Regulations for doctoral studies at the Institute for Atmospheric and Climate Science (IAC ETH)¹

This document is provided to all PhD students at the beginning of the doctorate by the respective secretariat. It is also available at https://wiki.iac.ethz.ch/Intranet/IntraPhd.

The regulations of the doctoral studies at IAC follow those of the ETH regulations ("Doktoratsver-ordnung"², "Ausführungsbestimmungen des Rektors zur Doktoratsverordnung"³) as well as the regulations of the Department Umweltsystemwissenschaften ("Detailbestimmungen zum individuellen Doktoratsstudium"^{4,5}). Compare also https://www.ethz.ch/de/doktorat.html and https://www.usys.ethz.ch/doktorat.html.

The regulations are issued by the institute board ("Institutsleitung", abbreviated IL).

1 Overview

1.1 Validity

These regulations are valid for all PhD students holding a position at the Institute for Atmospheric and Climate Science (IAC). With the exception of Paragraphs 1.8, 1.13 and Section 7 the regulations also apply to external PhD students with a main supervisor ("LeiterIn") at IAC.

1.2 Supervisor

The professor designated to have primary responsibility for the PhD student is referred to as the supervisor. He/she guarantees a continuous supervision of the PhD student. The supervision can be shared with a senior scientist or a PostDoc.

The PhD student and the supervisor define the project together.

1.3 Research Plan

The PhD student is responsible for the research plan (as defined in the overarching ETH regulations⁶). He defines and revises the research plan in consultation with the supervisor during the first year of the project. The research plan should also include considerations of the risks of failure within the project. See Paragraph 3.5.

1.4 Duration

The funding of the PhD is generally planned for three years. The three-year period ends with the preexam submission of the thesis to the doctoral administration of ETH.

The PhD may be extended in special cases following the guidelines in Section 2.

¹ Version of 17.9.2015, replaces former version of 20.4.2013

² SR 414.133.1

³ RSETHZ 340.311

⁴ Detailbestimmungen

⁵ Änderungen Detailbestimmungen

⁶ SR 414.133.1 Art. 11

The PhD student's position may be terminated in cases of mutual agreement, or after 18 months if the PhD committee does not support the continuation (see Section 3).

1.5 Doctoral Committee and PhD interviews

A doctoral committee overviews the PhD student's progress regarding scientific advance and organizational issues. The composition and duties of the committee are as follows:

- a. The committee includes a minimum of three persons. One is the supervising professor, optionally supported by additional supervisors. One member must be either a professor or a senior scientist from a different group of the IAC. In special cases the IL can appoint a non-IAC scientist instead.
- b. The members of the doctoral committee are approved by the IL.
- c. The committee holds the doctoral interviews (see Section 2). At least two doctoral interviews take place during the first year of the doctorate.
- d. Based on the second doctoral interview, the committee decides on the continuation of the doctoral studies past 18 months. In special cases it can defer the decision to a third interview.

1.6 PhD defense

The defense process follows the guidelines as given in by the Department⁷ and by ETH⁸.

1.7 Disagreement

In case of disagreement, the PhD student, supervisor, and committee members have, at any time, the right to request a discussion with the IL. Alternatively or in addition, Peter Isler or Erich Fischer can be contacted and asked to help finding a suitable mediator for the case.

1.8 Salary and Working Time

The following regulations are valid for PhD students starting after January 1, 2015. For PhD students starting before, transition regulations apply (Section 7).

- a. The PhD students receive a 100 % salary corresponding to ETH salary class 1 during the first 18 months, and ETH salary class 2 during the subsequent 18 months.
- b. Potential extension of funding after the 36-month period will be in salary class 2 as well, in general up to month 39.
- c. The first 2 contracts will be issued for 18 months each.
- d. Upon request and with the agreement of the supervisor and the IL, the working time and associated salary can be reduced to 80%. The funded duration of the thesis will then be adjusted accordingly (see Section 2).
- e. Exceptions to these regulations are possible subject to an agreement with the supervisor, IL, or as further specified under Section 2.

