



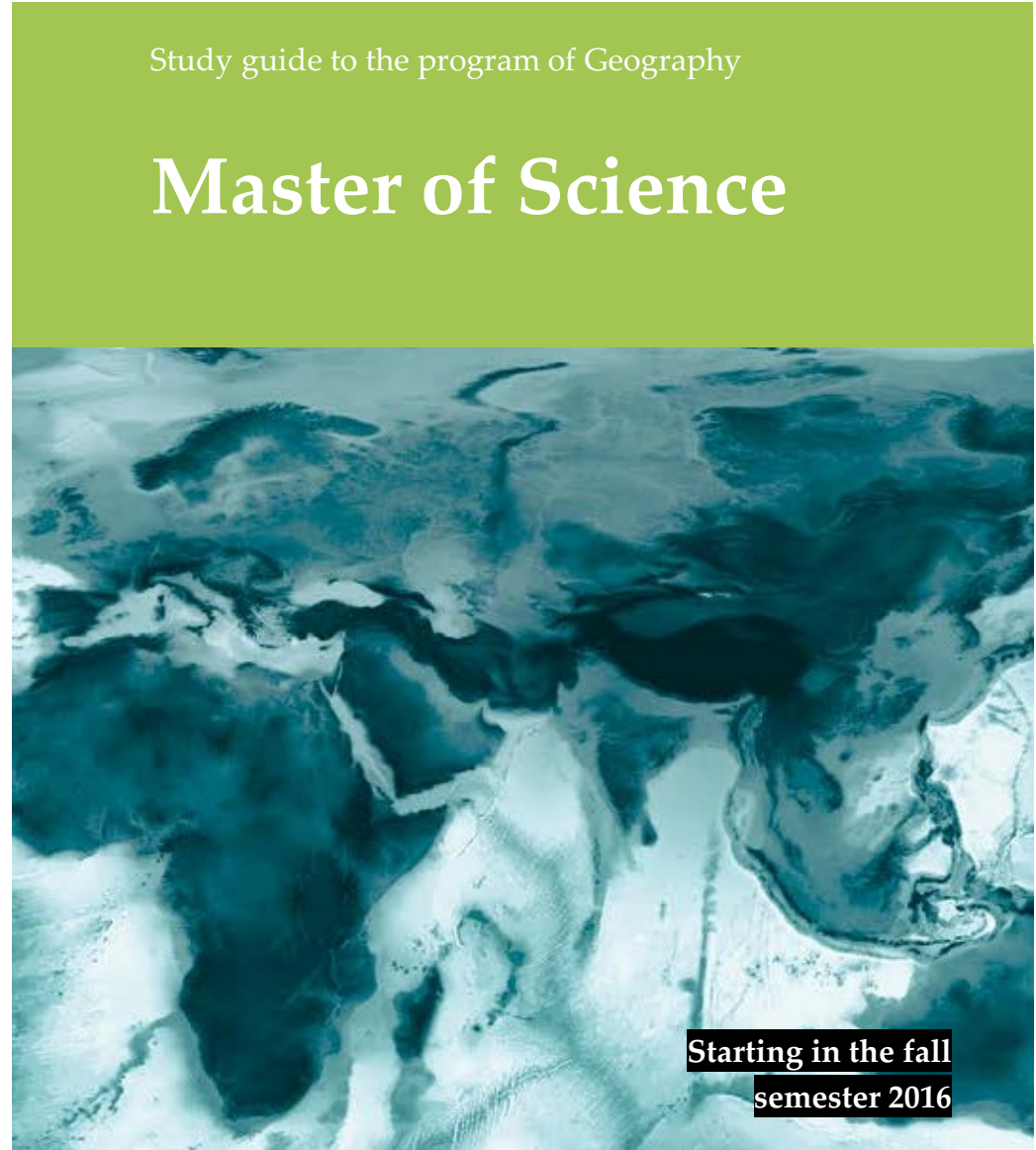
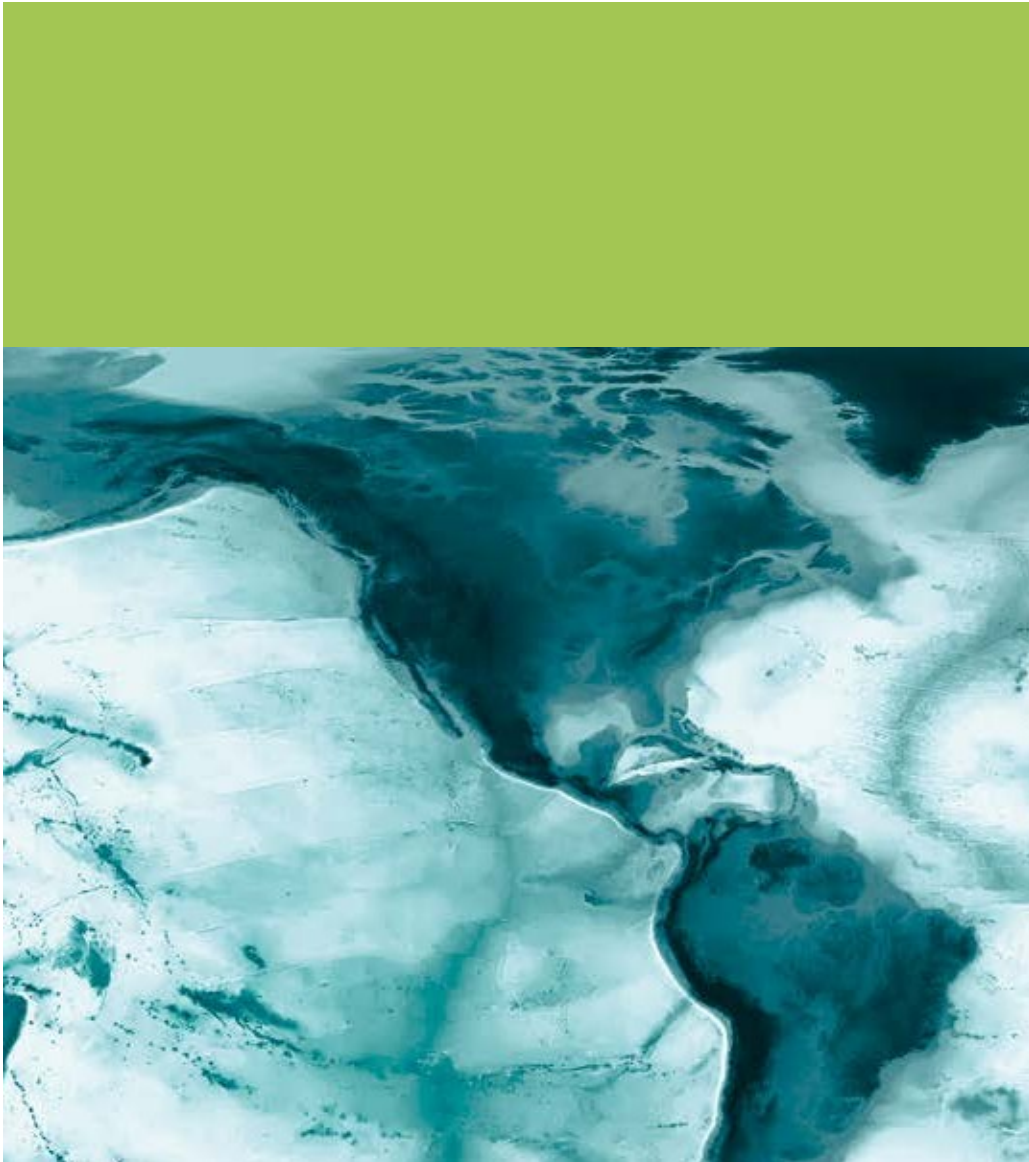
Universität
Zürich^{UZH}

