

# 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 2024 in accordance with decision by Head of School: J-2023-2252.Date of decision: 2023-10-17

## **Grading scale**

P, F

# **Education cycle**

Second cycle

# Main field of study

Computer Science and Engineering

## Specific prerequisites

Completed Bachelor's thesis, equivalent to DA150X/EF112X/IA150X/DM128X.

# Language of instruction

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

## 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 feministic 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.