

MAS ETH NATHAZ

Master of Advanced Studies ETH in Natural Hazards Management

«Your success is our challenge!»



«Understanding the hazard processes is key to being able to manage them. We will explore the effects of extreme climatic conditions and global warming on flooding, mass movements and cryogenic hazards as well as reviewing the processes behind tectonic hazards, and especially earthquakes.»

Sarah M. Springman, Professor for Geotechnical Engineering



«Buildings and infrastructure facilities should cope with and protect us from natural hazards. Methods of structural engineering will enable you to analyse and design constructions adapted to future hazard regimes.»

Thomas Vogel, Professor for Structural Engineering



«Risk-based management is an approach to improve regional safety against natural hazards. You will acquire the skills to contribute to the development of management options that are effective, economically efficient, environmentally sound and socially implementable.»

Hans Rudolf Heinemann, Professor for Land Use System Engineering

We run the programme together with our colleagues from the Network of Natural Hazards at ETH Zurich (HazNETH, www.hazneth.ethz.ch). The Swiss Federal Institute for Forest, Snow and Landscape Research (WSL, www.wsl.ch) contributes with expertise to equip you with field experience.



Get ready to master a local and global challenge!

Understand and manage
Natural Hazards

Information on programme

ETH Zurich
Secretariat MAS NATHAZ
Tel. +41 44 633 63 00
mas-nathaz@ethz.ch

or, visit our webpage
www.mas.nathaz.ethz.ch

Application

ETH Zurich
Centre for Continuing Education
www.zfw.ethz.ch/application

or, directly contact
Tel. +41 44 632 56 59
info@zfw.ethz.ch

Wengen (CH)
Source: Abteilung Naturgefahren, Canton of Berne

ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

A perfect match

Are you a professional in analyzing and/or managing natural hazards, but you have never had the opportunity to obtain a thorough overview on all aspects relevant to understanding and managing natural hazards? Do you want to acquire that knowledge and skills while you continue working in your job? Then, you should definitely consider applying for the MAS in Natural Hazards Management at ETH Zürich!

The capital for your future

ETH offers you a four-semester programme in Natural Hazards Management that is captured as «the big picture» on the right-hand side. Essentially, it is structured into modules aiming at providing basic skills, and modules aiming to help you to understand and manage natural hazards:

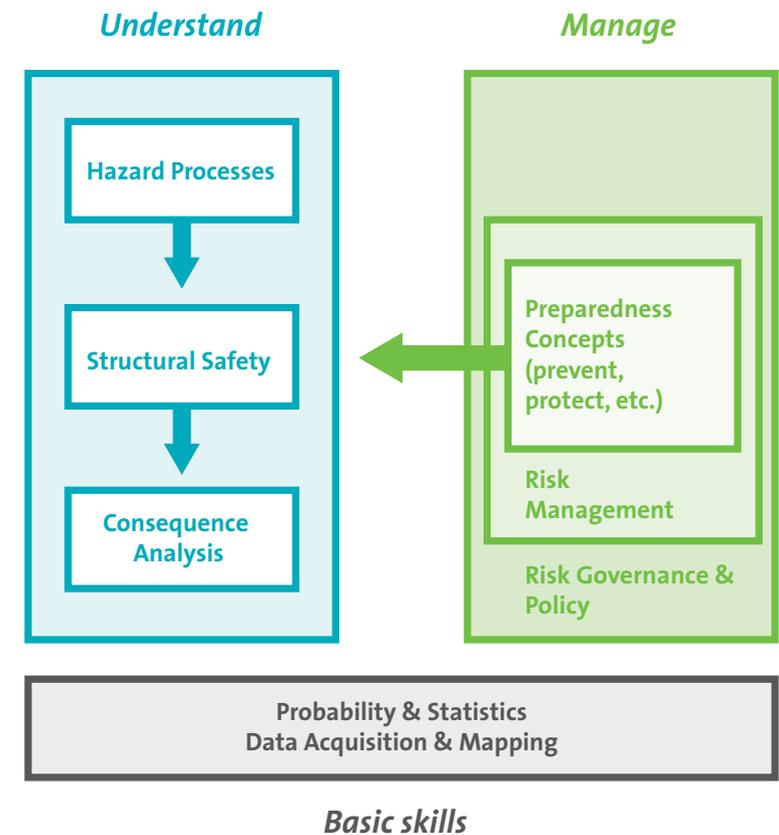
Basic skills – refreshes you in probability and statistics as well as the main features of data acquisition and mapping, with a special emphasis on spatially explicit data.

Understand – equips you with the skills to analyse hazards processes qualitatively and quantitatively, to analyse and model strain impacts on structures (e.g., buildings), and to analyse and model the consequences of hazard events (e.g., fatalities, injuries, economic costs).

Manage – equips you with the skills to identify sound options to manage risk from natural hazards based on well-founded knowledge on preparedness concepts for coping with natural hazards, as well as on skills to characterize policies, institutions and customs that govern management decisions.

The programme is balanced between theory blocks, case studies, exercises and field excursions that are all taught in English. It is organized in four blocks of one week per semester. You will complete your programme with a MAS thesis.

«The big picture»



Your career

The increasing human population and human wealth will result into more lives and human assets being at risk related to natural hazards. This development is likely to be even exacerbated by future effects of global climate changes. Thus, graduates of this programme will be highly desirable in future to develop sound solutions to cope with this both local and global challenge: in engineering consulting firms, the insurance-industry, and the public administration.

Start
In September (every second year)

Duration
2 years (4 semesters a 4 weeks)

Credit points
60 ECTS-points

Final certificate
Master of Advanced Studies ETH in Natural Hazards Management (MAS ETH NATHAZ)

Fee
CHF 16'700

Requirements

- Acknowledged university degree at Master's level or equivalent achieved through working experience
- Good English skills (C1) in writing, understanding, reading and speaking

Important dates
Check-out our webpage www.mas.nathaz.ethz.ch and stay informed with our newsletter www.sympa.ethz.ch/sympa/subscribe/mas.nathaz

Late applications can be accepted, if there are still open places. Check availability on webpage.