# PhD Plan

The PhD plan is uploaded through the PhD manager portal found here: <http://phdmanager.aau.dk/phdweb>. Please use your AAU login to sign in. All information regarding your PhD plan is provided through this system.

Specific instructions for the 2 month plan and 11 month plan are highlighted. Otherwise the 11-month plan is an **updated** version of the approved 2 month plan accompanied by a statement from the internal opponent at the [pre-defense](http://www.medicine.aau.dk/doctoral-school/phd/for-current-students/phd-plan-and-pre-defense/) (the 11 month plan will not be processed by the doctoral school before the pre-defense has taken place).

Only one document can be uploaded when submitting the PhD plan and the updated PhD plan. Make sure that the comments from the opponents are attached to the updated PhD plan when submitting it.

**The study plan (max 5000 words including references – number of words should be stated on the front page) must follow the structure strictly.**

Section 1. Project summary/abstract
A short (max 400 words) summary in layman’s terms describing key motivation, significance, methodology, and expected outcome of the PhD study. An academic reader with a general background in biomedicine should be able to understand the summary.

Section 2. The scientific content of the PhD project

1. The background for the project problem should be described (maximum 300 words).
2. An introduction to the state-of-the-art for the PhD project (include key references listed under section 9). Explain the relevance of the present PhD project so the scientific contribution will be evident.
3. Statement of the project’s objectives followed by a formulation of the specific problem(s) addressed in the study. The problem(s) could be stated as one (or more) scientific hypothesis, if relevant, that is (are) to be examined.
4. Key methods and description of sub-studies. Coverage of the methodological needs, identification of means of meeting these needs, and the methodological design describing each of the substudies. The coverage should include techniques for evaluating or assessing the outcomes of the project (e.g., empirical studies, theoretical studies).
5. 2 month: Potential significance and application(s) of the project’s expected outcome, possibly including methodological contributions.

11 month: Experiences and results obtained so far in the project and a description of any changes this has forced in the original study plan. Update the expected outcome of the entire PhD project. What is the potential significance of this expected outcome, possibly including methodological contributions.

1. 2 month: Time schedule (preferably as a GANTT-diagram) where it is recommended to include measurable milestones (project milestones and deadlines for expected publications for each 6-month period (preferably in a 3 month interval)).

11 month: Updated time schedule for the entire project. It is recommended that a number of sub-project activities are identified that can be associated with milestones, so that there are milestones (at least) each six months during the project. Remember to allocate time for preparing scientific publications (conference papers, journal paper etc.). Indicate deadlines for the expected publications. These milestones will allow the PhD student and supervisor(s) to assess the status of the project each six months and to revise the plan if needed. The specific activities described in the time plan must be of such detail that it is clear what should be carried out.

1. 2 month: Short outline of the content of the thesis, including an indication on whether the thesis is expected to take the form of a collection of papers. Please note that papers must be included in appendices and not as chapters.

11 month: Update the outline of the content of the thesis:

* This description could be organized by means of an overall table of contents.
* The thesis can be organized as either a monograph or as a plurality of papers together with an extended summary (e.g. 20-30 pages) that provides an overview of the topic, reviews the papers, highlights the most significant scientific results achieved, and relates the findings to the current international state-of-the-art. Be aware that printed papers cannot be included as chapters in the summary but must be included as appendices.
* Note that for each paper on which the thesis is based, a co-author statement must be submitted together with the thesis.
1. Outline the publication strategy for the project (tentative papers). Regardless of the form of the thesis, a practice is recommended where results are documented and submitted for publication throughout the project. For each publication, the following should be indicated: working title, coauthors, outlet (e.g. a conference or journal), and expected time of submission. Indicate who has the primary responsibility for the publication. Publications in journals indexed in web of Science are encouraged (use the ISI service at http://apps.isiknowledge.com/).

Section 3. Collaboration agreements
Agreement on the relationship between supervisor and student (meeting frequency, communication forms, mutual expectations, etc.).