Departement of Geography

Study guide to the program of Geography

Master of Science

Starting in the fall
semester 2016



Masthead

Student Advisory Board Geography and Earth System Science

October 2016

www.geo.uzh.ch/en/studying

Table of contents

| | |
|--|-----------|
| 1 Preface | 3 |
| 2 Geography at the University of Zurich | 5 |
| 2.1 Focus of Education | 6 |
| 3 Geographical World of Work | 8 |
| 3.1 Selected Fields of Work | 8 |
| 3.2 Employment Situation | 9 |
| 4 General information about studying at MNF | 10 |
| 4.1 Matriculation | 10 |
| 4.2 Structure | 11 |
| 4.3 Structure of major and minor | 12 |
| 4.4 Begin of studies | 13 |
| 4.5 Standard period of study | 13 |
| 4.6 Compulsory, core elective and elective modules | 13 |
| 4.7 Booking modules | 14 |
| 4.8 Assessments | 15 |
| 4.9 Mobility | 15 |
| 4.10 Final degree | 16 |
| 4.11 Transfer of additional credits | 16 |

| | |
|--|-----------|
| 5 Master of Science in Geography (MSc) | 17 |
| 5.1 General information | 17 |
| 5.2 Structure of the study program in Geography | 17 |
| 5.3 Emphasis within the Master of Geography | 19 |
| 5.4 Module overview | 20 |
| 5.5 Tutorials | 28 |
| 5.6 Internship | 28 |
| 6 Geography as a Minor | 30 |
| 7 Teaching Diploma for Upper Secondary Education in Geography | 31 |
| Lehrdiplom für Maturitätsschulen | 31 |
| 7.1 Geographie als 1. Unterrichtsfach | 32 |
| 7.2 Geographie als 2. Unterrichtsfach | 32 |
| 8 Varia | 33 |
| 8.1 Student Society Geography (Fachverein) | 33 |
| 8.2 Libraries | 33 |
| 8.3 Important University Information Offices | 34 |
| 8.4 Geographisch-Ethnographische Gesellschaft Zürich (GEGZ) | 37 |

1 Preface

In this **study guidance** (**“Wegleitung”**), the Master’s degree program in Geography is illustrated for students taking up their studies starting from fall semester 2015. For students with begin of studies before fall semester 2015, the guidance of the corresponding year (begin of studies) as well as the transitional regulations are relevant. The actual version of the study guidance as well as additional information are published on the website of the Department of Geography (GIUZ).

→ www.geo.uzh.ch/en/studying

The **program regulations** (**“Studienordnung”**) contain detailed content-related requirements and module and exam procedures of major and minor subjects at the Faculty of Science (MNF). The **framework ordinance** (**“Rahmenordnung”**) governs the general conditions for Bachelor’s and Master’s degree programs at the MNF. The mentioned regulations as well as further study guidelines are available on the website of the MNF.

→ www.mnf.uzh.ch/en/studying

In case of remaining questions, the student advisory board of the Department of Geography (GIUZ) is the first contact point:

| | |
|---------------|---|
| Office | Y25 K10, Winterthurstr. 190, Universität Irchel, Zürich |
| Phone | 044 / 635 51 18 |
| Mail | ✉ beratung.lehre@geo.uzh.ch |
| Opening hours | On two afternoons weekly, from 13.00 to 16.30 o’clock (please consider the information on the website for actual opening hours). Appointments for a meeting can be booked at → www.terminland.de/giuz-studienberatung |

Further information about the study program and particularly about individual courses can be found on the following websites:

- Website for students of the University of Zurich
→ **www.students.uzh.ch**
- Commented course catalogue of the University of Zurich
→ **<https://studentservices.uzh.ch/uzh/anonym/vvz/index.html>**
- Commented course catalogue of the ETH
→ **www.vvz.ethz.ch**

In order to allow students to efficiently plan their studies, an information event about the Master's program is held at the end of the Bachelor's program. For new students, an introduction presentation is held on Wednesday before the start of the fall semester.

Student advisory board of the Department of Geography, September 2016
Lena Bühlmann, Ursina Strub

2 Geography at the University of Zurich

Welcome! We are glad that you are interested in the study program in Geography at the University of Zurich.

According to the motto “*One Earth – Many worlds*”, existentially important questions about the present as well as the future of the living environment on our planet are examined at the Department of Geography. How do humans and environment interact, what kind of relations develop between human and space? Global change, neoliberalisation, virtual worlds, environmental changes and urbanisation are some of the challenges that touch Geography.

A study program in Geography offers a unique combination of research perspectives and it unites approaches of natural, social and computational sciences. The Master’s study program in Geography allows specialisation in individual research strands of Geography. Profound knowledge of actual research projects is imparted and critical discussion of socially relevant topics is encouraged. The students’ intellectual and communicational skills are promoted.

Aims of the study program

- The students understand the synthesis and transformation of the living space in their local, regional and global dimension and characteristics.
- The students are able to implement approaches of natural, social and computational sciences to analyse actual questions appropriately.
- The students are able to act responsibly as interdisciplinary thinking human beings at the creation and utilisation of living space.