1.9 Doc Jobs

a. The duties arising in teaching and infrastructure at the IAC ("Doc Jobs") are assigned amongst the PhD students.

⁷ USYS Guidelines

⁸ SR 414.133.1 Art. 26 - 33

- Depending on the Doc Job, they are assigned by the Doc Job responsible in consultation with the PhD student, or during a Doc Job bazaar. The attendance at the Doc Job bazaar is compulsory.
 PhD students absent without a valid excuse may be assigned Doc Jobs by the bazaar administration. Excuses are to be directed to the bazaar administration.
- c. According to the work load of each Doc Job, the PhD students receive a certain amount of Doc Job days for their work.
- d. Every PhD student should reach 50-55 Doc Job days during his doctoral studies. The minimum of Doc Job days for every PhD student is 45. The bazaar administration adjusts these numbers based on the number of PhD students and Doc Jobs.
- e. The integrated workload during the whole doctoral studies must not exceed that specified in the regulations of the department (67.5 days throughout the 3-year period, accounting for 1.5 years in salary class 1 and 2).

1.10 Course work

The PhD students are expected to attend courses of the institute, ETH and/or other research institutions to supplement their studies. At least 12 credit points must be obtained during the PhD. The acquisition of the credit points follows the regulations of the ETH, the department^{9, 10}, and the institute (see Paragraph 4.1).

1.11 Colloquium

The PhD students are expected to attend the institute colloquium in order to extend and deepen their knowledge in atmospheric and climate science.

1.12 Supervision of Bachelor and Master Theses

PhD students may supervise bachelor and master theses on a voluntary basis.

1.13 Vacations

The vacations of the PhD students are to be chosen such that they do not conflict with teaching and research duties.

In exceptional circumstances the PhD students can be granted an unpaid leave of absence. See Paragraph 2.1d.

2 Details: Duration of the doctoral studies

This Section extends on Paragraph 1.4.

2.1 Automatically funded extensions

Automatically funded extensions are granted for 11

- a. Prolonged illness
- b. Paid maternity (or paternity) leave (according to ETH regulations)
- c. Civil and military service
- d. Unpaid leave of absence (if supported by the supervisor and agreed by the IL).

⁹ Detailbestimmungen, Art. 2 - 7

¹⁰ Änderungen Detailbestimmungen

¹¹ RSETHZ 340.311 Art. 10e

2.2 Extension up to 3 years and 6 months

If a PhD student is unable to officially submit his/her thesis within the regular period (3 years plus extensions as defined above), he/ she notifies the IL before the end of the regular doctoral studies.

The information should include a brief report (< 1 page) about the status of the PhD and the reasons of the delay. The report should include the status of publications.

2.3 Extension up to 4 years

If a PhD student is unable to submit his/her thesis within an extension of 6 months, and if special circumstances justify an exceptional extension, he/she submits a proposal to the IL.

The IL decides whether the funding of the PhD may be continued, subject to the availability of funds from the respective group.

2.4 Inability to submit the thesis within 4 years

The maximum funded PhD period is 4 years. PhD work past this period will not be funded. In cases of unfunded extensions, the IL decides on the use of institute infrastructure.

3 Details: PhD interviews

This Section extends on Paragraph 1.5.

3.1 First interview:

The first interview takes place 5 – 6 months after the beginning of the doctoral studies and is non-public. The PhD students are to demonstrate their competence in:

- a. Formulating a scientific question: What is the problem, the goal? Which answers are expected to be found?
- b. Judging the value of their research project: What is new/ unique in the targeted investigations? What is their significance for the field?
- c. Placing the planned research within the existing scientific literature.

3.2 Second interview:

The second interview takes place approximately 11 - 12 months after the beginning of the doctoral studies. The second interview is public and is held as a seminar. The students:

- a. specify and define more precisely the questions discussed in the first interview,
- b. present first results.

The PhD committee will decide about the continuation of a PhD in this interview. In special cases it can defer the decision to a third interview.

3.3 Time Schedule

In both interviews, an (updated) time schedule for the PhD project has to be presented.

