

Course memo

This course memo is for students taking the course EH2220 starting autumn 2023 and students taking the course EH2221 starting autumn 2024.

The latest news can be found on Canvas (canvas.kth.se). It is also possible to contact the involved teachers:

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Assistance with administrative matters, such as course registration, is managed by the student service desk:

- **Web:** KTH | EECS | Contact
<https://www.kth.se/en/eecs/kontakt>
- **Service Center Borggården:** Lindstedtsvägen 3, floor 4
(open Mo-Fr 9:00–15:00)
- **Service Center Q:** Malvinas väg 10, entrance hall
(open Mo-Fr 9:00–15:00)

Learning outcomes

The course aims to give students the opportunity to study electric power engineering's role in society from a variety of viewpoints, and also to provide an opportunity to reflect on their own development and education.

After passing the course, students should be able to:

- discuss central questions linked to the importance of engineers in society,
- discuss and analyse the role of electric power engineering in society and its role to reach economically, socially and ecologically sustainable development,
- discuss and analyse scientific, social and ethical aspects of research and development,
- discuss and analyse human responsibility for how the technology is used including aspects of social, economic, environmental and working conditions,
- discuss ethical and cultural questions and differences in an international environment,
- discuss the above-mentioned subjects at a high level,
- present arguments based on scientific results,
- meet deadlines,
- write short, clear, analyses including one's own analyses.

Course registration

In order to access the course on Canvas you need to be registered on the course. Most students can register themselves through Ladok. Contact student service desk if there is any problem.

Learning activities

The course EH2220 will cover eight different topics listed in table 1; one per study period during the two years of the master programme. The course EH2221 will cover only the last four topics.

Except for the introduction lecture, there is no scheduled teaching in the course. For each topic, you should prepare by reading some text or study some other relevant material. The preparations for each topic are provided in Canvas (choose “Assignment” and read the instructions for the topic). You will also be reading essays written by other students.

Table 1 Course topics.

Study period	Topic	Published on Canvas	Time period for seminars
EH2220 year 1			
1	Motivation and expectations	4 Sep 2023	25–29 Sep 2023
2	Procrastination	30 Oct 2023	4–8 Dec 2023
3	Career	16 Jan 2024	19–28 Feb 2024
4	Master thesis	18 Mar 2024	2–17 May 2024
EH2220 year 2 & EH2221 year 1			
1	Sustainability	28 Aug 2024	23 Sep–4 Oct 2024
2	Gender equality, diversity and equal opportunities	28 Oct 2024	25 Nov–6 Dec 2024
3	Engineering ethics	14 Jan 2025	10–21 Feb 2025
4	Summary of the education	17 Mar 2025	28 April–16 May 2025

Examination

The examination in this course consists of essays and seminars. The results of EH2220 are reported per academic year and is therefore divided in two parts (UPP1 and UPP2 respectively). Each assignment is graded on the scale A–F. The final grade of EH2220 is the mean of the grades for UPP1 and UPP2. The course EH2221 includes only the last four topics of EH2220 and is reported as one assignment (UPP1).

Essays

For each topic in the course, you should write an essay (about 400–700 words, i.e., one page) which should cover the questions related to that topic. The essays should be uploaded in Canvas. You must submit an acceptable essay for each topic in the course to pass the course, and it is therefore possible to submit essays also after the deadline; however, missing a deadline will influence your grade (see **Grading** below). A preliminary schedule for when essay topics are published is given in table 1.

The following general instructions apply to all essays:

- The title of the topic and the name of the student should be included on top of the first page. (Do not include your Swedish personal number or any other private information in the essay—the essays will be distributed to other students.)
- The essay should address all questions indicated in the instructions. However, the essay should be a continuous text, i.e., do not use the questions as headings and write answers to them.
- Avoid just stating facts—the essay should explain *what you think* and *why you think so*.
- You should write your text so that someone that has not read the preparation instructions still can understand your text. Therefore, you need to provide proper references to texts that you have read and other material that was part of the preparation for the topic.

- The essay should be well-written in terms of language.

Detailed information about the questions are given in Canvas (go to “Assignments” and read the instructions for the topic).

Seminars

The students will be randomly divided into seminar groups, which are led by a mentor. Each seminar group will have its own group homepage, where you can share documents. There will be one seminar for each topic (usually around one or two weeks after the deadline for essay submission). The time of the seminar is decided by the mentor; the schedule of the upcoming seminars are announced on Canvas. The mentors also decide if the seminar should be a physical meeting or a video conference (or a combination of both). The preliminary time interval for the seminars is shown in table 1.

