DD2257 Visualization 7.5 credits

Visualisering

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

Establishment

Course syllabus for DD2257 valid from Spring 2009

Grading scale

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

Education cycle

Second cycle

Main field of study

Mathematics

Specific prerequisites

Language of instruction

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

Intended learning outcomes

The students should after the course be able to

- describe basic concepts in visualization
- describe basic methods for visualization of scalar data, vector data and volume data including time dependent data
- use a visualization system such as OpenDX for visualization of scalar data, vector data and volume data including time dependent data
- use a visualization system such as OpenDX for a practical problem.

Course contents

Perception. Fundamental elements of visualization. Techniques and algorithms for volume visualization. New forms of data presentation. Animation. Software tools. Applications, e.g. fluid visualization.

Course literature

To be announced at least 2 weeks before course start at the web page for the course. Previous year Visualization Toolkit An Object Oriented Approach to 3D Graphics, Will Schoeder, Ken Martin and Bill Lorensen, 4th Edition, has been used.

Examination

- TEN1 - Examination, 4.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Assignments, 3.5 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.

Other requirements for final grade

Examination (TEN1; 4 university credits).
Lab work (LAB1; 3,5 university credits).

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.