3.4 Third Interview

The doctoral committee or the PhD student may request a third interview. It is to be held before month 18 of the doctorate. The third interview is non-public.

3.5 Research Plan

The doctoral committee should receive a copy of the research plan for the two interviews. The research plan should be distributed to the doctoral committee one week prior to the first interview. The committee discusses changes to the research plan, to be worked out after the interview between the supervisor and the PhD student. After one year the research plan has to be handed in to D-USYS "Sekretariat" 12.

3.6 Progress Meeting

Upon request of the PhD student, an additional progress meeting can take place after 2 years. Alternatively, the student can hold an informal seminar within his/her group.

3.7 Formal course of the interviews

- a. Presentation of the project by the PhD student (15-20 min).
- b. Discussion between the doctoral committee and the PhD student (15-20 min).
- c. Judgment of the project by the committee in absence of the PhD student and the audience (10 min).
- d. Informal feedback between PhD student and committee on assessment, potential problems, and schedule in regard of the doctoral studies, etc. (>10 min).

3.8 Minutes

If requested by the doctoral committee, the PhD student or another member of the interview, the supervisor has to minute the results from the interview and the feedback discussion.

3.9 Organization

- a. The institute is responsible for a database documenting the names and dates (entry, interviews) of the PhD students¹³. The supervisor ensures that new PhD students are entered.
- b. Organization of the doctoral interviews: The PhD students organize the doctoral interviews (date/time, room, announcement of the 2nd interview as a seminar)

4 Details: Course work

This Section extends on Paragraph 1.10.

4.1 Credit Points

Of the 12 credit points required during the doctoral studies, a minimum of 4 must be acquired from outside the research field of the PhD student. Credit points can be acquired in the following ways:

- a. Courses at ETH or other research institutions.
- b. Oral or poster presentation at a conference, meeting, workshop etc. (1 credit point for significant oral presentations and/or new posters, max 3 credits).
- c. Participation as an elected or nominated member in a commission of the department or ETH (one credit for 30 hours, max 2 credits).
- d. Commitment in the organization of a scientific or informational event etc. (one credit for 30 hours, max 2 credits).
- e. Summer or winter schools.

¹² Title Page Research Plan

¹³ http://iac.ethz.ch/secretar/interviews.php

4.2 Reimbursement

For special courses, the costs of lectures may be reimbursed as decided by the supervisor.

The IAC supports the PhD students to take German or English courses (e.g., in scientific writing), and in general the professors budget contributes a maximum of 50% of the costs of two courses.

4.3 Special Cases

In special cases (presentations, workshops, etc.), the supervisor decides about the allocation of credit points. In case of disagreements, the IL decides in consultation with the supervisor.

5 Research integrity and good scientific practice

The PhD students and supervisors are responsible for working along the ETH guidelines for research integrity and good scientific practice^{14, 15}. This includes issues of plagiarism, the proper treatment of scientific data and principles of publications.

6 Coming into force

These PhD regulations become effective at 1.1.2015 for all PhD students starting after that date.

7 Details: Transition regulations

For PhD students that started before January 2015, the following transition regulations apply.

7.1 Salary

- a. Switch from 65% (old ETH salary system) to salary class 2 on January 1, 2015
- b. Switch to salary class 1 on January 1, 2016
- c. In addition, IAC guarantees that the integrated salary over 36 months amounts at least to: 1 year 65% (2013) + 1 year 65% (2014) + 1 year salary class 2.
- d. Deviations below this level are paid as fixed amount in 2016. It amounts to CHF 0 to 2086, depending on the starting date of the doctoral studies.

7.2 Contract durations

- a. On January 1, 2016, contracts are extended to month 18, 24 or 36, whatever applies.
- b. Contract extensions at months 36 will in general be in salary class 2 to up to month 39 (see Section 2).

¹⁴ https://www.ethz.ch/content/dam/ethz/main/research/pdf/forschungsethik/Broschure.pdf

¹⁵ https://rechtssammlung.sp.ethz.ch/Dokumente/133.pdf