2.1 Focus of Education

The Geographical Department of the University of Zurich has the following focus of education:

Physical Geography

- *Glaciology and Geomorphodynamics Group (3G)*: Climate history and climatic consequences, natural hazards, research on ice ages and high mountain areas
- *Geochronology (GCH)*: Dating of soils, landscapes and surface processes
- *Soil Science and Biogeochemistry (2B)*: Carbon cycle in the system of plant and soil, geography of vegetation and geoecology, history of landscape
- *Hydrology and Climate (H2K)*: Water cycle, catchment hydrology, hydrological processes, climate impact on water resources

Human Geography

- *Human Geography (HGG)*: Development studies, migration and multi-locality, spatial appropriation and nature conservation, youth and education
- *Political Geography (PGG)*: Geographies of violence and power, geographies of moral, political ecology
- *Economic Geography (WGG)*: Geographies of global commodity chains and transnational markets; work, gender and space; urban and regional development
- *Space and Organisation (SO)*: The geography of organization denotes the interdisciplinary study of the spatial aspects of organizations and processes of organizing. Geography as well as organization and management studies are the major fields to contribute to this area.

Remote Sensing and Geographic Information Systems

- *Remote Sensing Laboratories (RSL)*: Generating products of remote sensing of the earth surface, classification of land use, SAR and LIDAR, image spectrometry, instruments and methods for capturing environmental problems and processes with satellite and plane data.
- *Geographic Information Visualisation and Analyses (GIVA)*: Geographic information visualisation, science in spatial cognition, methods of analysing space, application of geographic information technologies in human and social sciences
- *Geographic Information Systems (GIS)*: Analysis of spatio-temporal data, pattern recognition in spatial data, automatic generation of maps, GIS in protection areas, spatial modelling in the environmental area.
- *Geocomputation (GC)*: Methods of geoinformatics with a focus on uncertainties in environmental modelling, methods of spatial localisation and search in text and images, extraction of geosemantical information out of unstructured geographical sources

3 Geographical World of Work

A wide occupational field is available for geographers. Because of the broad scope of the subject, employment can be found in a variety of special fields, although with certain competition from graduates of other study programs. Teamwork and interdisciplinary collaboration are often skills in demand.

3.1 Selected Fields of Work

Spatial planning: City, regional & land use planning, site evaluation, city and regional research, economic and structural policy, economic promotion, disposal, transport and mobility research, traffic planning, tourism

Environment, landscape and human beings: Environmental and landscape planning, nature and environment protection, natural hazards, biotope mapping, geo-ecology, geotechnology, ecosystem research, ecological management, environmental economy, soil protection, soil science, climatic research, hydrology, soil protection specialist unit, development cooperation, international organisations, insurances, meteorology

Information and communication: Press and public relations, media, publishing sector, statistics, market research, information services, remote sensing, (computer) cartography, geoinformatics (GIS), banks, museums, libraries

Schools: Teaching activities at secondary schools, vocational schools and other schools

3.2 Employment Situation

Thanks to the social importance of topics like environmental protection, city and spatial planning or natural hazards, the majority of graduated geographers will find an interesting and challenging position. Also, the importance of electronic data processing will rise and provide jobs in this field.

Examples of job outlines can be found here:

→ [**www.geo.uzh.ch/en/studying/after-graduation**](http://www.geo.uzh.ch/en/studying/after-graduation)

4 General information about studying at MNF

The degree courses at the MNF are structured into Bachelor's and Master's degrees. The Master's degree is based on the Bachelor's degree. In the Bachelor degree course a solid knowledge base as well as the capability for methodical-scientific thinking are imparted. Further information about the Bachelor's degree is given in the Bachelor's degree guide.

A following Master's course imparts advanced scientific knowledge and enables students to carry out independent scientific work. The structure of the Master's program at GIUZ is described on page 18.

As a third step, a PhD can be achieved after the Master's degree, if someone is accepted in a promotion program and/or an advisor is found willing to lead a dissertation project.

A Master's degree is also the basic of the teaching diploma for high schools. The didactical education is held at the Institute of Education (IfE) of the University of Zurich (see chapter 7).

Within the study program Master of Science in Geography, an emphasis of one field in Geography is possible, but not mandatory. It hence allows a specialisation of the knowledge gained during the Bachelor's program. For a successfully absolved Master's degree in Geography, the **diploma "Master of Science in Geography"** (MSc UZH in Geography) is awarded.

4.1 Matriculation

In order to follow a study program at University of Zurich, a matriculation is necessary. All students have to be matriculated as long as they require services of the University – including the visit of courses, the claim for counselling and support, the utilisation of libraries and the computer centre, taking exams, as well as the validation of the diploma.

Registration

The first matriculation needs a registration at the Student Administration Office of the University. This is also the case after an interruption of matriculation by deregistration.

→ www.uzh.ch/studies/application_en.html

Application period:

- Fall semester: 30th of April
- Spring semester: 30th of November

Semester enrolment

The matriculation is renewed every semester via the online semester enrolment.

→ www.students.uzh.ch/registration_en.html

4.2 Structure

Every degree program at the University of Zurich is built according to the principle of the credit point system. A Master's degree in Geography contains 90 respective 120 ECTS credits (ECTS = European Credit Transfer System). For all coursework, students get ECTS credits based on an official assessment. The following principles apply:

- No credit points are awarded without official assessment.
- One ECTS credit corresponds to a workload of around 25-30 hours. In this time, lectures and time for individual work (self-study, solving exercises, preparation for exams, etc.) are included.
- In a full-time study program, around 30 ECTS credits are gained per semester.
- Only integer ECTS credits can be gained.

The course of study is structured into compulsory modules, core elective modules and elective modules. Which and how many modules to absolve each semester is generally decided by the students themselves. It needs to be kept in mind that most modules are offered either in the fall or the spring semester, and the maximum period of study should not be exceeded. Some modules range over two semesters and therefore completion of modules can depend on prerequisites. Further information on individual modules is provided in the online course book.

4.3 Structure of major and minor

The Bachelor's (180 ECTS credits) and Master's programs (90 or 120 ECTS credits) at the Faculty of Science (MNF) are divided into major and minor subjects. Within the Master program (90 ECTS credits) in Geography, no minor is provided. Nevertheless, an additional minor can be completed, if the study program is extended to 120 ECTS credits. Additional to the minors offered at the University of Zurich, there is the special opportunity for students in Geography to complete a minor at ETH Zurich.

→ www.geo.uzh.ch/en/studium/nebenfaecher-fuer-geographiestudierende

At the Faculty of Science (MNF) and the ETH Zurich, a new minor can be started at Master's level. At any other faculty, a minor has to be started already at Bachelor's level in order to be continued at Master's level. A list of all major and minor subjects of the University of Zurich can be found at the following website.

