UNIVERSITY OF SKÖVDE

TRANSLATION FROM SWEDISH

COURSE SYLLABUS

Data Science Project A1F

15 credits

Course code: IT745A
Version number: 10
Valid from: 1 January 2026
Ratified by: Curriculum Committee for Informatics
Date of ratification: 15 May 2025

1. General information about the course

The course is provided by the University of Skövde and is named Data Science Project A1F (Projekt i Data Science A1F). It comprises 15 credits and is a second-cycle course. The level of progression is A1F.

The course is a part of the main field of study in Informatics. The disciplinary domain of the course is Technology.

2. Entry requirements

The course has the following entry requirements: passed IT776A Artificial Intelligence A1N and passed IT734A Data Mining A1N and attended IT803A Introduction to Data Science A1N with a passed grade on the examination 1002 Mini Project, 4.5 credits and a passed grade on the examination 2002 Written assignment, 3 credits (or the equivalent).

3. Course content

The student will study a problem related to data science, and show that he/she has acquired an intellectual maturity in the field. e.g., by being able to critically evaluate different methods for data analysis. The project can be carried out in collaboration with an external organization. The work shall be carried out in connection with the research interests of the researchers at the university of Skövde.

4. Objectives

After completed course the student should be able to:

- identify and solve a problem within data science,
- elicit and formalize a problem based on requirements from a client or define a research problem based on scientific publications,
- design and argue for a data analysis strategy for the selected problem,
- implement the data analysis strategy and critically reflect regarding the results, and
- communicate the project results both orally and in written form

5. Examination

The course is graded A (Excellent), B (Very good), C (Good), D (Satisfactory), E (Sufficient) or F (Fail).

The examinations of the course consist of the following modes of assessment:

- **Written assignment**
  15 credits, grades: A/B/C/D/E/F

Students with a permanent disability who have been approved for directed educational support may be offered adapted modes of assessment.

6. Types of instruction and language of instruction

The teaching consists mostly of own work with supervision.

The teaching is conducted in English.

7. Course literature and other educational materials

Berndtsson, M. et. al. (2007). *Thesis Projects: A Guide for Students in Computer Science and Information Systems*. London: Springer-Verlag London Ltd. ISBN 9781848000087. or

Dawson, C. W. (2009). *Projects in Computing and Information Systems: A Student's Guide*. Harlow: Addison-Wesley Professional. ISBN 0273721313.

Additional course literature is identified by the student and selected in consultation with the supervisor.

8. Student influence

Student influence in the course is ensured by means of course evaluation. The students are informed about the results of the evaluation and potential measures that have been taken or are planned, based on the course evaluation.

9. Additional information

Further information about the course, as well as national and local governing documents for higher education, is available on the website of the University of Skövde.