



DH2465 Computer Science, Business and Management 15.0 credits

Datateknik, ekonomi och ledarskap

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

Establishment

Course syllabus for DH2465 valid from Spring 2019

Grading scale

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

Education cycle

Second cycle

Main field of study

Computer Science and Engineering

Specific prerequisites

2D1640/DH2640 Graphics and Interaction Programming and 4D1144/ME2304 Management in Technology Intensive Organisations, or the equivalent.

Language of instruction

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

Intended learning outcomes

The course intends to give the students professional skills that are needed to solve computer scientific problems that are so compound and complex that they for their solution require knowledge both within computer science and within industrial economics.

The student should after the course be able to:

- Apply knowledge and skills from earlier courses and learn to acquire new knowledge when necessary
- Choose and justify the choice of suitable methods in order to systematically collect information with the purpose of empirically highlighting and understanding a complex problem in computer science
- Analyse and interpret collected information from different aspects, such as computer science and industrial economics
- Relate, contrast and explain practical results with theoretical concepts and models
- Work out and suggest a solution to a complex problem in computer science
- Identify, integrate and describe different aspects of computer science, business and leadership within an organizational context

Further, the student after the course should have assimilated advanced:

- Knowledge of the IT preconditions and conditions within different social sectors or lines of business

Furthermore, the student should after the course have good skills in:

- Organising, handling and leading a complex project work that runs over a long period of time, in collaboration with employers and associates.
- Describing, analysing and reflecting critically over own and others' project work, both orally and in writing

Course contents

The course is a project course and is completely integrated with the course DH2655, Cooperative IT-design. During period 1, the course contains lectures and practical assignments, partly about methods for putting demands, designing and developing IT-support (DH2655 and DH2465), partly about economics and leadership (specific for DH2465). During period 2, the students plan and carry out a project in groups of 5 to 7 students (joint groups for students of DH2655 and DH2465). During the project work applying systematic investigation and examination methodology for software design.

The course starts with a critical analysis of the technical preconditions and conditions (for example the IT maturity, programming environments, leadership traditions, regulations) within some different social sectors or lines of business. The analysis, that is carried out in small groups or independent, is reported in a specific report and constitutes basis and background of the larger project in the course.

The project is carried out on behalf of a company or other external organisation and is carried out as a cooperation between this organisation, the School of Computer Science and Communication and the School of Industrial Engineering and Management (the department of Industrial Economics and Management). The students independently work to solve the imposed assignment. The project is presented both in writing and orally. Supervision, above all, takes place on the students' inquiry.

Course literature

Will be announced no later than 4 weeks before the start of the course on the course web. Previous academic year, material produced at the department was used.

Examination

- PRO2 - Project, 12.0 credits, grading scale: A, B, C, D, E, FX, F
- PRO1 - Project, 3.0 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.

Other requirements for final grade

PRO1 – Project assignment, 3.0 credits, grading scale: A-F P, F

PRO2 - Project, 12.0 credits, grading scale: A, B, C, D, E, FX, F

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.