DD2470 Advanced Topics in Visualization and Computer Graphics 6.0 credits

Avancerade ämnen i visualisering och datorgrafik

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

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

The official course syllabus is valid from the autumn semester 2024 in accordance with the director of first and second cycle education decision J-2024-1111.Decision date: 2024-04-15.

Grading scale

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

Education cycle

Second cycle

Main field of study

Computer Science and Engineering

Specific prerequisites

Knowledge in computer graphics and visualisation, 12 credits, equivalent to at least two completed courses from the following list:

DD2258/DH2320 Introduction to Visualization, Computer Graphics and Image/Video Processing

DH2321 Information Visualization

DH2323 Computer Graphics and Interaction

DH2650 Computer Game Design

DD2257 Visualization

DH2413 Advanced Graphics and Interaction

Active participation in a course offering where the final examination is not yet reported in Ladok is considered equivalent to completion of the course.

Registering for a course is counted as active participation.

The term 'final examination' encompasses both the regular examination and the first re-examination.

Language of instruction

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

Intended learning outcomes

After passing the course, the student should be able to

- carry out and present a whole, or parts of, a method from a current research report in visualisation and computer graphics
- give an account of current research challenges in visualisation and computer graphics
- search for research literature that is relevant for visualisation and computer graphics efficiently
- navigate the scientific publication landscape including conferences, journals and bibliometrics,
- read research articles efficiently and evaluate them with regard to structure and aspects such as novelty, technical soundness, evaluation and usability

in order to be able to benefit from academic research in their future career and thereby contribute to knowledge transfer to the industry.

Course contents

Give an overview of relevant research publications, the structure of a research paper and how to, in an efficient manner, search for relevant literature.

Read, present and discuss recent research papers in visualisation and computer graphics. Implement a method, or parts thereof, published in a research paper.

Examination

- PRO1 - Project 1, 2.0 credits, grading scale: A, B, C, D, E, FX, F
- PRO2 - Project 2, 4.0 credits, grading scale: A, B, C, D, E, FX, 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.

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.