→ www.degrees.uzh.ch

4.4 Begin of studies

Generally the course of study starts in the fall semester. As – besides the Master's thesis – there is only one compulsory module in the Master's program, there is no big difference in starting in the fall or the spring semester. If students begin their course of study in the spring semester they have to take into account the conditions for modules (e.g. Module B is only bookable after graduation of module A).

4.5 Standard period of study

The standard period of study is three semesters for a Master's without minor (90 ECTS credits), and four semesters for a Master's with a minor (120 ECTS credits). The maximum period of study is twice the standard period of study, thus six – or eight – semesters.

If the maximum period of study is exceeded, no degree can be achieved at the Faculty of Science (MNF) anymore. The Faculty might permit exceptions after handing in a justified request.

4.6 Compulsory, core elective and elective modules

Study programs consist of different modules. Modules can contain one or more courses such as lectures, exercises, seminars or field trips. Every module is completed by an assessment. The type of assessment is determined for every single module and is published in the online course book.

There are different kinds of modules:

- **Compulsory modules** are compulsory for all students of a certain study course. If the assessment of a compulsory module is failed, the assessment can be repeated once. If the repetition is again

insufficient, all study programs, which contain the respective module as compulsory module, can no longer be attended.

- **Core elective modules** are modules, which can be chosen out of a given list. A core elective module can be repeated once. If the repetition is again insufficient, the respective module can be replaced once by another core elective module.
- **Elective modules** are modules, which can be freely chosen out of the offer of a subject. A substitution of an elective module is possible without restraint.

4.7 Booking modules

After having paid the semester fees it is possible to book modules online. The deadlines of the respective faculties have to be considered. The booking tool opens about six weeks before the start of the lectures. Booking modules is usually possible until the third week after the start of lectures, but there are modules, which need to be booked earlier. A deregistration of modules is usually possible until around the middle of the semester.

→ www.students.uzh.ch/booking/fristen_en.html

If a module exam is failed, an invitation to apply for the repeat examination is sent together with the exam result. The registration for a repeat examination is binding and it is not possible to de-register. It can also be chosen to repeat the whole module.

Modules at the ETH Zurich (all modules with the code ESS) can be booked after a separate enrolment. Therefore, an antecedent registration as special student at the ETH is needed. This registration has to be confirmed every semester. Afterwards, modules at the ETH Zurich are bookable online at myStudies.

→ www.mystudies.ethz.ch

4.8 Assessments

With the enrolment for a module of the UZH, the assessment of the respective module is registered as well. A deregistration after the expiry of the cancellation deadline is only possible upon submission of a medical certificate or a written request. These documents have to be handed in at the Student Affairs Office of the Faculty of Science no later than five days after the date of the exam. Afterwards, missed exams will be graded as failed. In the final diploma, only passed assessments will be shown.

For modules at the ETH Zurich the registration for exam has to be carried out separately. A deregistration is possible until shortly before the exam.

At the beginning of each semester, all students receive a transcript of records by mail. Students have access to their summary of credits at any time online.

→ www.students.uzh.ch/record_en.html

4.9 Mobility

An exchange of one or two semesters can be undertaken at the beginning of the Master studies. Studying at another university in Switzerland or abroad is a very exciting and valuable experience. Furthermore it offers the possibility of improving a foreign language. All necessary information about studying abroad can be found at the website of the GIUZ.

The study advisory board supports students with the planning of mobility stages at other universities.

Please note: Applications have to be submitted up until 31st of January for the following academic year (autumn until autumn!).

→ <http://www.geo.uzh.ch/de/studium/austauschprogramme.html>

4.10 Final degree

The issuing of the Master's degree doesn't take place automatically due to the gained ECTS credits. Students have to submit an application form (leaflet "Application form for the graduation as MSc in Geography") at the office of the student advisory board. If all conditions are fulfilled, the Faculty of Science will grant the respective academic title at the next meeting of the Academic Committee, but only if the application was submitted at least four weeks before the meeting. Otherwise the diploma will be issued after the subsequent meeting.

→ http://www.geo.uzh.ch/de/studium/konsekutiver_master/abschluss.html

→ <http://www.mnf.uzh.ch/en/fakultaet/Sitzungstermine.html>

4.11 Transfer of additional credits

It is possible to credit up to a maximum of 10 additional ECTS credits to the study program in Geography. This can include modules of the UZH and the ETHZ, as well as language courses of the Language Center of the University of Zurich and ETH Zurich. A maximum of 4 ECTS credits can be credited for language courses (BSc and MSc together).

All additional ECTS credits are listed in the summary of credits, but are not included in the calculation of the average grade.

5 Master of Science in Geography (MSc)

5.1 General information

A Master of Science in Geography is the standard degree in this subject. For a test-free admission to the Master's study program in Geography, a Bachelor's degree in Geography from the Faculty of Science of the University of Zurich – or an equivalent degree from another recognised university – is required. The Faculty decides about a possible admission for students with a degree from a university of applied sciences.

The Master's study program enables a specialisation within the field of geography. The Master's degree is the qualification for professional ability for academic jobs. Furthermore it builds the professional scientific foundation for qualification as a secondary school teacher and the base for a PhD.

5.2 Structure of the study program in Geography

The consecutive Master study program in Geography at GIUZ consists of a compulsory interdisciplinary module, at least five consolidation modules, the Master's thesis, the Master's exam, and of elective modules in the extent of 23 ECTS credits (see overview on the next page). This sums up to a total of 90 ECTS credits, if no minor is chosen. It is possible to complete an additional minor of 30 ECTS credits. The study program is then extended to 120 ECTS credits.

Master in Geography

| CP | 7. Semester (HS) | 8. Semester (FS) | 9. Semester (HS) | CP |
|----|--|--|-----------------------------------|----|
| 1 | Consolidation Module * Vertiefungsblock | Consolidation Module * Vertiefungsblock | GEO 511 Master's Thesis | 1 |
| 2 | | | | 2 |
| 3 | | | | 3 |
| 4 | | | | 4 |
| 5 | | | | 5 |
| 6 | 6 CP | 6 CP | | 6 |
| 7 | Consolidation Module * Vertiefungsblock | Consolidation Module * Vertiefungsblock | | 7 |
| 8 | | | | 8 |
| 9 | | | | 9 |
| 10 | | | | 10 |
| 11 | | | | 11 |
| 12 | 6 CP | 6 CP | | 12 |
| 13 | Consolidation Module* Vertiefungsblock | GEO 599 excursions | | 13 |
| 14 | | Elective Modules | | 14 |
| 15 | | | | 15 |
| 16 | | | | 16 |
| 17 | | | | 17 |
| 18 | 6 CP | | | 18 |
| 19 | GEO 410 General Education: Geography.Matters. | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | 4 CP | | | |
| 23 | Elective Modules | | | |
| 24 | | | | |
| 25 | | | | |
| 26 | | | | 26 |
| 27 | | | | 27 |
| 28 | | ca. 15 CP | | 28 |
| 29 | | | | 29 |
| 30 | ca. 8 CP | | 30 CP | 30 |
| 31 | | | GEO 512 Master's Exam | 31 |
| 32 | | | 2 CP | 32 |

| | |
|----------------|-----------------------|
| | Compulsory Modules |
| | Core Elective Modules |
| | Elective Modules |
| GEO 511 | Master's Thesis |
| HS | fall semester |
| FS | spring semester |
| CP | ECTS Credit Points |

excursions: 0.5 CP per day, compulsory: 1 CP = 2 days (max. 2 CP = 4 days)

