EH2770 IT Management with Enterprise Architecture I 7.5 credits

IT-Management med Enterprise Architecture I

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
Course syllabus for EH2770 valid from Spring 2019

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

Education cycle
Second cycle

Main field of study
Electrical Engineering

Language of instruction
The language of instruction is specified in the course offering information in the course catalogue.
Intended learning outcomes

Upon completion of this course the participants should be able to:

• With examples describe and explain the complexity in business operations and its IT support in large enterprises.
• Produce understandable and realistic enterprise architecture models of organisations in a predefined modeling language.
• Use enterprise architecture models (created in a predefined modeling language) to analyze the quality of different scenarios of business and IT-systems solutions.
• Create simplified enterprise transformation plans for moving from a current situation to a future desirable state.

In addition the participants should:

• Have a basic understanding of how enterprise architecture is used in practice in organizations today.

Course contents

The course consists of, and is examined by, one main project assignment in which the students take on the role as the chief architect for a large enterprise’s IT portfolio. The organisation in question today has an IT-portfolio that is without governance structures and that is offering poor support to the business. The assignment is to suggest a future scenario of the business and IT-systems and to convince the enterprise’s CEO to conduct a transition project that implements the scenario.

The course contains the following knowledge modules:

• The complexity of enterprises and the challenge for enterprise architecture.
• Basic enterprise architecture modeling.
• Enterprise architecture analysis.
• Enterprise architecture transition planning.

Disposition

The knowledge modules are studied by the students themselves. Seminars and tutoring sessions are held by the teachers, as is peer reviewing seminars. The course also contain a number of traditional guest lectures with speakers from industry.

The project assignment is examined by a written report and an oral presentation. The assignment is done in groups.

Specific prerequisites

Single course students: 120hp and English B or equivalent.
Course literature
Annonseras vid kursstart (en sammanställning av rapporter, böcker, artiklar, websidor och videofilmer)
Announced at course start (a combination of reports, books, articles, web pages, and videos)

Equipment
A computer with Windows or Mac operating system with rights to install software.

Examination
- INLA - Assignment 1, 1.0 credits, grading scale: P, F
- INLB - Assignment 2, 1.0 credits, grading scale: P, F
- PROA - Project Assignment, 4.5 credits, grading scale: A, B, C, D, E, FX, F
- SEMA - Lecture Series, 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.

The main examination in the course is a project assignment, which is also handed in preliminary halfway into the course. In addition an oral presentation is also examined as is attendance at lectures. The project assignment is done in groups. If there is a need to differentiate the grade between the group members examination is done by individual oral examination.

Other requirements for final grade
All examination parts must be approved.

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.