Before a seminar, you should read the essays of the other students in your seminar group. The essays will be distributed in Canvas. To find the essays, go to the Group Homepage for your seminar group. In the group homepage, select “Files” in the menu to the left and choose the folder of the corresponding topic. Take note of interesting reflections by other students, which you would like to discuss in the seminar.

During the seminar, you should take active part in the discussion. Being active means that you should participate in the discussion and share your view and arguments on the topic. If you are only answering direct questions from the mentor then you are not considered active in the seminar, which will influence your grade (see **Grading** below).

Sometimes it might not be possible for students to attend the seminar of their group. Please contact the course coordinator as soon as possible to find a solution. If possible, you will be placed in another group for that particular topic. If you cannot attend any seminar on a topic, you will need to write a reflection report of 1 000-1 200 words (about two pages). The following instructions apply to reflection reports:

- The title of the topic and the name of the student should be included on top of the first page.
- The reflection report is not uploaded in Canvas but sent directly to the course coordinator.
- The objective of the reflection report is to comment and discuss the thoughts of the other students. The report should not be a summary of what the other students have written, but should provide an overview of the other students’ view on the topic. Moreover, you should elaborate the topic and add some new thoughts of your own to the topic. Are there common themes that appear in several essays? Is there any particular observation or comment that you find very interesting? Do you have new thoughts or insights after reading the essays?
- The report should be organised based on different themes that you have identified in the essays. Do not write one section or paragraph for each essay that you have read.
- The reflection report should also include a conclusion of what you have learned from the essays of the other students.
- You may assume that the reflection report is read by someone who has also read the essays of the other students. However, you need to provide proper references to other sources that you are using in the reflection report.

If you write a reflection report and send it to the course coordinator before the seminar you could not attend then that will count as active participation in the seminar (because the reflection report will be distributed to the mentor, who can use your analysis as part of the discussion with the remainder of the group).

Grading

The topics in this course are open-ended questions and there are no specific right answers to the questions that are addressed in essays and seminars. As your opinions cannot be graded, the grading of the course is based on that you are active in discussions and that you complete your tasks on time. The grading criteria are shown in table 2 and are used both for UPP1 and UPP2. Students who are passive in all seminars or fail to submit at least one essay on time will have to redo the topics next academic year.

Your result on each topic are provided in Canvas as the score to the essay you have uploaded. The score is a binary code which will be the sum of the following bits:

- 8 - Approved essay.
- 4 - Participated in seminar or completed reflection report.
- 2 - Essay submitted in time.
- 1 - Active participation in seminar.

Submitting an essay and participating in the seminar (or write a reflection report) are mandatory for each topic. Thus, you will need at least 12 points from each topic in order to pass the course.

Examples:

- 15 points: Essay approved and submitted in time, participated in seminar and took active part in the discussions.
- 13 points: Essay approved but not submitted in time, participated in seminar and took active part in the discussions.
- 10 points: Essay approved and submitted in time, but has neither participated in seminar nor written a reflection report.
- 5 points: Participated in seminar and took active part in the discussions, but the essay has not been submitted at all or was submitted late and not approved.

Table 2 Grading criteria.

Grade	Requirement
A	<ul style="list-style-type: none"> • Ability to write relevant essays on all four topics during one year. • Ability to actively participate in all discussions during seminars and to meet all deadlines during the year.
B	<ul style="list-style-type: none"> • Ability to write relevant essays on all four topics during one year. • Ability to actively participate in almost all discussions during seminars and meet almost all deadlines (the student may at one occasion be passive in a seminar or miss a deadline) during the year.
C	<ul style="list-style-type: none"> • Ability to write relevant essays on all four topics during one year. • Ability to actively participate in almost all discussions during seminars and meet almost all deadlines (the student may at two occasions be passive in a seminar or miss a deadline) during the year.
D	<ul style="list-style-type: none"> • Ability to write relevant essays on all four topics during one year. • Ability to actively participate in almost all discussions during seminars and meet almost all deadlines (the student may at three occasions be passive in a seminar or miss a deadline) during the year.
E	<ul style="list-style-type: none"> • Ability to write relevant essays on all four topics during one year. • Ability to actively participate in at least one discussion during seminars and to meet at least one deadline.

Course evaluation

The course is evaluated continuously and we appreciate if you let us know what you think about the course! You can discuss the course in the seminars with your mentors, in the discussion section of Canvas or contact the examiner and mentors directly by e-mail.