



Faculty of Economic Sciences, Communication and IT
Information Systems

Syllabus

Course Approval

The syllabus was approved by the Faculty Board of Economic Sciences, Communication and IT on 24 May 2012, and is valid from the Autumn semester of 2013 at Karlstad University.

Course Code: ISAE07

Research Project in Information Systems, 30.0 ECTS Credits
(Forskningsprojekt inom Informatik, 30.0 Swedish credit points)

Degree Level: Master

Progressive Specialisation: A1F (Second cycle, has second-cycle course/s as entry requirements)

Language of Instruction

English.

Prerequisites

30 ECTS credits advanced level courses in Information Systems and relevant background for the chosen research area. Upper Secondary English course B or equivalent.

Major Field of Study

IKA (Information Systems)

Learning Outcomes

This course prepares the student for starting a master thesis or dissertation in Information Systems.

After completing the course the student should be able to

- develop solutions (processes, architectures, user interfaces) for research-related Information Systems problems,
- making testable selected parts of the suggested solutions in a simulator or on a real platform,
- conduct evaluation of the selected parts of the suggested solutions based on either simulation or implementation,
- demonstrate knowledge in a given area of Information Systems,
- actively participate in (research) projects in Information Systems,
- read current literature at the level of conference and journal papers in Information Systems, and
- write technical reports with content suitable for submission to national/international conferences and journals in the area of Information Systems.

Content and Form of Instruction

During this course the students will deepen their knowledge and abilities in Information Systems. An important part of system design is to identify the whole width of problems that are involved in the design for a real world implementation. Based on such an analysis, the students will derive a sequence of more detailed sub-problems that can be treated by means of tools and mechanisms that the students are already familiar with. The students will then implement solutions to those problems, evaluate them in a real system or in a simulator and evaluate performance of proposed solutions.

The course includes project work in groups. Each group has to present two written reports describing the background, considerations regarding models, precise problem definition, and description of the solution, results and conclusions. One of the reports is a paper of about 10-15 pages in a style and quality suitable to submit to conferences or journals. The other is a complete project report covering all literature considered, all models considered, all data collected, etc., for which there is no page limit.

Each group will be given a specific problem to be solved.

Reading List

See separate document.

Examination

Both the written reports and the oral presentation of the paper in a seminar are parts of the examination. The contribution of each group member should be specified in the reports. Students who do not pass the first time, must submit a revised version of their parts or completely new reports for renewed evaluation.

Grades

One of the grades Distinction (VG), Pass (G) 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.

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