

Project plan/description for PhD-project at the UiT Avalanche Science Centre

Instructions

Below is an example of how to organise the project plan/description and which topics to include. By using this template you ensure that all required elements are included in the project description. You are, however, free to deviate from this template and, if desired, submit an even more detailed description.

The development of a project plan is a process in two steps:

Step 1: Applicant's project plan

In this step, the applicant is expected to write and submit a project plan/description as part of an application for a PhD position or funding of such. In this case, a 5-10 pages document is to be written using this template. The content should be based on the Science Programme for the Avalanche Science Centre, as well as you own ideas and interest for the PhD. The plan may be less elaborate and detailed than what is expected in step 2.

Advice on what is important at stage 1 is included under each chapter in red italics.

Step 2: PhD student's project plan as a base for an agreement with UiT

A relatively detailed project plan/description has to be submitted in order to be admitted to a ph.d.-programme at Institutes affiliated with the Avalanche Science Centre at the University of Tromsø.

The detailed project plan/description developed in step 2 serves multiple purposes.

- It is an agreement between the student and the supervisors on how the PhD-study and the research project will be carried out.
- It ensures that the project is well planned and that the proposed research is manageable within the project period. Hence, planning ahead and submitting a well written project description increases the prospect of completing the PhD-studies on time.
- For some PhD-students, the topic of the project may not be well known. Reading and writing the background, establishing the scientific objectives and investigating which methods to use, is a good way of just getting started with the project.
- The project description is also a "mini-application" for project funding. For most PhD-students the project description is the first attempt to write something that resembles a project proposal. Writing project proposals are an important activity of researchers and scientists in order to fund their research. Therefore the project description can be considered an integral part of the PhD-training, i.e. it is kind of an introduction on how to write a project proposal.

The project plan/description shall be written in cooperation with the supervisors. The presentation of the research project shall be 5-10 pages, and it must be signed by the PhD student and all supervisors. According to the University regulations and the supplementary regulations at the BFE-faculty, several topics must be described. Although some topics may seem peculiar at first glance, they are required for specific reasons.

Project Title

NAME:

Affiliation/Institute:

PhD-programme:

1 Background

Important

Describe the background for the project. Place the proposed study in scientific context and how it is related to international research. Explain why the current study is of scientific interest. Refer to important theories that can/will be applied. Cite relevant sources/literature.

The background will resemble an introduction section of a scientific paper. The section would start with general information and proceed to more specific details. If the following questions are answered, the background is usually well described.

- What will I be studying?
- What do we know about the topic before starting the research?
- Why is it an important topic?
- How will this study advance our knowledge within the field?

2 Objectives

Important

What is the aim of the research that will be carried out? Which hypotheses will be tested? Describe the primary aim of the project and also any secondary objectives.

3 Methodology/methods and data

Important, but applicants are not expected to provide final details

In brief, describe the methodology/methods that will be used. Include a description of the primary data and/or sources to be used to gather data (if relevant). Explain, where relevant, how collected data will be analysed.

If the project requires special scientific resources and/or equipment/infrastructure, describe how access to the necessary resources will be obtained.

4 Time schedule

Important, but applicants are not expected to provide the details as illustrated in the example.

Provide a preliminary time schedule for completion of the doctoral degree programme. The schedule should indicate when the candidate plans to complete the educational component, the field and laboratory work, the data analysis, the writing and submission of scientific articles and presentations (lectures, poster presentations, etc). Also include when stays/visits at other institutions will take place.

Example of a time schedule:

