Co-creating Digital Solutions and Automation

Samskapande av digitala lösningar
7.5 credits

Single subject course

726G43

Valid from: 2026 Autumn semester

Determined by	**Main field of study**	
Chairman of the Course and Programme Syllabus Board at the Faculty of Arts and Sciences	Information Systems	
Date determined	**Course level**	**Progressive specialisation**
2025-11-24	First cycle	G2F
Revised by	**Disciplinary domain**	
	Social sciences	
Revision date	**Subject group**	
	Informatics/Computer and Systems Sciences	
Offered first time	**Offered for the last time**	
Autumn semester 2026		
Department	**Replaced by**	
Institutionen för ekonomisk och industriell utveckling		

Entry requirements

General entry requirements for undergraduate studies and Social Studies and English and Mathematics corresponding to the level in Swedish upper secondary education (Samhällskunskap 1b or 1a1 and 1a2 or Samhällskunskap nivå 1b or nivå 1a2, Engelska 6 or Engelska nivå 2 and Matematik 3b/3c or Matematik C or Matematik fortsättning nivå 1b or Matematik fortsättning nivå 1c).

and

90 ECTS credits, of which at least 30 ECTS credits must be in information systems/informatics courses (or equivalent)

Exemption from Swedish

Intended learning outcomes

On completion of the course, the student should be able to:

Knowledge and understanding

- identify and explain different perspectives on co-creation and responsible innovation

Competence and skill

- apply co-creation as an approach to the design of digital solutions and automation
- apply concepts from Science and Technology Studies (STS) in the co-creation of digital solutions

Judgement and approach

- critically analyze the societal impact of digital solutions and automation
- assess the value of including external users in the design and testing of digital solutions and automation

Course content

The course aims to introduce the student to theories and concepts from social sciences with a focus on Science and Technology Studies (STS), such as Actor Network Theory (ANT), Social Construction of Technology (SCoT), Agential Realism and Sociotechnical Imaginaries (STIs). The course covers how these can be used for co-creation and in the design and testing of digital solutions and automation. The course also covers the effects of digital technologies and automation on a societal level with a focus on responsible innovation.

Teaching and working methods

The teaching consists of lectures, workshops, seminars, supervision and project work. In addition, the student should conduct self-study.

Teaching and examination language: English

Examination

The course is examined through:

- individual written essay, grading scale: EC
- written group project, grading scale: EC (P/F)
- active participation in seminars: EC (P/F)
- active partivipation in workshops: EC (P/F)

For a final grade of E (Pass), at least E is required in the individual written essay, and Pass in the remaining sections. A higher final grade is based on the grade in the individual written essay.

Detailed information can be found in the course's study guide.

If special circumstances prevail, and if it is possible with consideration of the nature of the compulsory component, the examiner may decide to replace the compulsory component with another equivalent component.

If the LiU coordinator for students with disabilities has granted a student the right to an adapted examination for a written examination in an examination hall, the student has the right to it.

If the coordinator has recommended for the student an adapted examination or alternative form of examination, the examiner may grant this if the examiner assesses that it is possible, based on consideration of the course objectives.

An examiner may also decide that an adapted examination or alternative form of examination if the examiner assessed that special circumstances prevail, and the examiner assesses that it is possible while maintaining the objectives of the course.

Students failing an exam covering either the entire course or part of the course twice are entitled to have a new examiner appointed for the reexamination.

Students who have passed an examination may not retake it in order to improve their grades.

Grades

ECTS, EC

Other information

Planning and implementation of a course must take its starting point in the wording of the syllabus. The course evaluation included in each course must therefore take up the question how well the course agrees with the syllabus.

The course is conducted in such a way that there are equal opportunities with regard to sex, transgender identity or expression, ethnicity, religion or other belief, disability, sexual orientation and age.

If special circumstances prevail, the vice-chancellor may in a special decision specify the preconditions for temporary deviations from this course syllabus, and delegate the right to take such decisions.

About teaching and examination language

The teaching language is presented in the Overview tab for each course. The examination language relates to the teaching language as follows:

- If teaching language is “Swedish”, the course as a whole could be given in Swedish, or partly, or as a whole, in English. Examination language is Swedish, but parts of the examination can be in English.
- If teaching language is “English”, the course as a whole is taught in English. Examination language is English.
- If teaching language is “Swedish/English”, the course as a whole will be taught in English if students without prior knowledge of the Swedish language participate. Examination language is Swedish or English depending on teaching language.