

Guidelines to Master's Project Proposal

Learning Goals

The main purpose of the Master's Project Proposal is to help students organize ideas, material and objectives for their Master's Thesis, and to begin development of communication skills. The main objectives of the Master's Project Proposal are to demonstrate the following abilities:

- to formulate a scientific question
- to present scientific approach to solve the problem
- to interpret, discuss and communicate scientific results in written form
- to gain experience in writing a scientific proposal

Stages of Development of Master's Project Proposal

- Chose the topic for your Master's Project in collaboration with your prospective main supervisor.
- Define a co-referee and/or additional supervisor together with your main supervisor:
At least main supervisor, co-referee or additional supervisor must be a professor/PD of the Department of Earth Sciences or of the Institute for Atmospheric and Climate Science. At least one examiner must belong to another research group. Exceptions have to be approved by the Director of Studies. Grades from all examiners have equal weight for the final mark.
- Discuss the research questions, goals, approach you intend to take, methodology, data needed and time plan with your supervisors. Define and read key literature.
- Construct a logical outline for the project. Include analysis steps and expected outcomes.
- Fill in details of the project proposal. Write complete proposal in scientific proposal format.
- Hand in the final version to your main supervisor, your co-referee and additional supervisor for approval and grading.

Format of the Master's Project Proposal

The Master's Project Proposal includes the following documents:

- **Abstract/Summary of less than one page**
The abstract summarizes the main issues and conclusions of the report
- **Proposal of 10-20 pages (maximum)**
The proposal is a scientific description of your Master's Project and has a clear structure. It is suggested to follow the outline listed below.
- **Time plan**
Detailed time plan for your MSc Thesis incl. deadline.

Administrative steps to follow

The Master's Project Proposal is usually completed **during the third semester**¹⁾ of your Master's Studies.

- Register and fill out all details of your Master's Project Proposal in myStudies (button: "Projects/papers/theses", course number 651-4060-00). The registration is only definite after approval for your Master's Project Proposal by your supervisor and by the study advisor in eDoz²
- **By January 31** hand in the **final version** of your Master's Project Proposal **to your supervisors and to your study advisor** (in paper or as PDF)
- Main supervisor enters the **grade** for your Master's Project Proposal **by February 15**
- After successful completion of your MSc Project Proposal upload it as Project Outline when registering for your MSc Thesis in myStudies

Outline of the Master's Project Proposal

The list below is a recommended guideline (except for time plan³) for your Master's Project Proposal.

Title

Define a short, significant title which reflects clearly the contents of your report. The title page follows the guidelines of scientific proposals at Department of Earth Sciences (see <http://www.erdw.ethz.ch/documents/index>).

Abstract

Succinct abstract of less than one page.

Table of content

The table of content lists all chapters (headings/subheadings) including page number.

Introduction

Explain why this work is important giving a general introduction to the subject, list the basic knowledge needed and outline the purpose of the report.

Background and results to date

List relevant work by others, or preliminary results you have achieved with a detailed and accurate explanation and interpretation. Include relevant photographs, figures or tables to illustrate the text. This section should frame the research questions that your subsequent research will address.

Goal

List the main research question(s) you want to answer. Explain whether your research will provide a definitive answer or simply contribute towards an answer.

Methodology

Explain the methods and techniques which will be used for your project depending on the subject: field work, laboratory work, modeling technique, interdisciplinary collaboration, data type, data acquisition, infrastructure, software, etc.

Time Plan³ for Master's Project Proposal and Master's Thesis

Give a detailed time plan. Show what work needs to be done and when it will be completed. Include other responsibilities or obligations.

¹ If you plan your MSc Project Proposal in spring semester the deadline is June 30

² Counterpart for lecturers comparable and linked to myStudies for students

³ Time plan is a mandatory element of the Master's Project Proposal

Discussion / Conclusion

Explain what is striking/noteworthy about the results. Summarize the state of knowledge and understanding after the completion of your work. Discuss the results and interpretation in light of the validity and accuracy of the data, methods and theories as well as any connections to other people's work. Explain where your research methodology could fail and what a negative result implies for your research question.

Acknowledgements

Thank the people who have helped to successfully complete your project, like project partners, tutors, etc.

Reference & Literature (Bibliography)

List papers and publication you have already cited in your proposal or which you have collected for further reading. The style of each reference follows that of international scientific journals.

Appendix

Add pictures, tables or other elements which are relevant, but that might distract from the main flow of the proposal.