Year	2016		2017		2018		2019		2020	
Semester	S	F	S	F	S	F	S	F	S	F
Courses										
Philosophy of science and ethics		X								
Artic marine molecular ecology, UNIS		X								
From bloom to gloom, PhD course - DTU aqua			X							
Experimental design and Applied statistics for biologists			X							
Duty work 25%										
Teaching Bio-2653		X		X						
Laboratory assistance Bio-1023			X		X		X			
Field Work and data collection										
Sampling empty beer bottles from participating subjects		X	X							
Sampling strange objects found in the navel of participating subjects			X	X						
Interviews with study participants				X	X					
Laboratory Work										
Analysis of beer bottles			X	X						
Analysis of navel objects				X	X					
Data analysis										
Correlating empty bottles to the abundance of navel objects				X						
Geographic and demographic distribution of "navel "incidences				X	X					
Statistical analysis of interviews					X	X				
Writing and submission of articles										
Paper I: Beer and its effects: Quantitative analysis of beer and navel objects				X	X					
Paper II: Distribution of beer and suddenly appearing objects on the body surface						X	X			
Paper III: An explanation of how beer causes inanimate as well as animate objects to appear in bodily crevices.							X	X		
Mid-term evaluation and thesis										
Mid-term evaluation										
Writing up thesis										
Other dissemination activities										
Oral presentation at conference							X			
Poster presentation at conference					X					
Stays/visits at other institutions										
Stay at the Beer and Navel Research Institute, Hamburg						X				

5 Instructional component

Less important now, the successful applicant will specify this at a later stage. HEL-courses are compulsory.

Enlist the planned courses and/or scientific activities to fulfil the requirement of the instructional component. Include course code, course name, how many ECTS/credits the course provides and which semester it will be taken. Also mention which institution that offers the course, particularly if not being held at UIT. You may also choose to explain how the courses are relevant for the topic of your study.

Course code	Course title, Institute	ECTS/credits	Semester
HEL-8010	Forskningsetikk og vitenskapsteori	6	F2016
HEL-8024	Quantitative Research Methods	6	F2016
HEL-804	Allmennrettet og vitenskapelig forskningskommunikasjon	3	S2017

XXX	XXX	3	S2017
	Special syllabus: Oral presentation at conference	3	S2017
	Special syllabus: Poster presentation at conference	2	S2017
	Special syllabus: Literature study	1	S2017
TOTAL		30	

Provide a description of the literature based special syllabus, if any. A couple of sentences where the topic is described will usually suffice.

Example of description of special syllabus

The special syllabus comprises an oral presentation (3 ECTS) and a poster presentation at conferences (2 ECTS) and a literature study (1 ECTS). In the poster and the oral presentation, findings/results of my project will be presented. The topic of the literature study is [Topic]. The following literature will be used as syllabus and it will be evaluated by an oral examination. Enlisting the literature is optional.

- Journal article...citation
- Journal article...citation
- Journal article...citation
- Book chapter... citation

6 Plan for teaching and other obligatory work

Not important now, the successful applicant will specify this at a later stage

If the research fellow has teaching obligations and other work duties, a preliminary work plan should be included in the time schedule as well. Mention which duties that will be carried out, e.g. which courses you will teach. Develop the work plan in cooperation with the head of the institute.

7 Dissemination and publication plan

Important, but applicants are not expected to provide the details as illustrated in the example.

Provide a preliminary plan for how the results of your research will be disseminated. Include both planned written publications and oral presentations. For articles, include the working title of manuscripts, when it will be submitted, planned co-authors and also which potential journal it will be submitted to. At least provide the working title and planned year of submission. If there are plans to have oral and/poster presentations at conferences, work-shops etc, list such activities as well.

The most common way of submitting and defending a thesis is by using a collection of articles and a synopsis. If a monograph is to be used rather than a collection of articles, provide a professional explanation and give a tentative title and a detailed plan for how the work will be undertaken.

Example of a tentative publication and dissemination plan:

The goal is to submit three manuscripts to peer-reviewed scientific journals. Additionally, outcomes of the project will be presented at conferences and/or work-shops. The plan below lists probable co-authors, the planned year of submission, potential journals and the current working titles for each paper.

	Authors	Year	Title/ conference name	Journal
Paper I	Larsen R., Nilsen IG., Bendiksen, GBS. and Aschan M	2017	An uphill struggle: Writing a detailed project description in connection with the admission to PhD-studies	Journal of Mind-Bogglingly Tiring Activities
Paper II	Larsen R. and Aschan M	2018	Running late: Scientific, financial and other issues that may occur during PhD-studies.	International Journal of Frustration and Bad Mood.

