

DH2321 Information Visualization 6.0 credits

Informationsvisualisering

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

Establishment

On 2019-10-15, the Head of School of EECS has decided to establish this official course syllabus to apply from the spring semester 2020 (registration number J-2019-2403).

Grading scale

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

Education cycle

Second cycle

Main field of study

Computer Science and Engineering

Specific prerequisites

Completed course in computer graphics and visualisation DD2258/DH2320, or equivalent.

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

Having passed the course, the student should be able to

- develop interactive information visualisations through interactive data transformations, visual mappings and view transformations
- justify design choices based on domain knowledge
- analyse and criticise information visualization systems
- demonstrate and explain own information visualisations for a broad audience
- evaluate own information visualisations.

Course contents

The course covers the basic concepts of information visualization including the 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, in particular D3.js.

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

Examination

- PROA Individual project, 1.0 credits, grading scale: A, B, C, D, E, FX, F
- PROB Individual project, 2.0 credits, grading scale: A, B, C, D, E, FX, F
- PROC Group project, 2.0 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.