Template for PhD Project Description, Department of Informatics, UiO

The PhD committee at IFI approves this template, effective January 1st, 2024. The project description and the application for admission to the PhD program are to be submitted within two months from the start date of your employment agreement.

The PhD thesis is an independent, scientific work that meets international standards regarding academic level, method, and ethical requirements. The preferred format of the thesis is a collection of publications/articles published in internationally recognised publication channels (scientific journals or conferences).

The PhD degree at the Department of Informatics is a supervised study requiring a project description for admission to the PhD program. The project description is a joint proposal to be approved and signed by the PhD candidate and the supervisors. The primary purpose of the project description is to ensure a smooth collaboration and good progress for the candidate with proper research focus and clear milestones. The project description should be detailed enough for the PhD Committee at IFI and the Faculty to assess research goals, scientific challenges, incremental milestones, and publication plan. It also forms the baseline for the 3rd-semester reporting.

The project description should be between 4 – 10 pages and contain the following nine elements:

1. Project title

2. Main objective and summary of the project

Present the main objective and a summary explaining how you intend to attain your goal.

3. Project background and scientific basis

Provide a brief survey of existing research efforts and scientific basis, preferably referencing scientific literature. If your project is part of a larger research effort, explain specifically the scope and boundaries of your project and your planned contributions within the larger framework.

4. Research questions and scientific challenges

Outline your research questions and scientific challenges. Explain their scientific foundation and your approach to addressing them. Describe your ambitions of reaching beyond the state-of-the-art and how to reach these goals.

5. Scientific method

Outline your method for reaching your scientific goals. Describe how you plan to use empirical, analytical or other methods for your research. Please state how these methods relate to the expected scientific contributions of the thesis. If applicable, describe the source of your data.

6. Expected impact

Describe the expected scientific, economic, and societal impacts of the project. What are the potential broader and long-term positive effects on knowledge, innovation, and large-scale global challenges, and what are the potentially adverse effects, such as environmental damage, stigmatisation of particular social groups, political or financial adverse consequences, and misuse? Relate this to the Faculty's Strategy 2030 and the Sustainable Development Goals¹.

¹ See <u>UiO Strategy 2030</u>, page 4, 13, 14, 15, 16, 19, 20, and 22 the <u>SDGs</u>

7. Research ethics

Research takes place under a high grade of freedom and trust and thus also entails a significant degree of personal responsibility for the individual researcher. As a PhD candidate at the University of Oslo, you are responsible for conducting your research according to recognised scientific and research ethical norms. This requires a high degree of awareness of the ethical aspects of the research.

In this section, you are expected to:

- 1. Confirm that you have familiarised yourself with the research ethical guidelines, norms, and institutions at the University of Oslo.
- 2. Evaluate your project regarding the handling of personal data.
- 3. Provide reflections on research integrity.

7.1 Guidelines, norms, and institutions

We expect you to familiarise yourself with the following research ethical guidelines, norms, and institutions at the University of Oslo:

- a. Standard for Research Integrity at the University of Oslo
- b. The National Research Ethics Committees General guidelines
- c. The National Research Ethics Committee's particular guidelines (relevant to your project)
- d. The Vancouver criteria (in particular section II, part A.2-3)
- e. The Research Ethics Committee
- f. The Science Ombud

When you have familiarised yourself with the above, confirm by using the following text or similar:

"I confirm that I have familiarised myself with the following research ethical guidelines, norms, and institutions at the University of Oslo: The Standard for Research Integrity at the University of Oslo, The National Research Ethics Committee General guidelines. I further know the relevant guidelines for my project: [Guidelines for Research Ethics in Science and Technology/Ethical Guidelines for the Use of Animals in Research/Guidelines by The Norwegian National Research Ethics Committee for Medical and Health Research (NEM)/Medical and Health Research in Lowand Middle-Income Countries/Guidelines for Research Ethics in the Social Sciences and the Humanities (NESH)]². I also understand the roles of The Research Ethics Committee and The Science Ombud."

7.2 Personal data

PhD candidates, independent of their nationality and the location(s) for data collection, need clearance from <u>SIKT</u> if they *process personal data*. Candidates processing personal data abroad must also follow local privacy protection regulations. Health-related research needs clearance from <u>REK</u> (Regional Committees for Medical and Health Research Ethics).

Personal data consists of any data relating to an identified or identifiable person. *Processing* means any operation performed on personal data, such as collection, recording, registering, organisation, structuring, storage, adaptation, alteration, retrieving, transferring, distributing, publishing, deleting, or destroying.

² Remove the guidelines not relevant to your project

If you are in doubt about whether you will process personal data, you can do a test provided by <u>SIKT</u>.

If you are <u>not</u> processing personal data in your project, you can use the following texts or similar:

"I hereby declare that I am not handling personal data according to the definition of personal data and processing by <u>SIKT</u>."

If you <u>are</u> processing personal data in your project, you can use the following texts or similar:

"I will process personal data in my project. [Describe what kind of data and processing is involved and where you are in the clearance process with NSD.] [If your data is health-related, describe where you are in the clearance process with REK.] [If you are collecting data outside Norway, describe where you are in the clearance process with local authorities]. [If your PhD project is part of a larger project where your PhD project is explicitly granted clearance to process personal data, refer to the project]."

7.3 Reflections on Research Integrity

Reflect on research integrity in the context of your project. You can relate this to principles of reliability, honesty, respect, and accountability and topics such as co-authorship, referencing, openness and the use of AI in research.

8. Project timeline

Outline a research plan for each semester, including coursework, scientific contributions, the 3rd-semester reporting and planned publications with possible publication channels. Indicate mandatory/teaching duties (25%) when agreed and planned visits to other research institutions (national or international). We use the project timeline to assess progress during the 3rd-semester reporting.

We recommend you summarise the research plan in a table to make it easy to evaluate progress. This can, for example, look like:

Semester and year	Activities and milestones
1st, (Spring/Autumn, year)	Research Activities
	Courses
	Conference attendance
	Submission of publications (theme, publication channel)
	Research stays abroad
	Mandatory duties
	Etc.
2 nd	
3 rd	3 rd semester reporting.
4 th	
5 th	

9. Project organisation and cooperation

The principal supervisor should provide an overview of knowledge/expertise each supervisor will contribute, how they collectively cover the academic field of the project, and how the members of the supervisory team will meet and cooperate. One should also describe how the support of the candidate will be maintained if one of the members must vacate her/his post and therefore must be replaced. Finally, the robustness of the research group should be

addressed, i.e., how other academic staff, PhD candidates and projects support this project and how the project fits into the ongoing research activities.

10. Literature references

List applicable references.