

Course syllabus

Avancerat projekt i datavetenskap Advanced Project in Computer Science

EDAN90, 7,5 credits, A (Second Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED C/D **Date of Decision:** 2023-04-18

General Information

Elective for: C4, D4

Language of instruction: The course will be given in English on demand

Aim

The aim of the course is to apply a scientific approach to develop a deeper understanding of a subarea of computer science.

Learning outcomes

Knowledge and understanding
For a passing grade the student must

- have a deepened knowledge of the chosen topic
- know about research methods and practices in the chosen subarea
- know how to document and present a project according to scientific standard

Competences and skills

For a passing grade the student must

- be able to plan, execute, and document the chosen project
- be able to search for and summarize relevant information from both scientific and practice based sources
- be able to apply gathered knowledge within the chose area

• be able to present the result of the project in both written and oral form, according to academic standards for the subarea

Judgement and approach

For a passing grade the student must

- be able to reflect on the conduct and results of the project in a report of scientific character
- be able to collect and assess information from different kinds of sources

Contents

In this course, the student perform a project within a subarea of computer science with connection to the research being performed at the department and the courses given at the department. The course gives an opportunity to further deepen the knowledge within an area of computer science the student has already become familiar with by taking other courses at the department. Further, the course aims at practicing scientific work practices and communication. The course includes:

- supervised literature studies via databases and library
- supervised practical work within the chosen project area
- analysis and reflection based on a scientific approach of collected information and conducted work
- written report in Swedish or English according to standard from international reviewed journals and oral presentation, in Swedish or English, at a public seminar

Available project topics can vary from course instance to course instance and will be announced beforehand on the course web page. Topics are selected from the department's advanced courses. No guarantee is given that all topics will be available at each course instance. If supervisors are available within the research groups of the department, an individual course plan can be made for a project performed within one of the research projects at the department.

Examination details

Grading scale: UG - (U,G) - (Fail, Pass)

Assessment: To pass the course, the students will have to complete the project work, write a scientific report, and present their work orally.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Admission

Admission requirements:

• EDAN70 Project in Computer Science plus one of the department's courses on G2 or A level related to the chosen topic for the project. The specific course requirements and available project topics will be explicitly stated at the course web page for each course instance

The number of participants is limited to: 30

Selection: Completed university credits within the programme. Priority is given to students enrolled on programmes that include the course in their curriculum.

Reading list

• Original scientific articles or other literature related to the chose topic.

Contact and other information

Course coordinator: Studierektor, studierektor@cs.lth.se

Course homepage: http://cs.lth.se/edan70