

Eidgenössische Technische Hochschule Zürich Swiss Federal Institute of Technology Zurich

Department of Biology (D-BIOL) Detailed stipulations regarding the doctorate

of 27 January 2022

This English translation serves information purposes only and has no legal force. The original German version is the legally binding document.

The ETH Zurich Executive Board,

at the request of the Department of Biology at ETH Zurich¹, and pursuant to Art. 52 of the ETH Zurich Ordinance on the Doctorate of 23 November 2021²,

hereby decrees the following detailed stipulations regarding the doctorate:

Section 1: General provisions

Art. 1 Purpose

¹ These detailed stipulations set out the department-specific provisions governing the doctorate at the ETH Zurich Department of Biology (D-BIOL). They are based on the fundamental provisions of the ETH Zurich Ordinance on the Doctorate of 23 November 2021³ and on the Rector's Implementation Provisions for the ETH Zurich Ordinance on the Doctorate of 23 November 2021⁴.

Section 2: Recruitment and admission to the doctorate

Art. 2 Doctoral programmes

In addition to regular doctoral studies, D-BIOL also offers doctoral students the option of participating in doctoral programmes at the «Life Science Zurich Graduate School».

² The measures described below are intended as a contribution to quality assurance of doctoral theses at D-BIOL. Decisive for the quality of doctoral theses are the doctoral students, their supervision and the project topic.

¹ Resolution of the D-BIOL Department Conference of 8 December 2021 (approval of the detailed stipulations)

² SR **414.133.1**

³ SR **414.133.1**

⁴ RSETHZ **340.311**

Art. 3 Doctoral plan

¹ Doctoral plans comprise a maximum of five pages including the title page (content: approximately 2000 words), and are structured as follows:

Title page:

- working title of the doctoral thesis
- name and contact information of the doctoral student
- institute where the doctoral thesis is being conducted
- name of the doctoral programme (if one is being completed)
- names of all members of the doctoral committee
- start and planned end date of the doctoral thesis
- planned date of the aptitude colloquium

Content:

- an introduction to the topic that is generally understandable to biologists
- research questions (hypotheses) and aims of the doctoral thesis
- experimental approach/strategy
- results already achieved before submission of the doctoral plan (optional)
- schematic timetable
- expected publications
- details of references cited in the text
- timetable of extended doctoral studies (if these are required)
- teaching commitments
- other tasks

Art. 4 Aptitude colloquium

- ¹ The aptitude colloquium is an oral examination of at least 60 minutes' duration. It consists of a presentation by the doctoral student (duration: maximum 30 minutes) followed by a discussion between the doctoral student and the aptitude committee on the research project described in the doctoral plan.
- ² Aptitude colloquia can be conducted in the partial or full physical presence of the aptitude committee and the doctoral student, or entirely by video conference.
- ³ The chairperson of the aptitude committee is responsible for the minutes of the aptitude colloquium and informs the doctoral student orally of the decision of the aptitude committee after the aptitude colloquium.

² The doctoral plan must be submitted to the aptitude committee and the doctoral committee no later than ten months after provisional admission.

Art. 5 Aptitude committee

- ¹ The aptitude committee is composed of the doctoral committee and the chairperson of the aptitude committee.
- ² The aptitude committee must be chaired by one of the following:
 - a. a member of the doctoral committee
 - b. a person appointed by the doctoral committee, who must be a full or associate professor of D-BIOL

Art. 6 Doctoral committee

- ¹ Each D-BIOL doctoral student is required to assemble a doctoral committee in agreement with the doctoral thesis supervisor. This committee must be established and the details submitted to the doctoral committee for approval at the latest when the doctoral plan is submitted. The composition of the doctoral committee must be mentioned on the title page of the doctoral plan.
- ² The D-BIOL doctoral committee is composed of at least the following persons:
 - a. the doctoral thesis supervisor
 - the second advisor (usually a D-BIOL professor, a D-BIOL adjunct professor or a D-BIOL *PrivatdozentIn*)
 - c. a working professor from outside ETH Zurich or a person in a professorshipequivalent position with proven expertise in the subject area

The doctoral committee may be supplemented by other members.

- ³ After final admission, meetings between the doctoral student and the doctoral committee take place at least once a year. The doctoral student prepares an annual progress report for the meetings. The meeting's objectives are, in particular, discussion and evaluation of the research work on the basis of the annual progress report, determination of next steps, and where the student stands in their doctoral studies. Further meetings may be held at the request of the doctoral student or the doctoral thesis supervisor.
- ⁴ The doctoral committee meetings do not replace the annual status conversation between the supervisor and the doctoral student. The annual progress report can be used in the context of doctoral committee meetings and the annual status conversation.

Section 3: Supervision of the doctorate

Art. 7 Doctoral thesis supervisor

The supervisor of a doctoral thesis at D-BIOL may be:

- a. a D-BIOL professor
- b. an adjunct professor or *Privatdozentln*, provided that
 - 1. they work full-time at D-BIOL, and
 - 2. the institute to which they belong and D-BIOL have agreed.

