

Appendix

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

31 August 2010 (Version: 1 September 2019)

Applies to students who commence or re-enter the degree programme in Autumn Semester 2020 or later.

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

Subject and scope

This appendix sets out the academic and language prerequisites for and further details regarding admission to the Master's degree programme in Management, Technology, and Economics (MTEC). 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

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 ECTS credits⁽¹⁾ (credits) or an equivalent university degree in Mechanical Engineering or Electrical Engineering and Information Technology, or
- b. a university Bachelor's degree comprising at least 180 credits or an equivalent university degree in other Engineering disciplines or in Natural Sciences which – provided that any pertaining additional requirements can be completed within the set framework – satisfies the academic prerequisites listed in Section 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 require proof of a university place, and determines whether said proof must be supplied from the original university or from another university in the country where the Bachelor's degree was acquired.

1.2 Academic prerequisites

¹ Attendance of the Master's degree programme in MTEC presupposes basic knowledge and skills in the disciplines Mathematics, Physics and Computer Science which are in content, scope, quality and level of mastery equivalent to those covered in the ETH Bachelor's degree programmes in Mechanical Engineering or Electrical Engineering and Information Technology (discipline requirements profile).

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

² The **discipline requirements profile** set out below comprises **54 credits** in total and is based on knowledge and skills 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 If an applicant does not completely satisfy the academic prerequisites, admission may be subject to the acquisition of the missing knowledge and skills in the form of additional requirements. Completion of additional requirements is expressed in credits. For further details, see Section 5 below.

⁴ Admission is not possible if the applicant demonstrates academic gaps which are too extensive. For further details, see Sections 2.3 and 3.1 below.

⁵ The **discipline requirements profile** is structured in the two parts set out below. Details regarding the content of these course units are published in the ETH course catalogue (www.courses.ethz.ch).

Part 1: Basic knowledge and skills (14 credits)

Part 1 comprises 14 credits and covers basic knowledge in Analysis, Linear Algebra, Computer Science and Statistics.

Part 2: Subject-specific knowledge and skills (40 credits)

Part 2 comprises 40 credits and covers the basic knowledge and skills from the candidate's original degree programme.

Part 2a: Candidates with a background in **Engineering**: 40 credits in areas of Engineering, such as: (*listed alphabetically*)

- Automatic Control Engineering
- Chemistry
- Fluid Dynamics
- Hydraulics
- Materials
- Mechanics
- Physics
- Process Engineering
- Signals and Systems Theory
- Structural Engineering
- Thermodynamics

Part 2b: Candidates with a background in **Natural Sciences**: 40 credits in areas surrounding the understanding, description and modelling of chemical, physical and biological processes: (*listed alphabetically*)

- Biology
- Chemistry
- Ecology
- Numerics, Algorithms, Computer Science, Differential Equations
- Physics

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⁽²⁾) must be provided.

³ The required language certificates must be submitted by the application deadline. The ETH Zurich publishes a list of the language certificates accepted.

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

2.1 Bachelor's degree from ETH Zurich in Mechanical Engineering or Electrical Engineering and Information Technology, or enrolled status in one of these two programmes

Admission without additional requirements

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

Entering the Master's degree programme

² Students of the ETH Zurich Bachelor's degree programmes in Mechanical Engineering or Electrical Engineering and Information Technology may enrol in the degree programme directly via www.mystudies.ethz.ch 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 The admission procedure outlined in Section 4 is dispensed with. In detail:

- 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 The required language level is measured according to the Common European Framework of Reference for Languages (CEFR) scale.

³ The permitted number of missing credits is set out in the Programme Regulations of the respective consecutive Master's degree programme (e.g., BSc Mechanical Engineering → MSc Mechanical Engineering).

2.2 Bachelor's degree from EPF Lausanne in Mechanical Engineering or Electrical Engineering and Information Technology

Admission without additional requirements

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

² The language prerequisites listed in Section 1.3 still apply.

Entering the Master's degree programme

³ Candidates who have been granted admission may only enter the programme when they have completed the preceding Bachelor's degree programme.

2.3 Bachelor's degree in Mechanical Engineering or Electrical Engineering and Information Technology from a university outside Switzerland

¹ Holders of a Bachelor's degree or the equivalent in Mechanical Engineering or Electrical Engineering and Information Technology from a university outside Switzerland must satisfy all of the academic and language prerequisites listed in Section 1 above for admission to the degree programme.

² Admission may be subject to additional requirements.

³ Admission is not possible if

- a. the language prerequisites have not been satisfied (see Section 1.3), or
- b. in the context of academic prerequisites (see Section 1.2):
 - 1) any credits from Part 1 of said academic prerequisites must be acquired, or
 - 2) more than 30 credits from Part 2 of said academic prerequisites must be acquired.

Entering the Master's degree programme

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

3 Specific stipulations for persons holding Bachelor's degrees in other Engineering disciplines or in Natural Sciences

3.1 University Bachelor's degree or enrolled status in an ETH Zurich Bachelor's degree programme

¹ If they are able to satisfy all the academic and language prerequisites set out in Section 1 within the given framework and have demonstrated very good performance in the preceding Bachelor's degree programme persons may also be admitted to the degree programme who

- a. hold a university Bachelor's degree or the equivalent in Natural Sciences or in an Engineering discipline other than Mechanical Engineering or Electrical Engineering and Information Technology; or
- b. are enrolled at ETH Zurich in a Bachelor's degree programme other than Mechanical Engineering or Electrical Engineering and Information Technology.

² Admission may be subject to additional requirements.

³ Admission is not possible if

- a. the language or performance prerequisites cannot be fulfilled, or
- b. in the context of academic prerequisites (see Section 1.2):
 - 1) any credits from Part 1 of said academic prerequisites must be acquired, or
 - 2) more than 30 credits from Part 2 of said academic prerequisites must be acquired.

3.2 Entering the Master's degree programme

¹ To students enrolled in an ETH Zurich Bachelor's degree programme (*not Mechanical Engineering or Electrical Engineering and Information Technology*) who have been admitted to the Master's degree programme, the following applies:

- a. They may enrol in the 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
- b. The normal ETH enrolment dates and deadlines apply.
- c. 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 All other Candidates who have been granted admission can only enter the degree programme when they have completed the preceding Bachelor's degree programme.

⁴ The permitted number of missing credits is set out in the Programme Regulations of the respective consecutive Master's degree programme (e.g., BSc Physics → MSc Physics).

4 Application and admission procedure

¹ All interested parties – with the exception of matriculated ETH Zurich students from the Bachelor's degree programmes Mechanical Engineering or 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 Applications will not be considered if

- a. they are submitted late or not in the correct form, or
- b. any pertaining fees have not been paid.

⁴ 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.

⁵ At the request of the Director of Studies the Rector decides to admit or reject the candidate.

⁶ The candidate receives a written admissions decision which includes relevant information concerning any additional admission requirements.

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 degree 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 Deadlines and conditions for performance assessments

¹ Candidates must undertake all of the performance assessments pertaining to the additional admission requirements within one year of starting the Master's degree programme at the latest. The additional requirements, including any assessment repetitions, must be fulfilled at the latest within 18 months of starting the Master's degree programme.

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

³ A failed performance assessment may only be repeated once.