**Instruction to making the research and study plan (PhD plan)**

Please read the instruction carefully before filling in the form. Please delete the instruction part of the document before submitting it to the PhD school.

To make a PhD plan with all its elements is mandatory according to the Danish PhD order.

A draft for the finished plan including information on all elements 1 - 8, a poster and pdfs of the official course descriptions must be in place within one month from enrollment and uploaded in the PhD web portal: <https://phdweb.sdu.dk/> .

After the draft has been uploaded, you will be given written feedback on changes/ additions needed on the draft from the Vice Head of the PhD school in PhDweb.

If there are no changes or additions needed the plan is approved in PhDweb by the Vice Head of the PhD school and will move on in the web portal to the next approvers. You can follow the approval of the plan in PhDweb. You will be notified by email once the plan has been approved by the Head of the PhD School.

The student and the principal supervisor are responsible for making a PhD plan, corrections and additions so that it can be approved by the vice head of the PhD school within two months of enrollment and can be approved by the head of the PhD school within three months from enrollment.

The plan serves multiple purposes:

* It is an agreement between the student and the principal supervisor on how the PhD-study and the research project will be carried out under supervision. It is an agreement between the student, the principal supervisor, the head of research unit and head of department that both the research project and study will be carried out as described in the plan.
* It ensures that both the PhD study and the project are well planned and that the proposed research is manageable within the project period.
* For most PhD students, the exact topic of the project may not be well known before enrollment. Preparing the plan together with the principal supervisor provides a platform for the matching of expectations as well as introduces the student to the project.
* For the PhD student, the making of the PhD plan provides the first-time experience in composing collective material that in small-scale is somewhat comparable to the material that goes into a funding application. Writing project proposals and applications for funding is an important activity of researchers and scientists to attain funding for research projects.

**Elements of the Plan and instructions to fill in:**

**1) Agreement on the type of supervision provided.**

Instruction:

Describe the form and frequency of the supervision of the principal supervisor. If there are co-supervisors, the agreement must specify a division of roles between them, to what extent they will be available to the PhD student, and what specific scientific expertise they bring to the supervision of the student and the project.

**2) Plan for the PhD project.**

Instruction:

Make the description, and include as a minimum in the description of the PhD project:

**Background**

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?

**Objectives**

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 any secondary objectives.

**Methodology/methods**

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.

A PDF of a poster of the project must be included in the plan.

**3) Plan for PhD courses (30 ECTS) observing the internal rules for PhD courses of the PhD school at the faculty.**

The courses are approved individually for each student in the research and study plan.

**Please note:**

Conference participation that is listed as course activity cannot also render knowledge dissemination hours.

Official course descriptions for all courses must be included in the plan.

If the student later in the study wishes to change the composition of courses in the PhD study, the student must apply for exemption from this in the PhD committee.

**Example of a course plan:**

|  |  |  |
| --- | --- | --- |
| **Place of the activity (e.g. University, conference venue)** | **Course title** | **ECTS/credits** |
| HR department, SDU | Teaching course | 2 |
| MMMI, SDU | Writing course | 5 |
| SDU | Core scientific course at PhD level | 5 |
| DTU aqua | From bloom to gloom | 10 |
| SDU | Experimental design and Applied statistics for biologists | 2 |
| Copenhagen University | C3PO 2014, conference | 3 |
| London, England | R2D2 Conference | 3 |
| **TOTAL** |  | **30** |

Printed pdfs of all the official course descriptions must be included in the pdf of the plan**.**

**To make pdfs of the full official course descriptions you need to:**

**Go to the course website and choose print as pdf - save it on your desktop and include the description in the collective pdf of the plan. The description must include all information on the course and its contents, its level, ECTS, and form of examination. This is done with all course activities (excluding the conferences and literature report) so that you correlate the pdf filled in form of the plan, the poster and course descriptions.**

**4) Plan for participation in active research environments, including change of research environment abroad:**

Short description of the research group(s) you will be affiliated with at the venue of the change of research environment.

List the name of the venue for your change of research environment (Name of department/University/ Country) and a short description on why the research environment at the venue is relevant to your study. It is allowed to list a number of possible venues.

