



Faculty of Health, Science and Technology  
Computer Science

### Syllabus

#### Course Approval

The syllabus was approved by the Faculty Board of Health, Science and Technology on 26 August 2014, and is valid from the Spring semester of 2015 at Karlstad University.

**Course Code:** DVAE11

**Degree Project for Master of Science in Engineering, Computer Engineering, 30.0 ECTS Credits**  
(Examensarbete för civilingenjörsexamen i Datateknik, 30.0 Swedish credit points)

**Degree Level:** Master

**Progressive Specialisation:** A2E (Second cycle, contains degree project for Master of Arts/Master of Science (120 credits))

#### Language of Instruction

Swedish or English

#### Prerequisites

Completed course credits for the Master of Science degree in computer engineering to the extent that no more than 30 ECTS course credits remain besides the Degree project 30 ECTS cr.

#### Major Field of Study

DVA (Computer Science)

#### Learning Outcomes

The aim of the degree project is that students develop and demonstrate the knowledge and skills required to work independently as a Master of engineering in the chosen technological field.

#### Knowledge and understanding

Upon completion of the course, students should be able to:

- demonstrate knowledge of the scientific basis of computer engineering and proven experience as well as insights into current research and development,
- demonstrate deepened knowledge in the chosen area.

#### Competence and skills

Upon completion of the course, students should be able to:

- demonstrate ability to critically, independently and creatively identify, formulate and deal with complex problems and to partake in research and development, thus contributing to knowledge development,
- demonstrate ability to plan and complete qualified tasks within given frames, including time limits, using adequate scientific and engineering methods,
- demonstrate ability to critically and systematically integrate knowledge acquired on the programme,
- perform information searches and independently identify relevant information,
- demonstrate ability to clearly present and discuss their results and the knowledge and arguments on which these are based, orally and in writing,
- follow the standard conventions of scientific writing in structure, style, formal aspects and correct referencing.

## Judgement and approach

Upon completion of the course, students should be able to:

- assess a fellow-student's degree project or equivalent work in terms of relevant science or ethical aspects,
- assess and critically review the results yielded in relation to science literature and demonstrate ability to identify their need of further knowledge.

## Content and Form of Instruction

The course is in the form of a project, supervised by university advisors.

Students have the opportunity to further develop knowledge and skills in the chosen area. The students work independently and are responsible for the process and the result. The project is chosen in consultation with the advisor. The purpose, aim, method and time plan must be approved by the examiner before the work is commenced. In the case of two students collaborating on a major project, the individual research questions applied throughout the project must be identified from the start. Each student writes and presents their own thesis. Students are required to serve as a peer reviewer. Supervision is only offered for the duration of the course.

## Reading List

See separate document.

## Examination

Assessment is based on the following components: problem formulation, process of completion, written report, oral presentation and performance as peer reviewer. The report is to be written in Swedish or English. If the language is English there must be a title and summary in Swedish.

## Grades

One of the grades Pass with Distinction (5), Pass with Some Distinction (4), Pass (3), or Fail (U) is awarded in the examination of the course.

## Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course assessment is based on student views and experiences as reported in written course evaluations and/or group discussions. Students will be informed of the result of the evaluation and of the measures to be taken.

## Course Certificate

A course certificate will be provided upon request.

## Additional Information

Students who enrolled before 1 July 2007 will complete their studies in accordance with the requirements of the earlier admission. Upon completion students may request degree and course certificates to be issued under the current ordinance if they meet its requirements.

The local regulations for studies at the Bachelor's and Master's levels at Karlstad University stipulate the obligations and rights of students and staff.