5.3 Emphasis within the Master of Geography

An emphasis on one Thematic Subject Area (TSA) in Geography is possible within the Master studies. This emphasis is mentioned in the Master's diploma in addition to the Master's title. This will be in the form of "MSc in Geography, with Major in X", with "X" being replaced by the emphasis.

In order for an emphasis to be mentioned, a minimum of three consolidation blocks (VB) as well as the Master's thesis have to be completed within the field of the emphasis.

The following emphasises are possible:

- Physical Geography:
A minimum of three consolidation modules have to be chosen out of at least two of the four units of Physical Geography (e.g. two modules out of 3G and one out of 2B or H2K or one module out of three different units).
- Human GeographyD
- Remote Sensing
- Geographic Information Science

In addition to the emphasis, it is possible to achieve a general Master's degree. This is especially suitable for candidates studying towards a Teaching Diploma for Upper Secondary Education. Here the five consolidation modules have to be chosen out of the three TSA's Physical Geography, Human and Economic Geography, as well as Remote Sensing and Geographic Information Science. At least one course has to be chosen from each TSA. The Master's thesis is written in any of the three TSA.

- General Geography

5.4 Module overview

From the range of courses offered by the Department of Geography, at least five core elective modules have to be completed. Core elective modules are also called consolidation modules (“Vertiefungsblock VB”) and are assigned 6 ECTS credits each. The choice of the consolidation modules determines the emphasis within the Master’s study program. For some of these modules, prior completion of other modules can be required (e.g. certain core elective modules from the Bachelor’s study program).

Course type

VL Lecture
 UE Practical course
 SE Seminar
 E Field trip
 BL Block course
 PR Practical training
 VU Lecture with practical course

Assessments

PP Poster/presentation
 MP Exam
 SA Paper
 KW Calendar week

The language of the module title usually corresponds to the teaching language.

5.4.1 Compulsory Modules

| ECTS | Module title | Type | Time | Semester | Assessment |
|------|-----------------------------|------|-----------|----------|------------|
| 4 | GEO 410 Geography. Matters. | VU | Mon 14-16 | HS | SA, PP, MP |
| 30 | GEO 511 Master’s Thesis | SA | - | HS/FS | SA |
| 2 | GEO 512 Master’s Exam | PP | - | HS/FS | PP |
| 1 | GEO 599 Field Trips | E | - | HS/FS | E |

Master's thesis (GEO 511)

The Master's thesis contains all essential features of a scientific work. It has to be completed within one year (365 or 366 days). The amount of work corresponds to half a man-year (one person works 100% on their Master's thesis for half a year). It corresponds to 30 ECTS credits.

The Master's thesis is graded. In order to successfully pass, a minimum grade of 4 is required. In case of an insufficient grade, a new thesis with a different topic has to be written. If the second thesis is not accepted either, a Master's degree in Geography cannot be obtained at the Faculty of Science anymore.

Further information can be found on the information leaflet about the Master's thesis and the Master's exam.

→

http://www.geo.uzh.ch/en/studying/consecutive_master/master_thesis_exam.html

Master's exam (GEO 512)

The Master's exam takes place shortly after submission of your Master's thesis. It consists of a maximum one hour-long colloquium presentation and a disputation. The student thereby not only proves him- or herself in being well versed in the matter of their Master's thesis, but is also able to integrate the thesis into the context of the geographic research.

The Master's exam is passed when the Master's presentation and the disputation together are graded with at least a 4. A failed Master's exam can be repeated once. If the repetition is insufficient as well, no Master degree can be obtained at the Faculty of Science anymore. Further information can be found on the mentioned leaflet about the Master's thesis and Master's exam.

Compulsory field trips (GEO 599)

At least two days of field trips (corresponds to 1 ECTS credit) have to be taken before the end of the Master studies. This does not include field

trips, which are part of certain lectures or exercises. 0.5 ECTS credits are assigned per field trip day. For field trips held over several days, a maximum of 1 ECTS credit (= 2 days) is assigned; even if the duration is significantly longer. In total a maximum of 2 ECTS credits (= 4 days) can be earned during the Master's study program. Only integer ECTS credits can be gained. The credit points for the field trips are awarded once before the end of the study program, upon confirmation of having completed the field trips. Field trips have to be booked via OLAT. It is recommended to complete the compulsory field trips as soon as possible as places are limited.

→ www.olat.uzh.ch

> GEO 399/GEO 599/GEO 999 - Exkursionen der Geographie

5.4.2 Core Elective Modules (Vertiefungsblöcke VB)

Emphasis on Physical Geography

| ECTS | Module title | Type | Time | Semester | Assessment |
|------|---|----------------|-------------------------|----------|------------|
| 6 | GEO 411 Field studies on high mountain processes | SE PR, E | Thur 13-17 irregular | FS | SA |
| 6 | GEO 463 Soil Science I | VU | Thur 10-12 | HS | SA |
| 6 | GEO 419 Soil Science II | VU VL | Fri 8-10 Fri 10-12 | FS | SA, PP |
| 6 | GEO 412 Soil Science III | BL | two weeks in June | FS | PP, SA |
| 6 | GEO 413 Quantification and modelling of the Cryosphere | PR/SE PR/SE | Fri 8-10 Wed 10-12 | HS FS | PP, MP |
| 6 | GEO 415 Cryosphere | VL | Mon 15-17 Tue 16-18 | FS FS | MP |
| 6 | GEO 416 Soil protection and land management in practice | VL PR | Do 8-10 Wed 8-10 | HS FS | SA SA |

| | | | | | |
|---|--|--------|-----------------------------------|----------|----|
| 6 | GEO 417 Environmental archives and age determination | PR, BL | Thur 14-16 one week in July | HS HS | SA |
|---|--|--------|-----------------------------------|----------|----|

| ECTS | Module title | Type | Time | Semester | Assessment |
|------|--|----------|-----------|----------|------------|
| 6 | GEO 418 Atmosphäre und Klima | VL | ETHZ | HS/FS | MP |
| 6 | GEO 471 Hydrological field measurements and calculations | VU VU | irregular | FS | PP, SA |
| 6 | GEO 475 Hydrological Modelling and Programming | VU | Mon 8-12 | HS | MP SA |

