



DH2322 Interactive Data Visualization 7.5 credits

Interaktiv datavisualisering

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

The official course syllabus is valid from the autumn semester 2026 as decided by the faculty board decision HS-2025-2043. Date of decision 2025-10-07

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Computer Science and Engineering

Specific prerequisites

Knowledge and skills in programming, 6 credits, equivalent to completed course DD1337/DD1310-DD1319/DD1321/DD1331/DD1333/DD100N/ID1018/ID1022.

Intended learning outcomes

After passing the course, the student should be able to

- develop interactive visualizations through interactive data transformations, visual mappings and view transformations
- motivate design choices based on domain knowledge
- analyse and criticize information visualization systems
- demonstrate and explain own data visualizations for a broad audience
- evaluate their own data visualizations

in order to achieve the ability to read and create interactive data visualizations. Knowledge of visualization enables clear communication in our data-rich world.

Course contents

The course covers the basic concepts of data visualization including visualization pipeline, data types, data transformations, data models, visual mappings, visual structures, view transformations, and evaluation techniques. Students develop projects using web-based visualization tools.

The course is project-based and students create and work both individually and in groups. The projects range from, for example, visualizing medical data to visualizing the environmental impacts of global trade. Group projects include actual data from open sources or from partners who provide the data.

Examination

- PROA - Individual Project, 2.0 credits, grading scale: A, B, C, D, E, FX, F
- PROB - Group Project, 4.5 credits, grading scale: A, B, C, D, E, FX, F
- INL1 - Home Assignments, 1.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability. The examiner may apply another examination format when re-examining individual students. If the course is discontinued, students may request to be examined during the following two academic years.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.