**5) Plan for 300 hours of knowledge dissemination.**

Plan for the knowledge dissemination activities in the study period that are relevant and related to the PhD project.

The 300 hours of knowledge dissemination must be documented before commencing the last year of the study

**Example of a plan for knowledge dissemination:**

|  |  |  |
| --- | --- | --- |
| **Place of the activity** | **Type of activity** | **Hours** |
| SDU | Making the PhD plan including a poster | 30 |
| x Company | Oral external presentation with title X, 30 min. presentation | 30 |
| Holstebro gymnasium | Book – a- researcher events – Talk with the title X, 1 hour presentation | 50 |
| SDU | Co-teaching master’s course | 86 |
| SDU | Co-supervising master’s student in thesis writing | 60 |
|  |  |  |
|  |  |  |
|  |  |  |
| **TOTAL** |  | **X** |

**6) Time schedule.**

Instruction:

Provide a time schedule for the study period. Plan for 3 years for 5+3 students, and 4 years for 4+4 students. The schedule must include the student’s plans for completing the study elements, such as course participation and knowledge dissemination (the writing and submission of scientific articles and presentations, lectures, poster presentations, etc.) and change of research environment. The schedule must also include the planning of the research (e.g. tests, lab work, the data analysis).

All study elements: course activities, knowledge dissemination and the change of research environment must be planned within the first two years of enrolment for 5+3 students and the first two years for 4+4 students.

**Example of a time schedule 4+4:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2021 | | 2022 | | 2023 | | 2024 | | 2025 | |
| Semester | S | F | S | F | S | F | S | F | S | F |
| **Courses (As listed in 3.)** | | | | | | | | | | |
| Teaching course | X |  |  |  |  |  |  |  |  |  |
| Writing course |  |  | X |  |  |  |  |  |  |  |
| Core scientific course at PhD level | X |  |  |  |  |  |  |  |  |  |
| From bloom to gloom |  |  | X |  |  |  |  |  |  |  |
| Experimental design and Applied statistics for biologists |  |  | X |  |  |  |  |  |  |  |
| C3PO 2014, conference |  |  |  |  | X |  |  |  |  |  |
| R2D2 Conference |  |  | X |  |  |  |  |  |  |  |
| **Field Work and data collection** | | | | | | | | |  |  |
| Sampling X from participating subjects |  | X | X |  |  |  |  |  |  |  |
| Sampling Y of participating subjects |  |  | X | X |  |  |  |  |  |  |
| Interviews with study participants |  |  |  | X | X |  |  |  |  |  |
| **Laboratory Work** | | | | | | | | | | |
| Analysis of X |  |  | X | X |  |  |  |  |  |  |
| Analysis of Y |  |  |  | X | X |  |  |  |  |  |
| **Data analysis** | | | | | | | | | | |
| Correlating X to Y |  |  |  | X |  |  |  |  |  |  |
| Geographic and demographic distribution of XY |  |  |  | X | X |  |  |  |  |  |
| Statistical analysis of interviews |  |  |  |  | X | X |  |  |  |  |
| **Writing and submission of articles** | | | | | | | | | | |
| Paper I: Title/subject |  |  |  | X | X |  |  |  |  |  |
| Paper II: Title/subject |  |  |  |  |  | X | X |  |  |  |
| Paper III: Title/subject |  |  |  |  |  |  | X | X |  |  |
| **Written evaluation and thesis** | | | | | | | | | | |
| PhD school Written evaluation |  |  |  |  | X |  |  |  |  |  |
| Writing thesis |  |  |  |  |  |  |  |  | X | X |
| **Knowledge dissemination activities (As listed in 5)** | | | | | | | | | | |
| Oral external presentation at x Company |  |  |  |  |  |  | X |  |  |  |
| Book – a- researcher events |  |  |  |  | X |  |  |  |  |  |
| **Change of research environment venue (As listed in 4)** | | | | | | | | | | |
| Stay at the X Research Institute, x University, Korea |  |  |  |  |  | X |  |  |  |  |
| Stay at the X Research Institute, x University, Aarhus |  |  |  |  | X |  |  |  |  |  |

**7) Agreements on intellectual property rights:**

Please indicate if there is an agreement regarding IPR. Any IPR agreements must be included in the plan.

