

Detailed Guidelines for the Doctoral Studies in D-INFK

Summary of responsibilities

The following list provides an overview of the main responsibilities of the department, the doctoral committee, the chair of the department and supervisors. Details of all responsibilities and procedures are found in the ETH regulations together with the specific department guidelines outlined in this document.

Department Conference

- Election of Doctoral Committee
- Approval of external doctoral students
- Approval of examination committees
- Final decision to award a doctoral degree

Doctoral Committee

- Propose entrance conditions to the Rectorate
- Approve research plans
- Approve credits for doctoral studies
- Approve co-examiners

Head of Department

- Appoints the chairs of examination committees

Supervisors

- Submit proposals for co-examiners
- Submit proposals for examination committees
- Ensure co-examiners submit their reports before the deadline specified by the student administration office

The Department Conference of the Department of Computer Science has decided on the following departmental guidelines based on the Doctoral Regulations of ETH Zurich which took effect from 1 November 2013:

Admission to Doctoral Studies

Art. 1 The Prorector for Doctoral Studies may decide that a candidate does not fulfil the requirements for admission, in which case the Doctoral Committee will be asked to propose entrance conditions. The Doctoral Committee will review the candidate's scientific qualifications and decide on the general level of entrance conditions. They then consult with the supervisor to determine the specific entrance conditions. If the candidate is required to take a course, it must be a course where at least 50% of the assessment is by written examination and the supervisor cannot be an examiner of the course. (DV Art. 9)

The supervisor can propose additional courses to be taken as part of the entrance requirement. Since the formal requirements are based on a candidate passing a course, any requirements that the supervisor might want to impose such as a minimum grade cannot be included as part of the formal entrance conditions and would instead have to be part of their own evaluation process.

Thesis Supervision and Mentoring

Art. 2 The doctoral students must continually inform their supervisor of the status of their work with a written report on a yearly basis or as requested by their supervisor. The students will be given a written response to this status report. (DV Art. 15).

Research Plan

Art.3 Each doctoral student must compile their own research plan. It must be submitted within 12 months together with the form "Approval of the Research Plan" to the Student Administration Office. The submitted document must be approved by the Doctoral Committee. Any extensions to this deadline must be also approved by the Doctoral Committee. (DV Art. 12).

Detailed information regarding the structure and content of the research plan is available in the "D-INFK Guidelines for Research Plans".

Doctoral students are encouraged to submit a proposed study plan together with their research plan in order that it can already be approved at this stage.

Co-examiners

Art. 4 The Doctoral Committee appoints one or more co-examiners based on the proposal of the supervisor and informs the Rectorate. At least one co-examiner must be appointed within three years from the registration date. (DV Art. 15).

The supervisor must submit all proposals for co-examiners to the Student Administration Office. A proposal should contain:

- A statement from the supervisor justifying the choice of co-examiner in terms of scientific expertise appropriate to the research.
- A full curriculum vitae in the case of an external co-examiner.

The Doctoral Committee will decide on the appointment of a proposed co-examiner based on scientific qualifications. Co-examiners should normally have a PhD and be actively engaged in research related to the thesis. In addition to Professors at ETHZ or other institutions, Senior Research Assistants closely working together with the doctoral student or collaborators from a non-academic research institution with experience in research leadership could be appropriate candidates. There is no requirement that individual co-examiners have to be independent.

Credits

Art. 5 Doctoral students must earn at least 12 credits where one credit corresponds to a workload of between 25-30 hours. The doctoral candidate must obtain at least one third of the required credits outside of their research field. (DV Art. 22).

Recognition of credits:

- Any doctoral seminar or Masters course of D-INFK may be attended as part of the doctoral studies. The number of credits will be based on the ECTS scheme as published in the course catalogue. Note that the number of credits, the conditions for credits being awarded and the rules applying to the examination procedure will be the same for both masters and doctoral students.
- Masters and doctoral courses from other departments of ETH Zurich, the University of Zurich and other universities may also be accredited if approved by the supervisor. The number of credits will again be based on the ECTS credit scheme calculated according to D-INFK course guidelines.
- Additional qualification courses for the certificate of teaching ability can be credited with max. 4 credits.
- Advanced language courses can be credited with up to 4 credits.
- A maximum of 4 credits from management and personal development courses offered by ETH Zurich and/or summer schools with scientific content.
- Participation in one or more commissions within ETH Zurich can be rewarded with 1 credit per semester. Being a member of the VMI (Verein des Mittelbaus) in the department conference will be honoured with 0.5 credits per semester. A maximum of 2 credits can be awarded from such activities.
- Any entrance qualification exams will not be counted towards the required credits.
- Credit can only be given for courses and activities that the student participated in after their registration as a PhD student.
- There should not be more than 30% overlap in content between any course attended by a doctoral student under their doctoral studies programme and courses attended under other study programmes. The student must sign a statement to this effect.

It is the responsibility of the doctoral candidate to provide evidence that they have earned at least the minimum number of credits required. The Doctoral Committee has to approve the credits.

Since students can only register for their doctoral examination once they have received confirmation that they have acquired 12 credits, we strongly advise that students have their credits approved at least one semester before the proposed examination, especially in cases where they want to be accredited for external courses and summer schools. If a study plan is submitted together with the research plan, approval can be given at this time which means that further approval will only be required if there are changes to the study plan.