Emphasis on Human Geography

| ECTS | Module title | Type | Time | Semester | Assessment |
|------|---|----------|-----------------------------|----------|------------|
| 6 | GEO 421 Development Studies | VL | Mi 10-14 | HS | SA PP |
| 6 | GEO 422 Qualitative Methodologies and Methods in Human Geography | VL | Mon 10-14 | FS | SA |
| 6 | GEO 423 Political Geography | SE | Wed 9-12 | FS | SA |
| 6 | GEO 425 Political Ecology | SE | Tue 14-16 | HS | SA |
| 6 | GEO 431 Regional- und Stadtentwicklung | VL UE | Tue 16-18 Fri 10-12 | HS HS | MP |
| 6 | GEO 432 Gender, Work and Space | VL UE | Thur 10-12 (irregularly) | HS | SA |
| 6 | GEO 433 Global Economic Geographies of Agriculture and Food Systems | SE | Thur 10-13 | FS | SA |

Emphasis on Remote Sensing

| ECTS | Module title | Type | Time | Semester | Assessment |
|------|--|----------|-------------------------|----------|------------|
| 6 | GEO 441 Remote Sensing A: Seminars | KO SE | Tue 15-17 Thur 14-16 | FS FS | SA |
| 6 | GEO 442 Remote Sensing B: Spectroscopy of the Earth System | VL UE | Wed 8-10 Wed 10-12 | HS HS | MP |
| 6 | GEO 443 Remote Sensing C: SAR and LIDAR | VL UE | Tue 8-10 Tue 10-12 | HS HS | MP |

Emphasis on GIScience

In the field of GIScience, any two modules à 3 ECTS Credits can be combined to one “Vertiefungsblock”.

| ECTS | Module title | Type | Time | Semester | Assessment |
|------|--|----------|------------------------------------|----------|------------|
| 3 | GEO 871 Retrieving Geographic Information | VU | Wed 14-16 | HS | SA |
| 3 | GEO 872 Advanced Spatial Analysis I | VU | Wed 10-12 | HS | SA |
| 3 | GEO 873 Cognitive Issues in GIScience | VL UE | Tue 9-10 Tue 14-16 | HS | SA |
| 3 | GEO 874 Introduction to Databases | VL UE | Fri 8-10 Fri 10-12 | HS HS | MP |
| 3 | GEO 875 Spatial Databases | VL UE | Fri 8-10 Fri 10-12 | HS HS | MP |
| 3 | GEO 876 Introduction to Programming for Spatial Problems | VU | Mon 14-18 Wed 8-10 Wed 12-14 | FS | SA |
| 3 | GEO 877 Spatial Algorithms | VU | Tue 14-16 Wed 8-10 | FS | SA |

| | | | | | |
|---|---|----------|------------------------|----------|----------|
| 3 | GEO 878 Geovisualisation | VL PR | Wed 10-12 Wed 14-16 | FS FS | MP PP |
| | GEO 879 3D Geovisualization | VU | Wed 16-18 | HS | SA |
| 3 | GEO 880 Computational Movement Analysis | VU | Mo 14-18 | FS | SA |
| 3 | GEO 881 Advanced Spatial Analysis II | VU | Thur 8-10 | FS | SA |

5.4.3 Elective Modules

Besides compulsory and core elective modules, elective modules in the extent of 23 ECTS credits have to be completed. Basically all modules of the course book of the University and the ETH Zurich are eligible:

Geography:

Courses offered by the Department, particularly:

- Core elective modules, which are not already taken as such
- Elective modules of the Department
- Additional field trips

Other subjects:

Whole offer of the University of Zurich and the ETH Zurich primarily on Master level. Subject to certain restrictions by the responsible field or instructor.

Further modules:

Other modules which are a reasonable addition can be chosen, e.g. language and communication courses of the Language Centre of the University of Zurich and the ETH Zurich. A maximum of 4 ECTS credits for language courses can be credited (BSc and MSc together)

Internship, tutorial

See information on page 28.

When choosing your elective modules, the following points have to be considered:

- Preconditions for individual modules, as defined in the course book, are also valid for other subjects.
- Depending on the emphasis in Geography, further compulsory modules can be determined.
- Individual sports courses cannot be credited as elective modules.
- Modules at the ETH have to be booked at the ETH via myStudies.

The following elective modules are offered at the Department of Geography:

| ECTS | Module title | Type | Time | Semester | Assessment |
|------|---|------|---------------------|----------|------------|
| 6 | GEO 401 Integratives Projekt | SE | Thur 16-18 | HS/FS | PP, SA |
| 3 | GEO 448 Machine Learning and Geosciences | VU | Thur 10-12 | FS | MP, SA |
| 2 | GEO 803 Solving Geospatial Problems using Matab | BL | September | HS | PP |
| 2 | GEO 805 Natural hazard and risk analysis in high-mountain areas | BL | 3 days in September | HS | PP |
| 1 | GEO 812 Getting started with R for spatial analysis | BL | September | HS | - |
| 3 | GEO 813 Vermessungskurs für Geographen/-innen | BL | Easter holidays | FS | SA |
| 3 | GEO 814 Quantification and modelling of the Cryosphere: spatial and thermal processes | VU | Mi 10-12 | FS | SA |
| 3 | GEO 815 Quantification and modelling of the Cryosphere: dynamic processes | VU | Fr 8-10 | HS | SA |
| 4 | GEO 819 The biogeochemistry of plant- soil systems in a changing world | VU | Fr 8-10 | FS | SA, PP |

| | | | | | |
|-----|--|----------|--------------------------------|----------|--------------|
| 2 | GEO 820 Stable isotopes in ecology and soil science | VL | Fr 10-12 | FS | SA |
| 4 | GEO 862 Cold Region Hydrology | VU | Fr 14-16 | FS | SA, PP |
| 6 | GEO 818 Dendro-Ecology | VL BL | Wed 16-18 irregular | HS FS | SA, PP SA |
| 3 | GEO 841 Cities and Globalization | VU | Wed 14-16 | HS | SA |
| 3 | GEO 855 Physics of Glaciers I | VL | Mo 12-15 | HS | MP |
| 3 | GEO 871-881 | VU | see p. 24-25 | HS/FS | |
| 2 | GEO 891 Ringvorlesung: Aktuelle Themen aus der Fachwissenschaft | VL | Mon 8-10 | HS | MP |
| 1 | Regionale Geographie (Fokus und Modulnummer ändert jedes Semester) | VL | HS: Tue 16-18 FS: Fri 12-14 | HS FS | MP |
| 1-2 | GEO 777 Seminar zur grossen Exkursion | BL | irregularly | HS FS | SA |

In addition, all core elective modules or parts of it can be chosen, e.g. GEO 856 Glaciers and high mountains in an environmental context (3 ECTS credits), which is part of GEO 415 Cryosphere dynamics.