If the work has 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.

**8) Budget for all the study activities described in the plan.**

**Budget example:**

|  |  |
| --- | --- |
| **Activity:** | **Expense DKK:** |
| Teaching course | **3.000,-** |
| Writing course | **1000,-** |
| Core scientific course, SDU | **0,-** |
| From bloom to gloom, DTU | **2000,- fee for course materials**  **500,+ travel** |
| Experimental design and Applied statistics for biologists |  |
| C3PO 2014, conference | **Travel expenses: 500,-**  **Conference fee: 3.500,-**  **Accomodation: 2.000,-** |
| R2D2 Conference | **Travel expenses: 3000,-**  **Conference fee: 8.500,-**  **Accommodation: 6.000,-** |
|  |  |
| **Change of research environment:**  **Korea 3 weeks**  **Aarhus 1 week** | **Korea:**  **Travel expenses 20.000,-**  **Accomodation: 10.000,-**  **Aarhus:**  **Travel expenses: 1.000,-**  **Accomodation 2.000,-** |
|  |  |
| **Special equipment, tests etc.:** | **?,-** |
|  |  |
|  |  |
|  |  |
|  |  |

**Research and study plan**

**(PhD plan)**

PhD Programme at The Faculty of Engineering

**The form must include information regarding all plan elements.**

**The PhD school reserves the right to not consider incomplete PhD plans.**

|  |  |
| --- | --- |
| **Student data:** | |
| Full name: | PhD student CPR no**.**: |
| Department: | Section/Center: |
| Principal supervisor: | Student e-mail: |
| PhD study commenced (M/Y): | PhD study ends (M/Y): |
| **Title of the PhD thesis:** | |
| **1) Agreement on the type of supervision provided – including information on the specific expertise each supervisor bring to the supervision of the student and the project:** | |
| **2) Plan for the PhD project, including a poster:** | |
| **3) Plan for PhD courses (30 ECTS) observing the internal rules for PhD courses of the PhD school at the faculty.**  **Please note:**  Conference participation that is listed as course activity cannot also render knowledge dissemination hours.  **PDFs of the official course descriptions for all courses must be included in the plan.**   |  |  |  | | --- | --- | --- | | **Place of the activity (e.g. University, conference venue)** | **Course title** | **ECTS/credits** | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | | **TOTAL** |  | **30** | | |
| **4) Plan for participation in active research environments, and description of the venue and relevance of the change of research environment abroad:** | |
| **5) Plan for 300 hours of knowledge dissemination.**  **Please note:**  Conference participation that is listed as course activity cannot also render knowledge dissemination hours.   |  |  |  | | --- | --- | --- | | **Place of the activity** | **Type of activity** | **Hours** | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | | **TOTAL** |  | **300** | | |
| **6)Time schedule.**   |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Year | 20xx | | 20xx | | 20xx | | 20xx | | 20xx | | | Semester | S | F | S | F | S | F | S | F | S | F | | **Courses (all elements listed in 3)** | | | | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | | **Knowledge dissemination activities (all elements listed in 5)** | | | | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | | **Change of research environment** | | | | | | | | |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | | **Laboratory Work** | | | | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | | **Data analysis** | | | | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | | **Writing and submission of articles** | | | | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | | **Written evaluation and thesis** | | | | | | | | | | | | PhD school Written evaluation |  |  |  |  |  |  |  |  |  |  | | Writing up thesis |  |  |  |  |  |  |  |  |  |  | | |
| **7) Agreements on intellectual property rights:**   |  |  | | --- | --- | | No agreement necessary: |  |   Agreements on intellectual property rights attached as appendix no.: | |
| **8) Budget for all the activities described in the plan.**   |  |  | | --- | --- | | **Activity:** | **Expense DKK:** | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | | |

The draft for the plan must be in place within one month from enrollment and uploaded in the PhD web portal: <https://phdweb.sdu.dk/> .