External Doctoral Studies

Art. 6 The thesis may be carried out outside of the ETH domain. In this case, a research plan for the doctoral thesis together with a statement explaining why the doctoral thesis will be carried out externally must be submitted together with the doctoral studies application form. The external institution must confirm that the ETHZ supervisor will have access to the research documents and installations. A proposal for an external thesis must specify at least one co-examiner. Proposals for external doctoral candidates must be approved by the Department Conference based on the recommendation of the Doctoral Committee. (DV Art. 16)

Doctoral Thesis and Examination

Art. 7 The department does not allow published articles to be included directly in a thesis ("cumulative thesis"). The research reported in any publications must be incorporated into the main text of the thesis so that it is a single, coherent document reporting on the thesis work.

The doctoral examination must be taken no later than six years after matriculation and lasts for at least one hour duration (DV Art. 27).

The examination committee will consist of:

- *a.* the Chair of the Examination Committee appointed by the Head of the Department
- b. the thesis supervisor as examiner
- c. between 1 and 3 co-examiners proposed by the supervisor.

All examination committees must be approved by the Department Conference (DK). The supervisor must submit a proposal for the set of co-examiners to serve on the examination committee to the Student Administration Office at least one week before the DK. The proposal must include the following information:

- A statement justifying the choice of co-examiners.
- A declaration of any dependencies between the co-examiners and the supervisor and/or student including research collaborations or former supervisor/student and employee/employer relationships.
- For each external co-examiner, a full curriculum vitae including a list of publications for the last five years.

The set of co-examiners must include at least one independent examiner who has experience of graduating their own PhD students. This would normally be a Professor, but could also be a senior researcher in a non-academic institution provided that they satisfy this condition. If the supervisor of the thesis is not a full (AO/O) Professor, then at least one of the co-examiners must be a full (AO/O) Professor.

The set of co-examiners proposed for the examination committee may be different from the set previously agreed during the course of the thesis.

The set of co-examiners must provide good coverage of the scientific domain of the thesis. It should include at least one computer science Professor.

It is the task of the supervisor to ensure that all co-examiners submit their reports before the deadline specified by the student administration office. If reports are not received by the deadline, then the Doctoral Committee has the right to cancel the examination.

The examination will consist of the presentation of the thesis by the candidate followed by discussions between the examination committee and the candidate. The presentation will normally last 30 minutes and the total examination time 60 minutes. However, extensions to the presentation time may be agreed between the supervisor and the Chair of the examination committee beforehand. It is the responsibility of the Chair of the examination committee to ensure that each examiner has sufficient examination time available.

The examination is open to all academic employees and official guests of the department as well as any external collaborators. At the discretion of the Chair, attendees who are not a member of the examination committee may be allowed to ask questions once the official examination has been declared to be finished.

The examination committee will meet after the examination to decide the outcome. Any elected Professor within D-INFK who attended the examination may also attend this meeting as an observer.

The Chair of the examination committee has to write a protocol of the examination which has to be signed by all members of the committee.

If the committee decides that the candidate has not passed the examination or is required to make changes to the thesis, it is the role of the Chair of the committee to document this in a letter with copies sent to the Rectorate and all examiners via the Student Administration Office.

Awarding the Doctoral Degree

Art. 8 Once a doctoral candidate has passed their exam, they are required to submit an electronic copy of the final version of their thesis to the Student Administration Office who will then prepare a request for the next Department Conference to vote on the awarding of the thesis. A copy of the thesis will be made available online to all members of the Department Conference for at least four days before the meeting. This means that candidates must submit a thesis no later than four days before a Department Conference for it to be discussed at that meeting.

Once approved by the Department Conference, a request is forwarded to the Prorector for Doctoral Studies to award the degree at the next doctoral graduation. This request must be received before a doctoral graduation deadline that is no later than 6 months after the examination. A candidate must therefore ensure that the final version of their thesis is submitted to the Student Administration Office in good time for it to be approved by a Department Conference before the last possible doctoral graduation deadline.

The title and content of a thesis can no longer be altered after approval by the Department Conference. The candidate will be required to submit three bound copies of the thesis to the Rectorate. The supervisor must sign one of the copies to confirm the acceptance of the version submitted.

Dematriculation by ETH Zurich

Art. 9 If a supervisor decides that they are no longer willing to supervise a PhD student, they must notify the student in writing by sending a registered letter to their home address with a copy sent to the Rectorate. The student can either choose to dematriculate by not enrolling for the next semester or they have up to six months to find a new supervisor. (DV Art. 13)

Retirement or Resignation of Supervisor

Art. 10 Professors who leave D-INFK due to retirement or resignation are required to discuss arrangements for their doctoral students with the Head of Department who should then inform the Student Administration Office of these arrangements. If it is known at the time of admission of a doctoral student that the supervisor will leave the department within 3 years, the Rectorate will request a written copy of the agreement between the Head of Department and the supervisor. A copy of this letter should be sent to the Student Administration Office.

Exceptions

Art.11 The Doctoral Committee is responsible for any exceptions to these internal guidelines.

Prof Moira C. Norrie Chair of Doctoral Committee Zürich, 20 May 2015