



DM2801 Digitalisation and Sustainable Societal Transformation 7.5 credits

Digitalisering och hållbar samhällstransformation

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

Establishment

The official course syllabus is valid from the autumn semester 2026 as decided by the director of first and second cycle education. Decision date: 2026-04-16

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Computer Science and Engineering

Specific prerequisites

Skills in scientific thinking and writing through one of the following

- degree obtained at university level of at least 180 credits
- completed or started degree project aiming at a degree at university level of at least 180 credits

- completed course in research methodology/theory of science, 6 credits.

Intended learning outcomes

After passing the course, the student should be able to

- evaluate definitions and approaches for sustainability and digitisation
- critically reflect on the socio-material composition of complex systems and their historical development
- evaluate current and future technology trends with regard to their influence on social and ecological sustainability
- give a thorough account of their own approach to sustainable digitisation

in order to

- be able to critically relate to technology and technical development with regard to how it influences sustainability
- prepare for further studies in the area.

Course contents

The course gives a basis in critical theory and ways of thinking that are needed for developing perspectives and approaches to sustainable digitisation. Through lectures, seminars and practical learning activities, the course will treat

- key concepts for sustainability and digitisation
- perspectives on ecology, participation, social justice, technology design and development in the context of sustainability and digitisation based on critical and feminist theory
- current technology trends in a historical perspective
- critical perspectives on adaptation practice in academia, society, and industry.

Examination

- INL1 - Hand-in assignment, 1.5 credits, grading scale: P, F
- INL2 - Hand-in assignment, 3.0 credits, grading scale: P, F
- INL3 - Hand-in assignment, 3.0 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.

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.