

Appendix

To the Programme Regulations 2006 of the
Master's degree programme in Environmental Sciences

31 August 2010 (Version: 1 November 2011)

Applies to students who commence the degree programme in Autumn Semester 2011 or later. For those entering the programme before Autumn Semester 2011 the stipulations of the previous Appendix apply.

This is an English translation only. The original German version is the legally binding document.

This appendix sets out the prerequisites for and further details regarding admission to the Master's degree programme in Environmental Sciences. It supplements the stipulations of the Admission Regulations of ETH Zurich and the Directive on Admission to Master's Degree Programmes.

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1 Profile of requirements

Policy

For admission to the Master's degree programme in Environmental Sciences (subsequently 'the degree programme') all of the following prerequisites must be satisfied.

1.1 Degree qualifications

¹ For admission to the degree programme one of the following is required:

- a. a university Bachelor's degree in Environmental Sciences comprising at least 180 ECTS¹ credits or an equivalent university degree in Environmental Sciences
- b. a Bachelor's degree in Environmental Engineering or Forestry from a Swiss university of applied sciences comprising 180 ECTS² credits
- c. a university Bachelor's degree comprising at least 180 ECTS credits or an equivalent university degree in a discipline whose content covers the academic prerequisites listed in 1.2.

² 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 desired Master's degree programme within the university system where the Bachelor's degree was acquired. The Rector may also demand proof of this, determining whether such proof must come from the home university or from another university in the country where the Bachelor's degree was acquired.

1.2 Academic prerequisites

1.2.1 Knowledge and competences

¹ Attendance of the Master's degree programme in Environmental Sciences presupposes basic knowledge and competences in the disciplines of Mathematics, Natural Sciences, Systems (of Natural Sciences), Social Sciences and Humanities which must in content, scope and quality be equivalent to those covered in the ETH Bachelor's degree programme in Environmental Sciences (discipline requirements profile).

² The **discipline requirements profile** comprises **64 ECTS credits** in total and is based on knowledge and competences covered in the ETH Bachelor's degree programme in Environmental Sciences. This includes training in the relevant methodological scientific thinking and in scientific writing.

³ The discipline requirements profile is structured in two parts, as follows. Details regarding the content of the corresponding course units, which come from the ETH Bachelor's degree programme in Environmental Sciences, are published in the course catalogue (www.vvz.ethz.ch).

¹ ECTS: European Credit Transfer System. Credits describe the average time expended to achieve a learning goal. One credit corresponds to 30 hours of work.

² A Diploma from a Swiss university of applied sciences is considered equivalent to a Bachelor's degree in the same discipline. A Bachelor's degree from a German or Austrian university of applied sciences is considered equivalent to a Bachelor's degree from a Swiss university of applied sciences.

Part 1: Basic knowledge and competences

Part 1a comprises basic knowledge in the areas of Mathematics and Natural Sciences (Biology, Chemistry and Physics). The substance of the following course units from the ETH Bachelor's degree programme in Environmental Sciences is required. The credits acquired in these disciplines must total at least 32. In addition, the number of credits given in parentheses must be acquired in each area.

1aa Mathematics (14 credits)

- Analysis
- Lineare Algebra [Linear Algebra]
- Systemanalyse [Systems Analysis]
- Statistik [Statistics]

1ab Fundamentals of the Natural Sciences (18 credits)

Biology (6 credits)

- Allgemeine Biologie [General Biology]
- Ökologie [Ecology]

Chemistry (6 credits)

- Chemie [Chemistry] I+II

Physics (6 credits)

- Physik [Physics] I+II

Part 1b comprises basic knowledge in the areas of (Natural Science) Systems, Social Sciences and Humanities. The substance of the course units below from the ETH Bachelor's degree programme in Environmental Sciences is required.

The credits acquired in these disciplines must total at least 12. In addition, the number of credits given in parentheses must be acquired in each area.

1ba Systems (6 credits)

Fundamental knowledge of at least two of the following systems is required:

- Hydrosphere
- Atmosphere
- Pedosphere
- Anthroposphere

1bb Social Sciences and Humanities (6 credits)

A basis is required in how scientific knowledge may be integrated into a social, economic, legal, political or philosophical context, and must be acquired via at least two of the following disciplines:

- Sociology
- Psychology
- Economics
- Jurisprudence and Civics
- Political Science
- Philosophy

Part 2: Knowledge and competences related to the specialisation, and independent work

Part 2a comprises at least 15 credits and covers the knowledge and competences in the selected specialisation which are required for completion of the Master's degree programme. The substance of those course units from the ETH Bachelor's degree programme in Environmental Sciences which have been defined as prerequisites for the individual Master's degree specialisations by the Departmental Conference of the Department of Environmental Sciences (D-UWIS) must be acquired. Lists of the current individual requirements for each Master's degree specialisation are published on the D-UWIS website (> Education > Master Course > Master prerequisites).

