



COURSE SYLLABUS

Fördjupningskurs i datavetenskap och kommunikation

Advanced Topic in Computing

7.5 credits (7,5 högskolepoäng)

Course code: DV2635

Main field of study: Computer Science, Software Engineering

Disciplinary domain: Technology

Education level: Second cycle

Specialization: AIN - Second cycle, has only first cycle course/s as entry requirements

Language of instruction: English

Applies from: 2023-08-28

Approved: 2023-03-01

1. Decision

This course is established by Dean 2022-12-21. The course syllabus is approved by Head of Department of Computer Science 2023-03-01 and applies from 2023-08-28.

2. Entry requirements

The student must have completed 90 credits in Software Engineering or Computer Science and have completed a course in Research Methodology. English 6.

3. Objective and content

3.1 Objective

The aim of the course is to enable students to develop specialised knowledge and understanding within a specific area within Computer Science. The course is a direct preparation for a future Master's degree project.

3.2 Content

The course includes various topics that are introduced by researchers in computer science. Elements included in the course are a review of research methods, searching and critical evaluation of scientific literature, formulation of scientific questions/problems, research ethics, scientific writing and presentation.

4. Learning outcomes

The following learning outcomes are examined in the course:

4.1 Knowledge and understanding

On completion of the course, the student will be able to:

- have acquired advanced knowledge of a specific area within computer science
- have orientation of current research within chosen area

4.2 Competence and skills

On completion of the course, the student will be able to:

- demonstrate an ability to articulate bases for a more extensive research work and to discuss and motivate choices
- be able to write a scientific text

4.3 Judgement and approach

On completion of the course, the student will be able to:

- In general terms be able to argue about the various pros and cons of the chosen area of specialization
- In detail be able to argue about the various pros and cons of the area of specialization
- In a detailed way be able to explain and demonstrate an understanding of the principles and rationale behind the presentation of scientific results

5. Learning activities

The course consists of lectures, seminars and a final seminar. In this seminars, students will write short papers, which are presented and discussed in detail. The final written report can be done independently or in groups consisting of two students.

6. Assessment and grading

Modes of examinations of the course

Code	Module	Credits	Grade
2310	Seminar	4 credits	GU
2320	Report	2.5 credits	AF
2330	Oral examination	1 credits	AF

The course will be graded A Excellent, B Very good, C Good, D Satisfactory, E Sufficient, FX Fail, supplementation required, F Fail.

The information before a course occasion states the assessment criteria and make explicit in which modes of examination that the learning outcomes are assessed.

An examiner can, after consulting the Disability Advisor at BTH, decide on a customized examination form for a student with a long-term disability to be provided with an examination equivalent to one given to a student who is not disabled.

7. Course evaluation

The course evaluation should be carried out in line with BTH:s course evaluation template and process.

8. Restrictions regarding degree

The course can form part of a degree but not together with another course the content of which completely or partly corresponds with the contents of this course.

9. Course literature and other materials of instruction

Main literature:

Literature is to a large extent scientific papers within the selected area. The papers are independently selected by the students in relation to the different projects during the course.

Reference literature:

Titel: Projects in Computing and Information Systems. A Student's Guide Third Edition

Author: Christian Dawson

ISBN: 9781292073460

Language: English

Published: 2015-04-16

Publisher: Pearson Education Limited

Number of pages: 320

10. Additional information

This course replaces the course DV2545