Art. 8 Special contact points

Contact points for doctoral students who have questions are listed on the D-BIOL website.

Section 4: Regular doctoral studies

Art. 9 Regular doctoral studies

¹ For doctorates conducted externally, i.e., outside the ETH domain, a doctoral studies programme of equivalent quality must be compiled which is adapted to the individual circumstances.

- ² The doctoral thesis supervisor is responsible for the following tasks:
 - a. checking the proof of ECTS credits for doctoral studies
 - b. confirmation that the corresponding documents could be verified
 - c. confirmation in writing that regulatory requirements have been fulfilled before registration for the doctoral examination.
- ³ Verification of at least 12 credits is required. One credit corresponds to 25-30 hours of work.
- ⁴ Credits earned in doctoral programmes are generally recognised by D-BIOL to the extent foreseen by the corresponding doctoral programme.

Art. 10 Details on acquisition of credits

a. Deepening of knowledge in the research area of the doctoral thesis and broadening of knowledge outside the traditional discipline

Credits can be earned by attending regular courses from the third year of the Bachelor's degree programme, from the Master's programme or from the doctoral programme of ETH Zurich and the University of Zurich as per the details in the corresponding course catalogue. Excluded are block courses from the third year of the Bachelor's programme, and courses whose content corresponds to studies already completed by the doctoral student.

b. Acquisition of cross-disciplinary competences

Credits can be earned, for example, by attending workshops on «Social and Personal Competencies», participating in ETH Zurich committees or commissions, and by attending didactics courses, Teaching Diploma / Teaching Certificate courses and language courses.

In this area, at least 1 credit must be acquired by attending a course on «Good Scientific Practice and Ethics».

Participation in workshops on «Social and Personal Competences» earns the doctoral student either 1 credit (1–3 days without presentation/poster), 2 credits (1–3 days with presentation/poster or 1 week without presentation/poster) or 3 credits (1 week with presentation/poster).

Doctoral students can earn 1 credit per year by participating in one or more ETH Zurich groups and commissions; by representing doctoral students at the D-BIOL Department Conference, Professors' Conference or on the departmental Teaching Commission; or by participating in an institute-internal doctoral student association. Written certification from the executive committee of the respective university group or the respective head of the institute are considered as proof of participation.

Membership of the executive committee of a university group can earn the student 1 additional credit per year.

Credits can be earned by attending didactics courses and Teaching Diploma / Teaching Certificate courses; see details in the Course Catalogue.

Credits can be earned by attending language courses; see details provided by the Language Center of UZH and ETH Zurich.

c. Integration into the scientific community

Credits in this area can be earned by attending seminars, colloquia, conferences and «Summer Schools».

1 credit per event can be earned for active participation in internal seminars or colloquia with a presentation. Confirmation of participation is provided by the doctoral thesis supervisor.

If posters are presented or talks given at ETH-external conferences, 1 credit can be earned per poster or talk.

Participation in «Summer Schools» can be awarded either 1 credit (3 days without presentation/poster), 2 credits (2–3 days with presentation/poster or 1 week without presentation/poster) or 3 credits (1 week with presentation/poster).

¹ Credits must be earned in each of the areas described in Para. 2 (a-c).

² The areas are as follows:

Art. 11 Verification of credits and special cases

Art. 12 Extended doctoral studies

Section 5: Doctoral thesis and doctoral examination

Art. 13 Notification and approval of co-examiners

Deadlines and procedures for the notification and approval of co-examiners can be found in the relevant information documents, and on the D-BIOL website in particular.

Art. 14 Organisation of the doctoral examination

Deadlines and procedures for organising the doctoral examination can be found in the relevant information documents, and on the D-BIOL website in particular.

Art. 15 Doctoral examination and presentation

¹ Before the doctoral student registers for the doctoral examination their credits must be verified by the D-BIOL Doctoral Administration. Documents verifying successful completion of one of the activities listed in Art. 10 are accepted.

² Should difficulties arise in applying the recommendations listed in Art. 10, the Director of Studies of Biology can decide on exceptions in consultation with the doctoral thesis supervisor.

¹ It is recommended that extended doctoral studies be completed within two years of provisional admission.

² Extended doctoral studies comprise a maximum of 12 credits.

¹ The doctoral examination consists of a 20-minute presentation followed by a 10-minute question-and-answer session with the audience. This is followed by a non-public oral examination by the examination committee lasting at least one hour.

² Doctoral examinations can be conducted in the partial or full physical presence of the examination committee and the doctoral student, or entirely by video conference.

