UNIVERSITY OF SKÖVDE

TRANSLATION FROM SWEDISH

COURSE SYLLABUS

Visual Data Analysis A1N

7.5 credits

Course code: IT824A
Version number: 2
Valid from: 1 January 2027
Ratified by: Curriculum Committee for Informatics
Date of ratification: 21 May 2026

1. General information about the course

The course is provided by the University of Skövde and is named Visual Data Analysis A1N (Visuell dataanalys A1N). It comprises 7.5 credits and is a second-cycle course. The level of progression is A1N.

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

2. Entry requirements

A Bachelor degree of at least 180 higher education credits (equivalent to 180 ECTS) within the fields of informatics or computer science.

A further requirement is proof of skills in English, equivalent of studies at upper secondary level in Sweden, known as English 6 or English level 2. This is normally demonstrated by means of an internationally recognized test, e.g., IELTS, TOEFL, or an equivalent.

3. Course content

The course focuses on visualization- and interaction techniques used to support decision makers find patterns, trends or to extract new knowledge. Through lectures, seminars and a smaller project work, the students are provided with a broad understanding of the importance of such techniques when designing and using data intensive applications.

4. Objectives

After completed course the student should be able to:

- critically reflect upon the importance of visualization in general and visual data analytics in particular,
- in detail account for the importance of visualization and interaction in data-intensive applications,
- describe and discuss central concepts regarding human perception and cognition,
- apply knowledge in visualization and interaction, and
- actively engage in discussions on the latest research topics.

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:

- **Lab assignment**
  2 credits, grades: G/U
- **Seminar assignment**
  2 credits, grades: G/U
- **Supervised written examination**
  3.5 credits, grades: A/B/C/D/E/F (determines the final grade)

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 is comprised of project work, lectures and seminars/group discussions.

The teaching is conducted in English.

7. Course literature and other educational materials

Barnum, C. M. (2020). *Usability testing essentials: Ready, set...test!* (2nd ed.). Burlington, USA: Morgan Kaufmann. ISBN 9780128169421. Is available as an e-book at the university library.

Ware, C. (2010). *Visual Thinking for Design*. [Electronic] Elsevier Science. ISBN 9780080558417. Is available as an e-book at the university library and at O´Reilly.com.

Munzner, T. (2014). *Visualization analysis and design: Principles, techniques and practice*. Boca Raton: CRC Press. ISBN 9781466508910. Is available as an e-book at the university library.

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

The content of the course corresponds completely or partially with the following course(s) and cannot be included in the required credits of a degree qualification:

- IT794A - Visual Data Analysis A1N 7.5 credits

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.