



EN2911 Individual Project in Electric Power and Energy systems I 7.5 credits

Individuellt projekt i elkraftteknik I

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

Establishment

This official course syllabus is valid from the autumn semester 2025 in accordance with decision by the director of first and second cycle education: HS-2025-0584. Date of decision: 2025-03-31

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Electrical Engineering

Specific prerequisites

Knowledge in analysis of electric power systems, 6 credits, equivalent to completed course EG2100,

or

knowledge in electrical machines and drive systems, 6 credits, equivalent to completed course EJ2201,

or

knowledge in power electronics, 6 credits, equivalent to completed course EJ2301,

or

knowledge in power grid technology and switchgear design, 6 credits, equivalent to completed course EI2436,

or

knowledge in electricity prices and emissions, 6 credits, equivalent to completed course EG2230.

In addition, the examiner must have approved that the student has sufficient prerequisites to conduct an individual research project.

Language of instruction

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

Intended learning outcomes

To pass the course, the students should show that they are able to

- describe, explain and demonstrate relevant methods and computation models for a scientific problem within a selected topic,
- choose an appropriate solution method for the selected topic,
- shortly present and discuss (oral and in writing) theory and case studies within the selected topic.

Course contents

As the aim of the course is to develop the students ability to carry out research, it is natural that most of the learning in the course will be depending on self-studies, such as reading textbooks, technical reports, master and doctoral theses and scientific papers, and of course the students' own research efforts. In addition to this, students will get supervision from an experience researcher in the field, who will teach the students concerning good research practice as well as provide guidance on how to solve different research problems.

Examination

- PRO1 - Project work, 7.5 credits, grading scale: P, 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.

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

This course is examined based on your project work. In order to pass the course, you will need to summarise your project work as instructed by your supervisor. In general you will have to prepare at least a written report and an oral presentation on your work.

Other requirements for final grade

Approved project work.

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.