

D-INFK Guidelines for Research Plans

1. When Should the Research Plan be written?

The ETH regulations require that all PhD students submit a research plan within the first 12 months of their study. Any extensions to this deadline have to be approved by the Doctoral Committee of the Department.

For PhD students in their first year, a reminder will be sent to them after 11 months if they have not submitted a research plan by that time. If there are practical reasons such as illness or a change of supervisor that prevent a PhD student from submitting a research plan by the deadline then they can apply to the Doctoral Committee for an extension.

Please note that if a PhD student is unhappy with any aspect of their supervision, it is the role of the Doctoral Committee to advise them or act as an arbitrator between a student and their supervisor. Any PhD student who feels that they are unable to submit a research plan because of general difficulties with their research supervision should therefore contact any member of the Doctoral Committee for counsel.

2. General Structure of Research Plan

Writing a research plan should help you structure and plan your work and also the thesis that you will write. It will also help you gain valuable experience of writing research proposals.

The following guidelines are intended to help you structure the research plan and also make sure that you include the necessary information. These should be treated as general, minimal requirements. Some individual research groups may have their own guidelines that request further information to be included or specify that the plan should be longer than the number of pages indicated below.

1. Basic Information

At the beginning of the research plan, you should state your name, the name of your supervisor, the date you were accepted as a PhD student at ETH Zurich and the start date of your employment as a research assistant at ETH Zurich.

Signatures of the doctoral student and the supervisor should be included at the end of the plan.

If there have been any changes to your supervision during your doctoral studies, a statement about this should be included in the research plan. If it is known at the time of writing the research plan, that the supervisor will leave ETH Zurich during the expected duration of the thesis, then the research plan should also indicate who will take over the supervision and they should also approve and sign the research plan.

2. Summary (max ½ page)

Your plan should contain a short summary to identify the area of your research, the main goals and the expected contributions to your field of research.

3. Introduction (min ½ page)

A brief introduction to the field of your research and the issues to be addressed should be included. It is important to already make clear what the general methods and outcomes of your research will be. For example, will you be designing an algorithm and proving it correct or developing a framework and designing experiments to evaluate it?

4. State-of-the-Art (min 1 page)

The goal of this section is to describe the setting of your research in terms of previous and related work. It should explain the significance of your research and identify research challenges. In a summary document such as this, you cannot go into details of all related work, so it is important to focus on the main concepts and to reference key papers. It should convince the reader that your research is worth doing and also that you have the necessary background knowledge to carry out that research.

5. Goals of Thesis (min 1 page)

This section should include a paragraph or two describing the main goals of the thesis and then provide details of the following:

- the research questions to be addressed
- the methods to be used
- the expected contributions

6. Detailed Work Plan (min ½ page)

Your work plan should be presented in terms of work packages. Each work package should represent a major piece of work. The number and nature of the work packages will depend on the topic of research and this is where the student should be guided by their supervisor. As a general guideline, a work package should describe a min of 3 and max of 12 months of work. Each work package description should define the task and the expected outcomes.

7. Progress to Date (min ¼ page)

With reference to the work plan, you should describe the progress made to date with details of any results, including publications accepted or submitted.

8. Time Schedule (min ¼ page)

A time schedule showing clearly when you started the PhD, the work packages completed or under way and the envisaged start and end times of the future work packages should be included. This should include estimates of when the thesis will be completed, including the writing of the thesis report.

9. References (max 1 page)

A list of papers referenced in the description of the state-of-the-art should be included. Since the research plan is intended to be a summary document, it is not necessary to include large lists of all papers that you have read, but rather to reference key papers in your area of research.