II2202 Research Methodology and Scientific Writing 7.5 credits

*Forskningsmetodik och vetenskapligt skrivande*

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years.

**Establishment**

Course syllabus for II2202 valid from Spring 2019

**Grading scale**

A, B, C, D, E, FX, F

**Education cycle**

Second cycle

**Main field of study**

Computer Science and Engineering, Electrical Engineering, Information and Communication Technology

**Language of instruction**

The language of instruction is specified in the course offering information in the course catalogue.

**Intended learning outcomes**
The aim of the course is to give the students the theoretical and practical skills to plan, conduct, analyze and present, orally and in written form, a scientific assignment in the area of information and communication technology and to give insight and understanding of research methodology, ethics and sustainability.

This means that, after the course, students will be able to:

- explain and apply scientific methodologies, methods, as well as techniques for scientific writing, and research methodology to prepare the writing of a scientific report, as well as a degree project.
- perform investigation and evaluation using methods, explain and take position to the results, as well as list and summarize related work.
- apply the knowledge in scientific writing and research methodology and use the knowledge to write a scientific report and opposition report.
- identify and describe examples of sustainability related to ICT-area.
- verbally and in writing give examples of and explain societal and ethical aspects and sustainability in the ICT-area.
- perform opposition.

**Course contents**

The course is divided into three parts where the parts are integrated in a final project. The three parts are:

- research methodology
- scientific writing
- scientific assignment

These three parts are examined by a project plan, a method description and a scientific report, as well as an opposition report.

**Disposition**

The course contains lectures, among some are compulsory, seminars, which all are mandatory, and laboratories.

**Specific prerequisites**

Good knowledge of English and basic knowledge of information and communication technology.
Course literature

Kurslitteratur kommer i huvudsak bestå av böcker och material, artiklar och verktyg, tillgängliga via Internet.

Examination

- PRO1 - Project Assignments, 7.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.