Linnæus University

Course syllabus

Faculty Board of Science and Engineering

School of Computer Science, Physics and Mathematics

2IK40E Examensarbete inom informatik, 15 högskolepoäng
2IK40E Bachelor Thesis in Informatics, 15 credits

Main field of study
Informatics

Subject Group
Informatics/Computer and Systems Sciences

Level of classification
First Level

Progression
G2E

Date of Ratification
Approved 2009-06-23
Revised 2010-08-18 by School of Computer Science, Physics and Mathematics. Revision made for English translation of the syllabus, prerequisites and course evaluation.
The course syllabus is valid from spring semester 2011

Prerequisites
At least 90 credits within the field of informatics/computer science/design

Objectives

The course aims for the student to use his/her acquired theoretical and practical knowledge to apply these to the scientific perspective in a bachelor thesis. After taking this course the student will be able to:

- identify and formulate a research thesis with support of literature studies
- plan and execute a research project in a scientific manner
- account for and communicate the acquired results both written and orally
- critically examine his/her and others work from a scientific perspective.

Content

- Application of a scientific approach in a research process, from formulating a scientific problem and choosing the appropriate methods to implementation and presentation of results.

- Planning and execution of a research project in smaller groups (1-3 students).
- Present a project in a written report and an oral presentation at a seminar.
- Critical review of others projects/thesis.

Type of Instruction

The course combines practical research work, seminars and tuition. The work can be conducted both individually and in groups. The course material consists of course and reference literature and scientific articles, conference papers and similar sources. The teaching aims to train the student to actively seek, gather and examine knowledge, apply this knowledge in practice and discuss the results during seminars.

Examination

The course is assessed with the grades U, 3, 4 or 5.

Grading is based on active participation during tuition and seminars, handing in written assignments in the form of research thesis and a report. Participation in tuition and seminars is obligatory. Grading is based on individual and collective results depending on group composition during the time the bachelor thesis is made. On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

Further opportunities for examination after course completion is offered within six weeks within ordinary term dates.

Course Evaluation

A course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The result of the course evaluation will be filed at the department.

Required Reading and Additional Study Material

Required Reading

Nyberg, R. (2000), *Skriv vetenskapliga uppsatser och avhandlingar med stöd av IT och Internet.* Studentlitteratur AB, ISBN 9789144010007; p. 254.
Paulsson, U. & Björklund M. (2003), *Seminarieboken,* Studentlitteratur AB, ISBN 914404125X; p. 138.
Trost, J. (2002), *Att vara opponent,* Studentlitteratur AB, ISBN 9144024673; p. 85.

Reference Literature

Kumar, R. (2005), *Research Methodology – A step-by step guide for beginners.* 2nd ed. Sage PublicationsPress, ISBN 141291194X; p. 332.

Additional Study Material

These books are available through the University's library as e-books:
Schultz, R. A. (2005), *Contemporary Issues in Ethics and Information Technology.* IRM Press; p. 202.
Gower, B. (1996), *Scientific method: An historical and philosophical introduction.* Routledge; p. 276.

The Required Reading and Additional Study Material are subject to changes.