

Appendix

To the Programme Regulations 2007 of the
Master's degree programme in Medicinal and Industrial Pharmaceutical Sciences (MIPS)

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 MIPS. 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 MIPS (subsequently 'the degree programme') all of the following prerequisites must be satisfied.

1.1 Degree qualifications

¹ Applicants for admission to the degree programme require:

a university Bachelor's degree comprising at least 180 ECTS⁽¹⁾ credits or an equivalent university degree in a discipline in the context of which the academic and performance prerequisites listed in 1.2 and 1.4 have been satisfied. Said disciplines include, in particular:

- Pharmaceutical Sciences
- Pharmacy
- Pharmaceutical Engineering
- Pharmaceutical Technology

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 MIPS presupposes basic knowledge and competences in the disciplines Mathematics, Chemistry, Biology, Physics and Computer Science which must in content, scope and quality be equivalent to those covered in the ETH Bachelor's degree programme in Pharmaceutical Sciences (discipline requirements profile).

² The **discipline requirements profile** comprises **149 ECTS credits** in total and is based on knowledge and competences covered in the ETH Bachelor's degree programme in Pharmaceutical Sciences. This includes training in the relevant methodological scientific thinking and in experimental competence.

³ The discipline requirements profile is structured in the two parts set out below. The substance of the course units listed, which come from the first two years of the ETH

¹ ECTS: European Credit Transfer System. Credits describe the average time expended to achieve a learning goal. One credit corresponds to 25-30 hours of work.

Bachelor's degree programme in Pharmaceutical Sciences, is required. Details regarding the content of these course units are published in the course catalogue (www.vvz.ethz.ch).

Part 1: Basic knowledge and competences

Part 1 comprises 110 credits and covers basic knowledge and competences in the disciplines of Mathematics and the Natural Sciences.

- Mathematik [Mathematics] (11 credits)
- Informatik [Computer Science] (4 credits)
- Allgemeine Chemie, Vorlesung und Praktikum [General Chemistry, lecture and practical] (4 + 8 credits)
- Organische Chemie [Organic Chemistry] (5 credits)
- Systematische Biologie [Systematic Biology] (5 credits)
- Grundlagen der Biologie [Basic Biology] IA: Allgemeine Biologie [General Biology] (5 credits)
- Grundlagen der Biologie IB: Molekularbiologie und Biochemie [Molecular Biology and Biochemistry] (5 credits)
- Physik [Physics] (8 credits)
- Statistik [Statistics] (3 credits)
- Physikalische Chemie, Vorlesung + Praktikum [Physical Chemistry, lecture and practical] (7 + 4 credits)
- Analytische Chemie [Analytical Chemistry] (2 credits)
- Organische Chemie, Praktikum [Organic Chemistry, practical] (8 credits)
- Anatomie und Physiologie, Vorlesung + Praktikum [Anatomy and Physiology, lecture and practical] (12 + 1 credits)
- GL der Biologie IIA: Zellbiologie, Vorlesung + Praktikum [Cell Biology, lecture and practical] (5 + 8 credits)
- GL der Biologie IIB: Neurobiologie, Mikrobiologie, Immunologie [Neurobiology, Microbiology, Immunology] (5 credits)

Part 2: Subject-specific knowledge and competences

Part 2 comprises 39 credits and covers subject-specific knowledge in Pharmaceutical Sciences.

- Medizinische Chemie, Vorlesung + Praktikum [Medicinal Chemistry, lecture and practical] (4 + 3 credits)
- Pharmazeutische Analytik, Vorlesung + Praktikum [Pharmaceutical Analytics, lecture and practical] (4 + 3 credits)
- Galenische Pharmazie, Vorlesung + Praktikum [Galenical Pharmacy, lecture and practical] (4 + 5 credits)
- Pharmazeutische Immunologie [Pharmaceutical Immunology] (2 credits)
- Gentechnologie [Gene Technology] (2 credits)

- Pharmakologie und Toxikologie, Vorlesung + Tutorat [Pharmacology and Toxicology, lecture and tutorial] (4 + 1 credits)
- Biopharmazie, Vorlesung + Praktikum [Biopharmacy, lecture and practical] (3 + 2 credits)
- Klinische Chemie [Clinical Chemistry] I (1 credit)
- Qualitätsmanagement in der pharmazeutischen Praxis [Quality Management] I (1 credit)

1.2.2 Degrees which satisfy the academic prerequisites

The academic prerequisites listed in Section 1.2.1 are fully satisfied by a Bachelor's degree from the following universities:

- ETH Zurich (examination centre Zurich)
- University of Basel (examination centre Basel)
- University of Geneva (Ecole de Pharmacie Genève-Lausanne, examination centre Geneva)

1.2.3 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 4).

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 C1)⁽²⁾ must be provided.

1.4 Performance prerequisites

Admission to the degree programme presupposes:

- a. (if the degree has been completed) a good to very good study performance record in the preceding Bachelor's degree programme
- b. (if the degree has not yet been completed) a good to very good study performance record in the first two years of the ETH Zurich Bachelor's degree programme in Pharmaceutical Sciences and pass grades in the course units Pharmaceutical Immunology and Genetic Engineering

These performance prerequisites are essential but their fulfilment does not guarantee automatic admission to the degree programme.

2 Specific stipulations for admission and entering the degree programme

2.1 General regulations

Application

¹ All interested parties should apply through the ETH Zurich Admissions Office for admission to the degree programme and are subject to the admissions procedure set out in Section 3.

Admission

² For admission to the degree programme all of the prerequisites set out in Section 1 must be satisfied.

³ Admission may be subject to additional requirements.

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

- more than 18 credits from Part 1 of said academic prerequisites must be acquired (see Section 1.2.1), or
- more than 12 credits from Part 2 of said academic prerequisites must be acquired (see Section 1.2.1), or
- more than 30 credits in total must be acquired.

² The required language level is measured according to the Common European Framework of Reference for Languages (EFR) scale: *Common European Framework of Reference for Languages*, p. 23f. www.coe.int/t/dg4/linguistic/Source/Framework_EN.pdf

2.2 Application with a 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 directly in the Master's degree programme, provided that only 8 credits maximum towards the Bachelor's degree are pending.

² For all Bachelor's degree students who are already matriculated at ETH Zurich and 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.

2.3 Application with a Bachelor's degree from another university

Entering the Master's degree programme

Candidates whose applications are accepted may enter the programme when they have successfully completed the preceding Bachelor's degree course.

3 Application and admission procedure

¹ All interested parties 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 requirements profile 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 Fulfilling additional admission requirements

4.1 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 4.2.

4.2 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.