Section 4. Plan for PhD courses
A tabular listing of all courses taken or to be taken during the PhD project is to be included in the table below. The course: Introduction to the PhD Study is mandatory and must be followed as soon as possible.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Courses | Place/Organized by | ECTS | General/Project course | Status |
| **Introduction to the PhD Study** |  | 05 | G |  |
| **Applying the Danish Code of Conduct for Research Integrity to your Research** |  | 1 | G |  |
| **Active participant in the PhD Day (at least once)** |  | 1 | Can vary |  |
| **Mandatory program specific course (see PhD moodle)** |  | Can varys | S |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | **Total** |  |  |  |

For each course, the title, time, location, organizer, and ECTS credits should be included together with an indication of whether the course has been completed. Only courses **at PhD level** will be approved.

Courses of a general nature in relation to the PhD project must cover minimum 10 ECTS credits. Courses specific to the subject matter of the PhD project must also cover minimum 10 ECTS credits (for the 2 month plan: Indicate topics to be covered if specific course names are not yet available). In general, no single course should exceed 6 ECTS credit points. It is recommended to show diversity in the composition of PhD courses.

If a course at master level is deemed to be highly relevant for the PhD project, the supervisor can establish a study group on the topic which include the master course and additional reading/discussion to bring it up to a PhD level. Study groups could also cover other topics not covered by the courses offered by the doctoral school. A written report describing the content of the study group must be completed to get course credit. To ensure the scientific level, the study group must be headed by a member of the scientific staff who is Professor/Associate Professor.

There is also an option for establishing ‘Project related self-study courses’ if the PhD student and the supervisor agree on a core topic for the PhD project that is not covered by the courses offered by the doctoral school. [See more information here.](https://www.phd.aau.dk/medicine-biomedical-science-and-technology/for-current-phd-students#phd-courses)

If conference and workshop participation is part of the course program, **each** such participation must be accompanied by a written report by the PhD student that relates the specific activity to the PhD project ([template can be found here](https://www.phd.aau.dk/medicine-biomedical-science-and-technology/for-current-phd-students)). This report must be of general value for the project. Course activities that relate to workshop and conference participation and the participation in study groups must **not** exceed 6 ECTS credits.

For study groups, self-study courses, and conference participation, the estimated workload for the student is 28 hours per ECTS credit.

By completion of the PhD study, documentation of the contents and the extent of the courses must be provided along with approval from the main supervisor.

Section 5. Plan for fulfillment of knowledge dissemination
Plan for dissemination of knowledge and findings from the project must be described. This could for instance be:

* Poster presentations at conferences/seminars.
* Lectures at conferences/ seminars
* Newspaper articles or other popular presentations
* Teaching (lecturing and project supervision)

Section 6. Agreements on immaterial rights to patents
Outline relevant agreements on immaterial rights to patents, etc. produced during the PhD project.

Section 7. External collaboration
The PhD student must participate actively in other research environments.

2 month: Plans for external collaboration (e.g., stay at a foreign research institution).

11 month: A description of completed external collaboration activities and/or specific plans for implementation of the external collaboration must be included. This should include:

* Travels, including visits at external/international research environments.
* Participation in external/international co-operation.
* Active engagement in external research environments.

Section 8. Financing budget
Financing budget for the PhD project i.e. expenses needed to complete the project (not salary). The funding source or sources should be identified.

##  Section 9. Career planning (only applicable for the updated PhD Plan)

*12-month plan: Describe your long-term career plans, i.e., beyond the PhD studies. For example, do you plan to pursue a career in academia and, if so, what is the next step after graduation? Is it a postdoc abroad or an industrial postdoc after which you plan to become assistant professor? Or do you intend to become an industrial researcher, and, if so, in what industry and with what potential companies. In what role do you see yourself long-term. Do you, for example, see yourself as a technical specialist or is your ambition to become a research manager? Explain how your PhD study plan and the choices you have made herein supports your career plan (e.g., the courses you plan to follow, your plans for external collaborations and knowledge dissemination).*

*Remember to use the resources provided by AAU PhD:* [*https://www.phd.aau.dk/phd-career-hub*](https://www.phd.aau.dk/phd-career-hub)