

Appendix

To the Programme Regulations 2006 of the
Master's degree programme in Management, Technology and Economics (MTEC)

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 MTEC. It supplements the stipulations of the Admission Regulations of ETH Zurich and the Directive on Admission to Master's Degree Programmes.

Contents

1 Profile of requirements

- 1.1 Degree qualifications
- 1.2 Academic prerequisites
- 1.3 Language prerequisites

2 Specific stipulations for persons holding a Bachelor's degree in Mechanical Engineering or Electrical Engineering and Information Technology

- 2.1 Bachelor's degree in Mechanical Engineering or Electrical Engineering and Information Technology from ETH Zurich
- 2.2 Other Bachelor's degrees in Mechanical Engineering or Electrical Engineering and Information Technology
 - 2.2.1 General regulations
 - 2.2.2 Bachelor's degree in Mechanical Engineering or Electrical Engineering and Information Technology from EPF Lausanne or from an IDEA-League partner university
 - 2.2.3 Bachelor's degree in Mechanical Engineering or Electrical Engineering and Information Technology from other universities

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

- 3.1 General regulations
- 3.2 Bachelor's degree from ETH Zurich
- 3.3 Bachelor's degree from another university

4 Application and admission procedure

5 Fulfilling additional admission requirements

5.1 General regulations

5.2 Performance assessment deadlines and conditions

1 Profile of requirements

The objective of the Master's degree programme in MTEC (subsequently 'the degree programme') is to provide students with training in Management, Technology and Economics at Master's level in addition to their qualifications in Engineering or the Natural Sciences.

Policy

For admission to 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 comprising at least 180 ECTS¹ credits or an equivalent university degree in Mechanical Engineering or Electrical Engineering and Information Technology
- b. a university Bachelor's degree comprising at least 180 ECTS credits or an equivalent university degree in a discipline in the area of
 - Engineering
 - Natural Sciences, with an orientation towards technology

in the context of which the academic prerequisites listed in 1.2 are satisfied.

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.

1.1 Academic prerequisites

1.2.1 Knowledge and competences

¹ Attendance of the Master's degree programme in MTEC presupposes basic knowledge and competences in Mathematics, Physics and Computer Science which is in content, scope and quality equivalent to that covered in the ETH Bachelor's degree programmes in

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.

Mechanical Engineering or Electrical Engineering and Information Technology (discipline requirements profile).

² The **discipline requirements profile** comprises **54 credits** in total and is based on knowledge and competences covered in the ETH Bachelor's degree programmes in Mechanical Engineering or Electrical Engineering and Information Technology. This includes training in the relevant methodological scientific thinking.

³ The discipline requirements profile is structured in two parts, as follows. Details regarding the content of the corresponding course units are published in the course catalogue (www.vvz.ethz.ch).

Part 1: Basic knowledge and competences

Part 1 comprises 14 ECTS credits and covers basic knowledge in analysis, linear algebra, computer science and statistics.

Part 2: Subject-specific knowledge and competences

Part 2 comprises 40 ECTS credits and covers the basic knowledge from the candidate's original degree programme which is required to complete the Master's degree programme.

- a. Candidates with a background in **Engineering**: 40 credits in areas of engineering, such as
 - Physics
 - Mechanics
 - Thermodynamics
 - Fluid Dynamics
 - Automatic Control Engineering
 - Signals and Systems Theory
 - Process Engineering
 - Structural Engineering
 - Hydraulics
 - Materials
 - Chemistry

- b. Candidates with a background in **Natural Sciences**: 40 credits in areas surrounding the understanding, description and modelling of chemical, physical and biological processes:
 - Chemistry
 - Physics
 - Biology

- Numerics, Algorithms, Computer Science, Differential Equations
- Ecology

Here at least 6 credits must be acquired in technology-related areas (e.g., Biotechnology, Environmental Technology, Food Technology, Waste Water Technology).

1.2.2 Admission with additional requirements

¹ If the academic prerequisites listed in 1.2.1 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.

1.3 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 C1²) must be provided.

2 Specific stipulations for persons holding a Bachelor's degree in Mechanical Engineering or Electrical Engineering and Information Technology

2.1 Bachelor's degree in Mechanical Engineering or Electrical Engineering and Information Technology from ETH Zurich

Unconditional admission

¹ Holders of a Bachelor's degree in Mechanical Engineering or Electrical Engineering and Information Technology from ETH Zurich are unconditionally admitted to the degree programme.

² 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

Registration

² Students of the Bachelor's degree programmes in Mechanical Engineering and Electrical Engineering and Information Technology who are already matriculated at ETH Zurich 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 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.

⁴ Students of the ETH Zurich Bachelor's degree programmes in Mechanical Engineering and Electrical Engineering and Information Technology 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.³

2.2 Other Bachelor's degrees in Mechanical Engineering or Electrical Engineering and Information Technology

2.2.1 General regulations

Application

¹ Interested parties holding a Bachelor's degree in Mechanical Engineering or Electrical Engineering and Information Technology which was not issued by ETH Zurich 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.

Entering the Master's degree programme

² Candidates who have been granted admission may enter the Master's degree programme when they have completed the preceding Bachelor's degree programme.

2.2.2 Bachelor's degree in Mechanical Engineering or Electrical Engineering and Information Technology from EPF Lausanne or from an IDEA-League partner university

Unconditional admission

¹ Holders of a Bachelor's degree or equivalent qualification in Mechanical Engineering or Electrical Engineering and Information Technology from the following institutions are guaranteed unconditional admission to the degree programme:

³ 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).

- a. EPF Lausanne
- b. an IDEA-League partner university

² The language prerequisites set out in Section 1.3 still apply.

2.2.3 Bachelor's degree in Mechanical Engineering or Electrical Engineering and Information Technology from other universities

Admission

¹ For admission to the degree programme all the prerequisites listed in Section 1 must be satisfied.

² Admission may be subject to additional requirements.

³ Admission is not possible if, to satisfy the academic prerequisites,

- any additional credits from Part 1 of said academic prerequisites must be acquired
- more than 30 additional credits from Part 2 of said academic prerequisites must be acquired (see Section 1.2.1)

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

3.1 General regulations

Application

¹ Interested parties who hold a qualifying Bachelor's degree in a discipline other than Mechanical Engineering or Electrical Engineering and Information Technology should apply for the Master's degree programme via the ETH Zurich Admissions Office, and are subject to the admissions procedure set out in Section 4.

Admission

² For admission to the degree programme all the prerequisites set out in Section 1 must be satisfied. Very good performance in the preceding course of studies is also required.

³ Admission may be subject to additional requirements.

⁴ Admission is not possible if, to satisfy the academic prerequisites,

- any additional credits from Part 1 of said academic prerequisites must be acquired
- more than 30 additional credits from Part 2 of said academic prerequisites must be acquired (see Section 1.2.1)

3.2 Bachelor's degree from ETH Zürich

Entering the Master's degree programme

¹ 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.

² 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.⁴

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 in Mechanical Engineering and Electrical Engineering and Information Technology – 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.

⁴ 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 are set out in Section 5.2.

5.2 Performance assessment deadlines and conditions

¹ Candidates 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.