

Contemporary Research in Computational Social Science II

Samtida forskning i Computational Social Science II
7.5 credits

Programme course

771A50

Valid from: 2026 Autumn semester

Determined by	Main field of study	
Course and Programme Syllabus Board at the Faculty of Arts and Sciences	Computational Social Science	
Date determined	Course level	Progressive specialisation
2025-11-06	Second cycle	A1N
Revised by	Disciplinary domain	
	Social sciences	
Revision date	Subject group	
	Other Subjects within Social Science	
Offered first time	Offered for the last time	
Autumn semester 2026		
Department	Replaced by	
Institutionen för ekonomisk och industriell utveckling		

Course offered for

- Master's Programme in Computational Social Science

Entry requirements

- Bachelor's degree equivalent to a Swedish Kandidatexamen within one of the following subject areas:
 - humanities
 - cultural studies
 - social sciences
 - behavioural sciences
 - natural sciences
 - computer sciences
 - engineering-sciencesor equivalent
- English corresponding to the level of English in Swedish upper secondary education (English 6 or Engelska nivå 2)
Exemption from Swedish

Intended learning outcomes

After completion of the course, the student should at an advanced level be able to:

- Independently synthesize current research debates in computational social science.
- Critically reflect on theoretical implications of computational approaches in the social sciences.
- Compare and evaluate research designs and empirical strategies used in computational social science.
- Critique ongoing research, drawing on relevant theoretical and methodological frameworks.

Course content

This course extends and deepens knowledge of computational and quantitative approaches to contemporary social science research problems, including agent-based models, machine learning methods, and network analysis of social relations. This is accomplished through the presentation and critical discussion of ongoing and novel research. Computational approaches to specific problems in social science research fields---for example, demographic, economic, political, and cultural research---are considered. A focus is placed on how computational thinking is employed in these research fields and the potential for computational approaches to open new insights into a variety of social phenomena.

Teaching and working methods

The teaching consists of lectures, seminars, and independent study.

Language of instruction: English.

Examination

The course is examined through

- Individual written assignment, grading scale: EC
- Group work, grading scale: EC
- Participation in seminars, grading scale: passed, failed

The examination comprises a total of 100 course points. To receive a passing final grade (E) in the course, students must obtain at least 40 course points by passing the required assignments and fulfill the participation requirements in the seminars.

For a higher final grade, the following is required:

For a final grade of D, a minimum of 52 course credits is required.

For a final grade of C, a minimum of 64 course credits is required.

For a final grade of B, a minimum of 76 course credits is required.

For a final grade of A, a minimum of 88 course credits is required.

Detailed information about the examination can be found in the 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.