DH2650 Computer Game Design 6.0 credits

Datorspelsdesign

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

Establishment

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.

At least one of the following:

- Knowledge in algorithms, data structures and basic software development techniques, 6 credits, equivalent to completed course DD1338/DD1320-DD1328/DD2325/ID1020/ID1021.
- Knowledge in human-computer interaction or interaction design, 4.5 credits, equivalent to completed course DH1622/DH1623/DH2628/DM2601/CH2010/HM1025 or completed part INL1 in DH1622.

Intended learning outcomes

After passing the course, the student should be able to

- give an account of actors on the computer game market and their roles
- explain the theory behind game rules and game experiences and analyse the influence of rules on systems
- describe and apply conditions and requirements for different game genres
- describe and apply user studies of computer games
- explain how modalities influence the game experience

in order to be able to develop computer game prototypes advanced enough to present to a publisher or other interested party.

Course contents

Computer Graphics, geometric modelling for games, real-time graphics and special effects, OpenGL, storytelling, educational games, children's games, social gaming, game rules, game experience.

Examination

- LAB4 - Laboratory Work, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB3 - Laboratory Work, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- LAB2 - Laboratory Work, 1.5 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.

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.

Additional regulations

Anyone who at the start of the course has not completed 6 credits of computer graphics with interaction corresponding to DH2323 must read DH2323 in parallel with DH2650.