaching programme in biology entitles students to teach biology at the baccalaureate school level. Knowledge of the German language on advanced level is mandatory. The diploma can only be awarded after the student has been awarded a master's degree. For details on the Teaching Diploma Biology (LD Biologie), see regulations and specific guidelines.

-> https://ethz.ch/de/studium/didaktische-ausbildung/studienangebot/lehrdiplom-fuer-maturitaetsschulen.html

#### Teaching Certificate in Health Sciences and Technology

The teaching certificate (DZ) certifies the successful completion of a teaching training with qualification in the respective subject and comprises 24 credits, which can be completed simultaneously with or after the master's degree. It is suitable for part-time teaching at vocational schools and technical colleges, as well as for training and professional development within companies and institutions, but not for baccalaureate schools. Knowledge of the German language on advanced level is mandatory. For details on the DZ HST, see regulations and specific guidelines.

-> https://ethz.ch/de/studium/didaktische-ausbildung/studienangebot/didaktik-zertifikat.html

#### **Doctorate**

The doctorate includes independent scientific work under the supervision of a professor. By contributing to teaching in their department, doctoral students also learn the skills necessary for teaching at the university level. A doctorate at ETH generally lasts about 4 years and the student is usually employed as an assistant.

A doctoral degree is a prerequisite for an academic career, but also an advantage for certain professional profiles in industry and in the public sector.

-> <a href="https://hest.ethz.ch/en/doctoral-studies.html">https://hest.ethz.ch/en/doctoral-studies.html</a>

#### **Committees for Students**

#### **Department Conference (DK D-HEST)**

The DK D-HEST is the highest body in the department. It decides on the research and teaching strategy and elects representatives to various committees. Members are all professors as well as employee representatives and student representatives of D-HEST.

#### **Teaching Commission (UK HST)**

The UK HST deals with aspects of teaching, especially with adjustments to the curriculum and the regulations of the degree programmes in Health Sciences and Technology. It is made up of three lecturers, three scientific staff representatives and three students.

#### **Association of Students at ETH (VSETH)**

The VSETH is one of the largest student bodies in Switzerland and a professionally managed association with about 11,000 members. It organises a variety of facilities and support for studying at ETH.

-> https://vseth.ethz.ch/en/

#### Health and Technology (HeaT) Study Association

HeaT is a VSETH study association and represents its students in dealing with the department, organises study support (e.g. exam preparation courses) and social events. In addition to supporting students of Health Sciences and Technology, HeaT currently also represents students of the ETH degree programme in Human Medicine, which was launched in autumn 2017.

-> https://heat.ethz.ch/

## **Academic Sport Association Zurich (ASVZ)**

The ASVZ is a non-profit organisation which, on behalf of ETH Zurich, the University of Zurich, and the Zurich University of Applied Sciences, offers all students, employees, and alumni a wide range of sports, with over 120 sports, an extensive infrastructure, state-of-the-art sports material, expert support and expertise available.

ETH students automatically have access to the ASVZ courses, as the corresponding semester fee is mandatory. Depending on the location, student ID is controlled at the entrance to the building or its rooms.

-> <a href="https://www.asvz.ch/en/634-welcome-asvz">https://www.asvz.ch/en/634-welcome-asvz</a>

#### **Advice for Career Start**

An academic degree is no guarantee for a position in the job market and it can take time to find a suitable position. Therefore, advice on writing applications, job interview skills and networking can be helpful. Below are organisations that help in starting a career.

#### **ETH Career Center**

The Career Center supports students with applications and career entry through individual advice and information on job exchanges and company trade fairs. Students can meet representatives of companies at events such as the Polymesse (always in April) and the Campus Interview (always in October) and the Zurich Life Science Day (always in February).

You can also get an application guide free of charge at the ETH Career Center or download it under the following link. It deals with the transition from university to professional life and covers important aspects in detail – from analysis to exploration, focusing and application.