For **Part 2b** proof of at least one piece of independent written work or a Bachelor's thesis comprising at least 5 credits is required.

1.2.2 Admission with additional requirements

¹ If the academic prerequisites listed in 1.2.1, part 1 are not completely satisfied, admission may be granted subject to the acquisition of the missing knowledge and competences in the form of additional credits (admission with additional requirements).

² The candidate must provide proof of the acquisition of the additional knowledge and competences required by passing the pertaining performance assessments by set deadlines (see Section 5).

³ If the candidate fails said performance assessments or does not respect the set deadlines he/she will be regarded as having failed the degree programme and will be excluded from it.

1.2.3 Admission with specified Master's degree subject selection

If the academic prerequisites listed in 1.2.1, Part 2 are not completely satisfied, the respective student may be compelled to include specified course units in his/her individual Master's degree programme curriculum.

1.3 Language prerequisites

¹ The teaching language of the degree programme is English.

² For admission to the degree programme, proof of sufficient knowledge of English (Level C1)³ must be provided.

³ Applicants to the degree programme who hold a Bachelor's degree from a university of applied sciences must, according to the pertaining additional requirements (see Section 3.2, Subsection 2), also supply proof of sufficient knowledge of German (level C1).

2 Specific stipulations for persons holding a Bachelor's degree in Environmental Sciences or Environmental Engineering from ETH Zurich

Unconditional admission

¹ Holders of a Bachelor's degree in Environmental Sciences or Environmental Engineering from ETH Zurich are unconditionally admitted to the degree programme.

Registration

² Students of the ETH Bachelor's degree programmes Environmental Sciences and Environmental Engineering should enrol in the degree programme directly via www.mystudies.ethz.ch. The admission procedure outlined in Section 4 is dispensed with.

Entering the Master's degree programme

³ Students of the ETH Bachelor's degree programme in **Environmental Sciences** may enrol directly in the programme, as long as

- a. only a total of 30 credits maximum towards the Bachelor's degree are pending; and
- b. the full number of credits required for the Bachelor's degree in the category Basic Courses I and II have been acquired.

⁴ Students of the ETH Bachelor's degree programme in **Environmental Engineering** may enrol directly in the programme, as long as only a total of 60 credits maximum towards the Bachelor's degree are pending. The modalities are oriented towards the stipulations of the Master's degree programme in Environmental Engineering. Listed below are the course unit categories in the Bachelor's programme where missing credits are allowed, and their permitted number. All credits for the Bachelor's degree in those course unit categories not listed here must be acquired.

<i>Category</i>	<i>Permitted number of missing credits</i>
Obligatory subjects	37 credits
Elective modules	5 credits

³ The required language level is measured according to the Common European Framework of Reference for Languages (EFR) scale: *The Common European Framework of Reference for Languages*, p. 23f. www.coe.int/t/dg4/linguistic/Source/Framework_EN.pdf

Elective subjects	4 credits
Compulsory electives GESS	4 credits
Bachelor's thesis	10 credits

⁵ For all Bachelor's degree students already matriculated at ETH Zurich who progress to the ETH Master's degree programme, the following applies:

- a. The normal ETH enrolment dates and deadlines apply.
- b. Admission is provisional until the Bachelor's degree is issued. Admission will be revoked if the Bachelor's degree is not or cannot be issued.

3 Specific stipulations for persons holding Bachelor's degrees in other disciplines

3.1 General regulations

Application

Interested parties who do not hold an ETH Bachelor's degree in Environmental Sciences or in Environmental Engineering should apply through the ETH Zurich Admissions Office for admission to the Master's degree programme and are subject to the admissions procedure set out in Section 4.

3.2 Bachelor's degree in Environmental Engineering or Forestry from a Swiss university of applied sciences

Admission

¹ Admission to the degree programme is guaranteed for those holding a Bachelor's degree in Environmental Engineering or Forestry from a Swiss university of applied sciences, as long as the final Bachelor's degree grade is at least a 5 [according to the Swiss grading system, which involves grades from 1 (lowest) to 6 (highest)],⁴ and the language prerequisites set out in Section 1.3 have been satisfied.

² Admission is always subject to the acquisition of additional study achievements comprising at least 45 credits.

³ The additional requirements to be fulfilled by candidates are structured in two parts, as follows:

⁴ The total grade is always calculated by ETH Zurich. The method of computation used, and other details such as how letter grades are transposed, are stipulated in the Directive on Admission to Master's Degree Programmes.

