

Course description – SI201X/SH204X Degree Project in (Theoretical) Physics Second Cycle

I. General information

A master thesis project, which means this course, can be conducted at a department, a research institute, a company or another university either in Sweden or abroad. The course corresponds to 20 weeks (about 5 months) of full-time studies. Registration to this course follows a special procedure – as described in detail below – and can be performed at any time during the academic year (i.e., from mid-August to end of June with exceptions for holidays). You have the possibility to find your own project that fits your personal interests. However, please carefully read all instructions in this course description (course memo) before you start to search for a project.

II. Preparations before course start

To find a master thesis project

Before you start your master thesis project, you need to find a project, a supervisor, an examiner, and to fill in the application form to become registered in this course.

Find a project, a supervisor, and an examiner

Contact directly potential supervisors that may suggest projects that interest you. If you plan not to conduct your project at KTH, you will also need to find a formal supervisor (a teacher or a researcher) at the Department of Physics at KTH, who can act as contact person for the project.

Note that your future written master thesis report will become a publicly available open document. If you conduct your project at a company, you must make sure that they are aware of this in order for you to avoid problems later.

In addition to the supervisor(s), each project needs an examiner at the Department of Physics, who is not the same person as the supervisor(s). Your supervisor(s) at the department can usually help you to find an examiner. If your project is not carried out at the Department of Physics, your formal supervisor at the department can normally be your examiner.

To become registered in the course

To become registered in this course, you will have to fill in an application form, sign it, and also to have the examiner to sign it. Then, it should be signed by the vice head for education at the Department of Physics, who will forward the application to the students' registration office (kursexp@physics.kth.se). The complete application process should be handled digitally with electronic signatures.

The application form to become registered in this course is known as “Examensarbetsansökan” (Application for Master of Science thesis project) and available at the website of the School of Engineering Sciences (SCI).

III. During the course

The studies of your master thesis project are mainly divided into three parts:

1. reading on the subject area in general and your own subject in particular, including literature search,
2. performing your own project on your subject,
3. writing your report on your project (i.e., the written report), which should include a summary of the subject area as well as results and discussion of your project.

Normally, these three parts take roughly equal amount of time to complete.

IV. Examination and completion

Written report

Templates in LaTeX and Word for degree project reports (written reports) and student presentations (oral presentations) are available at KTH. Alternative templates are also available and “recycled” at all divisions at the Department of Physics. In order to create a cover of your written report, please consult the “Student web” at the website of KTH. Presently, the link is the following:

<https://www.kth.se/en/student/studier/examensarbete/avhandlingarochexamensarbeten/omslag-1.458236>

Before finalizing your master thesis project, a so-called TRITA-number for your written report should be collected from the students’ registration office (kursexp@physics.kth.se). The TRITA-number should be stated in the written report. When you contact the students’ registration office for your TRITA-number, you should present the English and Swedish titles of your written report.

Usually, the written reports will not be printed, only published electronically. You decide if the full text of your written report or only the abstract should be published in the KTH publication database DiVA. All written reports should be checked for plagiarism with the tool Ouriginal.

Oral presentation

You should present your master thesis project in an open oral presentation at a division of the Department of Physics, which should be arranged by your supervisor. Oral presentations normally take place during semester time (i.e., not between beginning of July and mid-August). Your oral presentation should be announced about a week in advance and it should be about half an hour which should be followed by time for questions and discussion. Your examiner must be present at the oral presentation. After the oral presentation and the discussion following, the examiner and supervisor(s) should discuss your grade (pass or fail), based on (i) the process, (ii) the scientific content, and (iii) the presentation (i.e., the written report, the oral presentation, and discussion). Your grade is determined by the examiner.

Reporting the grade

To report the grade in the student administration system Ladok, the examiner should fill in a so-called grading report [Master’s Thesis (SI201X/SH204X) Grading Report] and send it to the students’ registration office (kursexp@physics.kth.se). The title page of the written report should also be enclosed.