Please note: An elective module can only be taken as such, if it isn't part of a chosen core elective module (e.g. GEO 415 can't be combined with 856 and 857. The module GEO 415 includes the courses GEO 856/857 and is a core elective module for the Master's degree in Physical Geography).

5.5 Tutorials

Students, who contribute as tutors in one of the modules of Geography, are awarded two ECTS credits per module. During the entire period of study (Bachelor and Master studies), a maximum of 5 ECTS credits can be earned.

Tutorials are a useful and recommended addition to the studies and a valuable experience. Tutors support the instructors in exercises and seminars of lower semesters. The correction of assignments is also part of the activity of a tutor. Their own knowledge is applied and passed on. Future teachers can collect first experiences in teaching. Furthermore, semester assistant positions are only given to students who have worked as tutors in the respective TSA. Apart from the 2 ECTS credits per tutorial, tutors receive a financial remuneration.

Open positions for tutorials for the following semester are published on the website in the middle of the semester. Students receive information about positions and deadlines by email.

5.6 Internship

An internship is a useful voluntary addition to the academic education. During an internship, first contacts in the job world can be established and practical experiences can increase chances in the job market

For a geographical internship, 2 ECTS credits per four weeks can be credited (for a 100% position). A maximum of ten weeks (100%) can be credited with 5 ECTS credits. During the whole study period (Bachelor and Master together) the crediting is limited to 5 ECTS credits. In order to receive the credits, a member of the professorial staff has to decide if the internship can be credited.

A report of about 5-10 pages has to be handed in and a confirmation of the internship (www.geo.uzh.ch/de/studium/downloads) has to be presented and accepted.

Internship positions have to be looked for and organised independently. Open positions are published on our website and advertised on the Internet.

- www.geo.uzh.ch/en/services/open-positions/
- www.careerservices.uzh.ch/static/jobs/index.php?lang=en
- www.iaeste.ch

6 Geography as a Minor

Geography can be taken as minor with 30 or 60 ECTS credits. Both programs are regulated within the guidelines for the Bachelor's program (Bachelorwegleitung) or on the website.

→ http://www.geo.uzh.ch/de/studium/geographie_nebenfach.html

7 Teaching Diploma for Upper Secondary Education in Geography

Lehrdiplom für Maturitätsschulen

As the Teaching Diploma for Upper Secondary Education can only be completed in German, the following information is provided in German.

Um Geographie an einer Mittelschule unterrichten zu können, wird das Lehrdiplom für Maturitätsschulen im Fach Geographie verlangt. Geographie kann als 1. oder 2. Unterrichtsfach gewählt werden. Es kann bereits während des Masterstudiums mit der didaktischen Ausbildung begonnen werden, ein abgeschlossenes Geographiestudium ist jedoch Voraussetzung für den Erwerb des Lehrdiploms für Maturitätsschulen. Die didaktische Ausbildung wird vom Institut für Erziehungswissenschaften (IfE) angeboten. Dafür ist eine Doppelimmatrikulation nötig.

→ <http://www.geo.uzh.ch/de/studium/lehrdiplom.html>

→ www.ife.uzh.ch/llbm.html

Bewerbungsfristen Doppelimmatrikulation:

Beginn im Herbstsemester:

30. April

Beginn im Frühjahrssemester:

30. November

Institut für Erziehungswissenschaften (IfE) UZH

Abteilung Lehrerinnen und Lehrerbildung Maturitätsschulen (LLBM)

Kantonsschulstrasse 3

8001 Zürich

Tel. 044/634 66 55

✉ sekretariat.llbm@ife.uzh.ch

7.1 Geographie als 1. Unterrichtsfach

Als Basis für das Lehrdiplom für Maturitätsschulen mit Geographie im Hauptfach dient der Bachelor- und Masterabschluss in Geographie. Das Lehrdiplom für Maturitätsschulen kann – muss aber nicht – neben dem Fach Geographie auch in einem 2. Unterrichtsfach (z.B. Geschichte, Biologie, Chemie, Physik, Mathematik) erworben werden. Das 2. Unterrichtsfach kann ein Fach aus der Mathematisch-naturwissenschaftlichen oder der Philosophischen Fakultät sein, **nicht** aber eines aus der wirtschaftswissenschaftlichen Fakultät oder der ETH, insbesondere Sport. Die Anforderungen für den fachlichen Teil in einem 2. Unterrichtsfach betragen 90 ECTS Credits. Informationen über die Anforderungen können beim Institut für Erziehungswissenschaften bezogen werden. Studierende, welche das Lehrdiplom für Maturitätsschulen in einem 2. Unterrichtsfach erwerben möchten, sollten daher bereits während dem Bachelorstudium Module im entsprechenden Fach belegen. Weiter muss die Fachdidaktik für das entsprechende 2. Unterrichtsfach besucht werden.

7.2 Geographie als 2. Unterrichtsfach

Studierende mit Nebenfach Geographie können Geographie als 2. Unterrichtsfach auswählen, sofern sie auch in ihrem Hauptfach das Lehrdiplom für Maturitätsschulen erwerben. Diese Möglichkeit richtet sich ausschliesslich an Studierende mit einem Hauptfach, welches an Kantonsschulen unterrichtet wird (z.B. Geschichte, Biologie, Physik).

Die fachwissenschaftlichen Voraussetzungen für das 2. Unterrichtsfach Geographie umfassen 90 ECTS Credits. Da die Module klar vorgegeben sind, empfiehlt sich eine frühe Planung des Nebenfachs. Die Liste der fachwissenschaftlichen Voraussetzungen ist auf der Website des GIUZ publiziert.