Section 6: Final provisions

Art. 16 Transitional provisions regarding the research plan and the doctoral committee

The following provisions apply to doctoral students who have been provisionally – but not yet definitively – admitted before 1 January 2022.

a. The doctoral students must prepare a research plan with the following details:

Title page

- working title of the doctoral thesis
- name and contact information of the doctoral student
- institute where the doctoral thesis is being conducted
- name of the doctoral programme (if one is being completed)
- names and signatures of all members of the doctoral committee
- start and planned end date of the doctoral thesis

Content

- an introduction to the topic that is generally understandable to biologists
- research questions (hypotheses) and aims of the doctoral thesis
- experimental approach/strategy
- results already achieved before submission of the research plan (if no data are available, state clearly why not)
- schematic timetable
- expected publications
- details of references cited in the text
- teaching commitments and other obligations
- b. The doctoral students must submit the research plan to the doctoral committee within twelve months of provisional admission. Extensions to this deadline require the approval of the doctoral committee. The supervisor submits the research plan to the doctoral committee for approval.
- c. The doctoral committee consists of at least the following persons:
 - the doctoral thesis supervisor
 - the second advisor (usually a D-BIOL professor, a D-BIOL adjunct professor or a D-BIOL *PrivatdozentIn*
 - a working professor from outside ETH Zurich or a person whose proven expertise in the subject area makes them equal to a professor

Art. 17 Transitional provisions regarding regular doctoral studies

Doctoral students who are completing their regular doctoral studies under the previous regulations in accordance with Art. 65 of the ETH Zurich Ordinance on the Doctorate are subject to the provisions set out in Annex 1.

Art. 18 Entry into force

These detailed stipulations enter into force retroactively on 1 January 2022. They replace the detailed D-BIOL stipulations on individual doctoral studies of 11 March 2014.

Application of salary rates

Salary rates for doctoral students are applied in accordance with Art. 8, Para. 3 of the Ordinance on Scientific Personnel at ETH Zurich⁵, in association with Section 1 (3) of the Directives for Doctoral Students Employed at ETH Zurich⁶.

At D-BIOL salary rates are uniform for all doctoral students. Doctoral student teaching or service tasks are distributed among D-BIOL doctoral students according to the principle of equality.

⁵ SR **172.220.113.11**

⁶ RSETHZ **622**

Annex 1

Individual Doctoral Studies under Previous Regulations

Doctoral Studies

- 1 General Rules
 - 1.1 The department requires a doctoral thesis supervisor, together with the doctoral student, to set up the plan for a doctoral study program, which adequately encompasses both the topic of the doctoral thesis and the interests of the student within the framework of the Ordinance on Doctoral Studies at ETH Zurich of 1 July 2008.
 - 1.2 For doctoral studies undertaken **externally at non-ETH Zurich institutions**, a study program should be set up that is **qualitatively equivalent** to that at ETH Zurich and suited to the individual circumstances.
 - 1.3 The restrictions on the doctoral studies choice possibilities for a student with a foreign mother tongue should be taken suitably into account.
 - 1.4 It is the supervisor's responsibility to supervise the **proof of credit units** for doctoral studies, to ensure the **verifiability** of corresponding documents and to **confirm in writing the fulfilment of the regulatory requirements** prior to registration for the doctoral examination.
 - 1.5 A minimum of 12 credit points has to be presented. One credit point is equal to an effort of 25 30 hours of work.
 - 1.6 Credit points obtained in doctoral programs are generally recognized to the extent that the corresponding doctoral program provides for them.
- 2. Details for the Acquisition of Credit Points
 - 2.1 Lectures at ETH Zurich and the University of Zurich A minimum of **2 credit units** should be obtained from formal courses taken in the 3rd year of the BSc curriculum and/or in the MSc curriculum and/or in doctoral programs (with proof of performance).
 - Biology lectures

In principle, all of the biology courses offered in the 3rd year of the BSc curriculum and in the MSc curriculum at ETH Zurich or at the University of Zurich are eligible for the acquisition of credit units. Courses not included are those having a subject content equivalent to pre-graduate courses already taken by the student.

- Courses offered by other departments at the ETH Zurich Courses offered by other ETH Zurich departments, especially in "Social Sciences and Humanities" (D-GESS), are eligible for the acquisition of credit units.

2.2 Courses from other institutions

A maximum of **four credit units** can be acquired from completed **language courses**.

Other courses may be recognised provided that confirmation of the course scope, content and completion can be provided which allows the course to be evaluated.

- 2.3 Activity as a member of a commission or a representative of the doctoral students in the D-BIOL department conference

 One credit unit per semester may be gained through active participation in one or more ETH Zurich committees or commissions. Representation by a doctoral student as a delegate for other doctoral students in the D-BIOL department conference is worth 0.5 credit units per semester. A maximum of 2 credit units may be gathered in this manner.
- 2.4 Active participation in ETH Zurich-external congress meetings (poster and/or oral presentation)

One poster and/or one oral presentation of the research work at an ETH Zurich-external conference is in each case worth **one credit unit** (a maximum of **2 credit units**).

2.5 Participation in workshops

An active participation in a one-week workshop or in a one-week continued education course is worth 2 credit units. A total of up to 4 credit units may be gained in this manner.

2.6 Participation in institute seminars

An active participation in institute seminars is worth a maximum of **0.5 credit units per year**. It is the supervisor's duty to confirm the claimed participation.