



The Council for Educational Development at the Faculty of Science and Technology (TUR)

invites you to the course

Ethics in science and engineering education, autumn 2022

The Council for Educational Development at the Faculty of Science and Technology offers a free two-part course on ethics in science and engineering education for everyone with basic pedagogical education and / or solid teaching experience.

In the first part of the course, corresponding to one week of full-time studies, the basics of ethics as well as ethics in disciplines within Science and Technology are discussed. In the second part of the course, corresponding to one week of full-time studies, participants carry out a project that aims to integrate ethics into, for example, a teaching element in a course, an educational program, or a subject area. The project is presented orally as well as in a written report. The course is based on ethical theory and research literature in ethics, and related areas.

Learning outcomes

After concluding part 1 of the course, the participant should be able to:

- * discuss basic ethical theory, and exhibit a reflected and problematizing approach towards this theory.
- * discuss and reflect on various ethical aspects of subjects in Science and Technology, in particular within education in the own discipline.

After concluding part 2 of the course, the participant should be able to:

- * plan, implement, evaluate and reflect on the integration of ethics in a teaching module, in an educational program, or in a subject area with support from research and proven experience of students' learning of the subject.

Course seminars and workshops

Part1 (always 10:15-12)

- 1) 23rd of August 10.15-12.00,
- 2) 2nd of September 10.15-12.00,
- 3) 13th of September 10.15-12.00,
- 4) 23rd of September 10.15-12.00,
- 5) 4th of October 10.15-12.00,
- 6) 14th of October 10.15-12.00.

Part 2 (different times)

- 7) 25th of October 13.15-16.00,
- 8) 6th of December 9.15-16.00,
- 9) 25th of April 2023 10.15-12

Course content

Part 1:

Ethics basics and ethics in specific disciplines (equivalent to one week full-time)

- 1) Awareness of ethical issues in science and technology. Why are ethics important to scientists and engineers?
- 2) Engineers' and scientists' responsibility. Avoidance of responsibility.
- 3) Models for critical thinking about ethics. Consequentialism and deontology.
- 4) Virtue, freedom, and relational ethics.
- 5) Justice and environmental ethics.
- 6) In-depth discussion of ethics in the participants' different disciplines.

Part 2:

Projects that integrate ethics into practice (equivalent to one week full-time)

- 7) Discussion on how to integrate ethics into courses, educational programs and subject areas. The participants present project ideas.
- 8) In-depth discussion and testing of the participants' ethical elements with the course participants as a test group.
- 9) Feedback on completed ethics projects.

Course facts

The course is free of charge, and is equivalent to one week (part 1) or two weeks (part 1 and 2) of full-time studies. A course certificate will be awarded after course completion.

Registration: no later than the 17th of August, email Pia.Westerlund@uadm.uu.se.
(A maximum of twelve participants are admitted.)

Course leaders: Maja Elmgren and Björn Victor.

If you have any questions regarding the course, the content or practical issues, please contact Maja Elmgren maja.elmgren@kemi.uu.se.

The Council for Educational Development at the Faculty of Science and Technology (TUR)
through
Maja Elmgren and Björn Victor