Paper III	Larsen R., Nilsen IG. and Aschan M	2019	The success of proper planning: A PhD-students tale on how thinking ahead assisted in completing a PhD on time	Journal of Major Happiness
Oral presentation	Larsen, R.	2017	Conference in PhD-education, Oslo	
Poster presentation	Larsen, R.	2018	IGNH symposium, Maldives	

Although it may be challenging to foresee and plan the dissemination and publication when starting a PhD-study, it is desired that some thoughts have been shed already at an early stage. The working titles of the manuscripts are likely to change as the research/studies progress. Nevertheless, it is useful to plan ahead and divide the whole project in smaller parts with separate milestones.

8 Affiliation to research groups and cooperation with other institutions

Less important now, the successful applicant may specify this at a later stage. However, please describe if you already have any plans for cooperation

Mention the research group(s) you will be affiliated with. If you are enrolled in a PhD-school, write the name of the programme.

If there are plans to visit other research institutions and/or collaborating partners, describe when and where this will be done.

9 Budget and funding plan

Less important now, the successful applicant may specify this at a later stage. However, please describe if you have any plans with costs extra apart from your salary

Set up a preliminary budget and a funding plan for the duration of the PhD-programme. It does not have to be very detailed, but estimate yearly operating costs in broad categories. Do however pinpoint if costs of extraordinary size is likely to occur and describe how it will be financed. If additional funding is required to carry out the planned research, describe how funding for these activities will be obtained.

Example of a preliminary budget and funding plan:

Costs	2016	2017	2018	2019
Equipment incl PC	25.000	15.000		
Travel expenses	5.000	25.000	25.000	25.000
Other costs			5.000	5.000
Total costs	30.000	40.000	30.000	30.000
Funding	2016	2017	2018	2019
ASC budget	30.000	30.000	30.000	30.000
Sponsor		10.000		
Total	30.000	40.000	30.000	30.000

The research is funded by the University of Tromsø. The annum is NOK ... each year. To carry out the research activities we have to buy a new HXTS-instrument to analyse our samples, approximately NOK 50.000. Funding for this instrument will be provided by the DhP-project which is led by Prof. Aschan. Aschan will also contribute to the budget for additional expenses that is not covered by my annum.

10 Ethical considerations

Not important now, the successful applicant will specify this at a later stage.

If the project is confounded with some ethical issues, e.g. animal experiments and collection human data, a paragraph describing ethical aspects should be included. Also mention if there is a requirement to obtain an approval from an ethical committee and potentially how and when this will be obtained.

11 Intellectual property rights (IPR)

Not important now, the successful applicant will specify this at a later stage.

If the work is confounded with IPR-issues that would cause restrictions regarding the dissemination and use of the results, describe which issues this pertains to and how it will be solved.

12 Individual and scientific learning outcomes

Important, but applicants are not expected to provide final details

Specify which individual skills, competences and knowledge you think you will acquire at the end of your 3-4 years as a PhD-student. In addition to the general learning outcomes described below, define which disciplinary and individual knowledge/skills that you think you will acquire when completing the degree. These learning outcomes could be related to:

- a. methodology (quantitative and/or qualitative)
- b. field and laboratory work
- c. sampling and experimental design
- d. statistical analysis
- e. management, networking and international understanding
- f. communication and dissemination
- g. Other scientific and/or personal skills

According to regulations of the Norwegian quality framework for higher education, learning outcomes has to be specified for each course and educational program. Since every PhD-study is different, i.e. each student has an individual course plans and will develop a specific set of scientific and personal skills, it is almost impossible to set general learning outcomes. Therefore, we require that each candidate describe the foreseen learning outcomes themselves in cooperation with the supervisors.

13 References

Less important now, the successful applicant will specify this at a later stage

Place the list of references at the end. References would primarily be cited in sections 1 and 3.

This would fulfil the requirement to include references to relevant academic literature.

14 Signatures

This is to be completed at a later stage by the successful applicant.

Place _____ Date _____ PhD-student _____

Place _____ Date _____ Main supervisor _____

Place _____ Date _____ Supervisor _____

Place _____ Date _____ Supervisor _____

Place _____ Date _____ Supervisor _____