 $\verb|-> https://ethz.ch/en/industry/industry/attract-eth-talents/career-center.htm||$ 

#### **ETH Alumni Association**

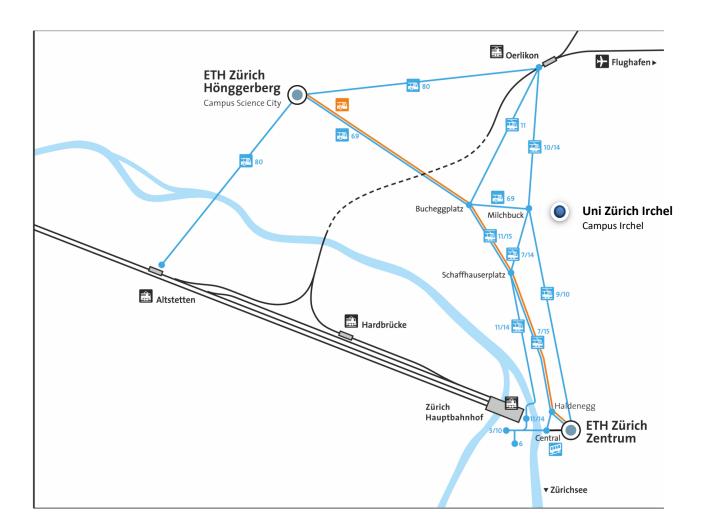
ETH Zurich graduates can join the Alumni Association. The ETH Alumni affiliate of Health Sciences and Technology (HST) networks graduates, current students, the department and the industry in the fields of exercise and health sciences, organises events and offers services (e.g. mentoring, jobs newsletter).

-> <a href="https://www.alumni.ethz.ch/en/">https://www.alumni.ethz.ch/en/</a>

## **Campus Maps**

#### Overview

-> https://ethz.ch/en/campus/access.html



#### **Transfer between Locations**

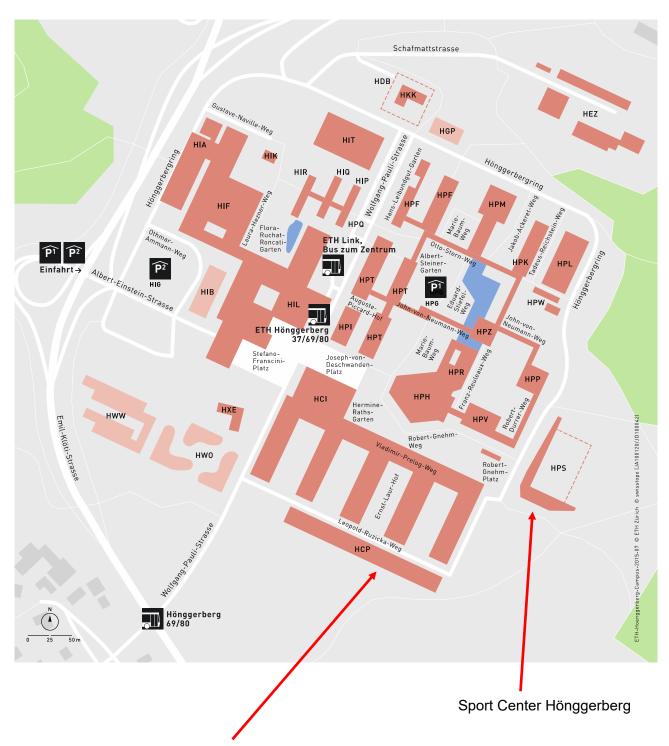
The ETH eLink is a direct, free of charge shuttle bus reserved for ETH students and employees, that travels between ETH Zentrum (Polyterrasse underpass) and ETH Hönggerberg with a stop at Haldenegg. Departure time is xx:10, xx:30 and xx:50 at ETH Zentrum and xx:14, xx:34 and xx:54 at ETH Hönggerberg during the day; during the semester additionally xx:00 at ETH Zentrum and xx:44 at ETH Hönggerberg. In the morning there are special runs from Zurich Main Station to ETH Hönggerberg (07:06, 07:36; during the semester also 07:21) and in the evening back (18:14, 18:34, 18:54; during the semester also 18:44).

Tram lines 9 and 10 run between ETH Zentrum and Irchel (Irchel or Milchbuck stops), bus line 69 between Irchel (Milchbuck stop) and ETH Hönggerberg. These tram and bus lines belong to the Zurich Transport Network (ZVV), hence transport is not free of charge.

## ETH Zentrum Campus



## **ETH Hönggerberg Campus**



Study Administration Office HST (HCP H 27.1)

## **UZH Irchel Campus**



#### **Information and Advice**

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