Additional requirements: Part 1

To fulfil Part 1 of the additional requirements at least 45 credits must be acquired in the disciplines of Mathematics and Natural Sciences, as indicated below. The course units to be completed come from the curriculum of the ETH Bachelor's degree programme in Environmental Sciences. Details regarding their content are published in the course catalogue (www.vvz.ethz.ch).

- Mathematik [Mathematics] I and II (13 credits)
- Chemie [Chemistry] I and II (9 credits)
- Biologie [Biology] I–IV (13 credits)
- Physik [Physics] I and II (10 credits)

Additional requirements: Part 2

To fulfil Part 2 of the additional requirements the candidate may be obliged to acquire knowledge essential for the chosen specialisation. What this entails will be determined by the supervisor on the authority of the admissions committee.

If no independent written work or a Bachelor's thesis comprising 5 credits can be verified, independent written work will also form part of the additional requirements to be fulfilled.

Entering the Master's degree programme

⁴ Candidates who have been granted admission may enter the Master's degree programme when they have completed the preceding Bachelor's degree programme.

3.3 Bachelor's degree in another discipline

3.3.1 General regulations

Admission

¹ For admission to the degree programme all the prerequisites set out in Section 1 must be satisfied. Good to very good performance in the preceding course of studies is also required.

² Admission may be subject to additional requirements and/or specified Master's degree subject selection.

³ Admission is not possible if the number of additional credits required to satisfy the academic prerequisites exceeds

- 15 credits from Part 1a of the academic prerequisites, or
- 30 credits in total.

3.3.2 Bachelor's degree from ETH Zurich

Entering the Master's degree programme

¹ Students from an ETH Bachelor's degree programme who have been granted admission can enrol in the Master's degree programme once they have acquired that number of credits which would qualify them to enrol in the Master's degree programme consecutive to their original subject.⁵

² For all Bachelor's degree students who are already matriculated at ETH Zurich and who progress to an ETH Master's degree programme, the following applies:

- a. The normal ETH enrolment dates and deadlines apply.
- b. Admission is provisional until the Bachelor's degree is issued. Admission will be revoked if the Bachelor's degree is not or cannot be issued.

3.3.3 Bachelor's degree from another university

Entering the Master's degree programme

Candidates who have been granted admission can enter the programme when they have completed the preceding Bachelor's degree programme.

4 Application and admission procedure

¹ All interested parties – with the exception of matriculated ETH Zurich students from the Bachelor's degree programmes Environmental Sciences and Environmental Engineering – must submit an application for admission to the degree programme. The specifications for application, in particular the documents required and the dates/deadlines for submission, are published on the website of the ETH Zurich Admissions Office (www.admission.ethz.ch).

² Application may be made even if the required preceding degree has not yet been issued.

³ The admissions committee of the degree programme determines how far the background of the candidate corresponds to the profile of requirements and submits an application for admission/rejection to the Director of Studies.

⁴ The Rector makes the final decision regarding admission without additional requirements, admission with additional requirements, or rejection.

⁵ The candidate receives a written admissions decision which includes relevant information concerning any additional admission requirements.

⁵ The permitted number of missing credits is set out in the Programme Regulations of the respective consecutive Master's degree programme (e.g., B.Sc. Physics > M.Sc. Physics).

5 Fulfilling additional admission requirements

5.1 General regulations

¹ Candidates who are admitted subject to the fulfilment of additional requirements must acquire the required additional knowledge and competences before or during the Master's programme via self-study or by attending classes. The corresponding individual performance assessments must take place by set deadlines.

² If the candidate fails said performance assessments or does not respect the set deadlines he/she will be regarded as having failed the degree programme and will be excluded from it.

³ The deadlines and conditions for undergoing said performance assessments depend upon the background of the candidate (see Sections 5.2 and 5.3).

5.2 Candidates with a university Bachelor's degree

¹ Candidates holding a university Bachelor's degree must undertake all of the performance assessments pertaining to the additional admission requirements 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.

² A pass grade in each individual performance assessment is required.

³ A failed performance assessment may be repeated once.

5.3 Candidates with a Bachelor's degree from a Swiss university of applied sciences

¹ Candidates holding a Bachelor's degree from a Swiss university of applied sciences must undertake all of the performance assessments pertaining to the additional admission requirements 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 two years of the start of the Master's programme at the latest.

² The performance assessments may be undertaken as examination blocks. A pass grade in the examination block is achieved if the average of the individual grades is at least a 4.

³ A failed performance assessment or a failed examination block may be repeated once. Repeating an examination block entails repeating all of the performance assessments belonging to it.