# LD1010 Digital transformation and Sustainable Development 4.0 credits

Digital Transformation och hållbar utveckling

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 a decision from the Faculty board of the ITM school: M-2024-0051. Date of decision: 2024-01-22.

## Grading scale

P, F

## Education cycle

First cycle

## Main field of study

Technology and Learning

## Specific prerequisites

General entry requirements.

## 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:

- Explain the basics of digital transformation and its effect on society.
- Explain digital transformation in an organisational context.
- Relate digital strategies to sustainable development goals and understand how digital transformation can accelerate the realisation of sustainable development goals.
- Analyse and critically review digital solutions for sustainability.
- Apply their knowledge in practical scenarios to promote sustainable development through digital projects.
- Describe the relationship between the strategies of an organisation and their effect on selection, prioritising, and supervision of a project.
- Consider, and make suggestions, how digital transformation for sustainable development can be carried out through projects.

# Course contents

Part 1: Introduction to digital transformation

- Basic concepts within digital transformation.
- Historical and contemporary perspectives on the role of digitalisation in society.

Part 2: Sustainable development and digitalisation

- Overview of UN's sustainable development goals.
- Case studies: Digital solutions for sustainability.

Part 3: Implementation of digital projects for sustainability

- Methods to integrate sustainability in digital projects.

Part 4: Critical thinking and perspectives on the future

- Discussion of ethical and social implications of digital transformation.
- Future trends in digital transformation and sustainability.

# Examination

- LEX1 - Continuous Assessment, 2.0 credits, grading scale: P, F
- LEX2 - Continous assessment, 2.0 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.