Faculty of Arts and Social Sciences
Information Systems

Syllabus

Research Project in Information Systems

Course Code:	ISAE07
Course Title:	Research Project in Information Systems *Forskningsprojekt inom Informatik*
Credits:	30
Degree Level:	Master's level
Progressive Specialisation:	Second cycle, has second-cycle course/s as entry requirements (A1F)

Major Field of Study:
IKA (Information Systems)

Course Approval
The syllabus was approved by the Faculty of Arts and Social Sciences 2026-02-26, and is valid from the Autumn semester 2026 at Karlstad University.

Prerequisites
30 credits in Information Systems at Master level. In addition, upper secondary level English 6 or English level 2. An equivalence assessment can be made.

Learning Outcomes
Upon completion of the course, students should be able to
1. develop solutions for research-related issues in information systems,
2. make selected parts of the suggested solutions testable in a simulator or on a real platform and evaluate these based on either simulation or implementation,
3. give an account of current literature in the form of conference and journal papers within the field of information systems, and
4. write technical reports with content of high academic standard within the field of information systems.

Content
The course prepares students to write a thesis in information systems.

In the course, students will deepen their knowledge and skills in information systems. An important part of system design is to identify the whole width of problems 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 addressed by means of tools and mechanisms that the students are already familiar with. The students will then implement solutions to those problems, for example, in the form of process descriptions, architectures, or user interfaces, and evaluate them in a real system or in a simulator and evaluate performance of proposed solutions.

The course includes project work that may be completed in groups. Each student/student 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 in a style and quality suitable to submit to conferences or journals. The other is a complete project report covering course literature, models considered, data collected, etc., for which there is no page limit.

Each student/student group will be given a specific problem to solve.

Reading List
See separate document.

Examination
All learning outcomes are assessed through two written assignments based on the project work and discussed in a seminar. The assignments can be completed individually or in groups. Submissions for assessment must clearly indicate individual contributions.

Students who do not pass the first time must either submit revised versions of their parts of the written assignment or provide entirely new submissions for reassessment.

If students have a decision from Karlstad University entitling them to Targeted Study Support due to a documented disability, the examiner has the right to give such students an adapted examination or to examine them in a different manner.

Grades
One of the grades Pass with 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 evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate
A course certificate will be provided upon request.

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