→ <http://www.geo.uzh.ch/de/studium/lehrdiplom.html>

8 Varia

8.1 Student Society Geography (Fachverein)

The Student Society Geography's primary aim is the protection of the interests of geography students towards the Department. It is close to the University of Zurich Student Association (VSUZH). The Student Society offers the possibility to establish contacts between the students, but it also aims to cooperate with the lecturer as well as with other student societies. The Geoteam organises parties, such as the popular "Geofest", and launched the "DoBar" with big with success. For a continued existence and safeguarding of students' interests, students, especially of lower semesters, are always needed and welcome to join!

→ www.geoteam.uzh.ch

✉ geoteam@geo.uzh.ch

Geoscope – the magazine of the Student Society Geography – discusses current issues of studies in geography. An indispensable study companion for everyone who wants to be actively involved with Geography and the University! The editors ensure that an issue is published twice a year.

→ www.geo.uzh.ch/microsite/geoscope

✉ geoscope@geo.uzh.ch

8.2 Libraries

A number of different libraries are available to students, including:

- Library of the Department of Geography (with reading room)
Room Y25 K22 → www.geo.uzh.ch/de/bibliothek
- Main Library of the University of Zurich, Winterthurerstr. 190
→ www.hbz.uzh.ch

- Zentralbibliothek Zürich, Predigerplatz (www.zb.uzh.ch)
- ETH-Library, ETH-City Campus → www.library.ethz.ch
- Library of Earth Sciences, Sonneggstrasse 5
→ www.library.ethz.ch/Bibliothek-Erdwissenschaften
- Schweizerisches Sozialarchiv, Stadelhoferstrasse 12
→ www.sozialarchiv.ch

8.3 Important University Information Offices

Student Administration Office (Kanzlei)

University Main Building, Rämistrasse 71, 8006 Zürich, room E 8

Tel. 044/634 22 17, Mail: kanzlei@uzh.ch

Opening hours: Monday - Friday: 9.30-12.30 o'clock

→ www.uzh.ch/studies/adresses.html

Student Affairs Office, Faculty of Science (MNF)

University Irchel, room 10-G-23

Tel. 044/635 40 07, Mail: diplom@mnf.uzh.ch

Opening hours: Tue / Thu: 10.00-12.30 / 13.45-16.15,

Wed: 10.00-12.30 (mornings only during semester holidays)

→ www.mnf.uzh.ch

Psychological Counselling Service

Plattenstrasse 28, 8032 Zürich

Tel. 044/634 22 80, Mail: pbs@ad.uzh.ch

Appointments by arrangement, also during semester holidays.

Consultations are free of charge and strictly confidential.

→ www.pbs.uzh.ch

Advisory Centre for Grants and Loans

University Main Building, Rämistrasse 71, 8006 Zürich, room KOL E10

Tel. 044/634 22 04, Mail: studienfinanzierung@ad.uzh.ch

Opening hours: Tue - Fr: 10.00-12.30. Appointments by arrangement.

→ www.studienfinanzierung.uzh.ch/index.html

International Relations Office (Exchange Programs)

University Main Building, Rämistr. 71, 8006 Zürich, room KOL E 17

Tel. 044/634 41 57, Mail: international@int.uzh.ch

Opening hours: Mo - Fr: 9.30 - 12.30 or by arrangement

→ www.int.uzh.ch/contact.html

Academic Sports Association Zurich (ASVZ)

Secretary and information desk: Polyterrasse ETH,

Tel. 044/632 42 10, Mail: info@asvz.ethz.ch

September-Mai: Monday - Friday 10.00 - 16.00 / Thursday 10.00 - 19.00

June-August: Monday - Friday 10.00 - 14.00 o'clock

→ www.asvz.ch

Accommodation Agency

Accommodation (rooms and flats) service for students, lecturers and employees of the University of Zurich and ETH Zurich

Sonneggstrasse 27, 8092 Zürich

Tel. 044/632 20 37, Mail: zimmervermittlung@ethz.ch

Opening hours: Monday, Wednesday - Fr 11.00 - 13.00 o'clock

→ www.wohnen.ethz.ch

Studentische Wohngenossenschaft (Woko)

Sonneggstrasse 63, 8006 Zürich

Tel. 044/632 42 90, Mail: woko@woko.ch

Opening hours: Monday - Thursday 11.00 - 15.00 o'clock

Phone hours: Monday - Thursday 9.00 - 13.00 o'clock

→ www.woko.ch

Employment Agency

Rämistrasse 62, 8001 Zürich

Tel. 044/634 21 73

Opening hours: Mo - Thu 9.00 - 17.00

Open positions are published on the website.

→ www.arbeitsvermittlung.uzh.ch

Other useful links

→ www.students.ch/jobs

→ www.marktplatz.uzh.ch (also for rooms and flats)

Career Services

Hirschengraben 60, 8001 Zürich

Tel. 044/634 21 53 or 54 or 62

→ www.careerservices.uzh.ch

The following section is about the Geographical-Ethnological Society in Zurich. They offer different field trips and lectures on geographical issues. As they are mainly held in German, this section is written in German.

8.4 Geographisch-Ethnographische Gesellschaft Zürich (GEGZ)

Die GEGZ sieht sich als Bindeglied zwischen Hochschule und Öffentlichkeit. Ihr Hauptanliegen ist es, durch Fachvorträge zu verschiedenen aktuellen Leitthemen und durch Exkursionen im In- und Ausland wissenschaftliche Forschungsergebnisse in verständlicher Form zugänglich zu machen. Die aktuell rund 400 Mitglieder zählende GEGZ umfasst junge Geographiestudierende ebenso wie aktive und ehemalige Geographie-Lehrpersonen, Hochschul-Absolventen/Innen und Dozierende verschiedenster Fachrichtungen. Die GEGZ pflegt und ermöglicht ein dichtes fachliches und persönliches Netzwerk. Sie ist als Regionalgesellschaft Mitglied der ASG (Association Suisse de Géographie, Verband Geographie Schweiz). Mit der ASG zusammen bildet die GEGZ die Trägerschaft der «Geographica Helvetica» (Schweizerische Zeitschrift für Geographie). Diese Zeitschrift erscheint *open access* und wird durch ein Herausgeberteam mit Schriftleitung an der Universität Zürich geleitet.

→ www.geo.uzh.ch/gegz

→ www.geographica-helvetica.net

Mitgliedschaft

Der Mitgliederbeitrag beträgt für Studierende pro Jahr 20 Fr., für alle anderen Mitglieder 60 Fr. Darin inbegriffen ist die Fachzeitschrift «Geographica Helvetica», welche vierteljährlich erscheint.

Die Vorträge finden jeweils während dem Herbstsemester alle zwei Wochen jeweils am Mittwoch Abend um 18.15 Uhr im Auditorium D1.2 des Hauptgebäudes der ETH Zürich statt.