Faculty of Arts and Social Sciences
Information Systems

Syllabus

Software Architecture

Course Code:	ISGC19
Course Title:	Software Architecture *Programvaruarkitektur*
Credits:	7.5
Degree Level:	Undergraduate level
Progressive Specialisation:	First cycle, has at least 60 credits in first-cycle course/s as entry requirements (G2F)

Major Field of Study:
IKA (Information Systems)

Course Approval
The syllabus was approved by the Faculty of Arts and Social Sciences 2023-09-11, and is valid from the Spring semester 2024 at Karlstad University.

Prerequisites
60 ECTS credits in Information Systems, including Introduction to programming, 7.5 ECTS credits, and either Object-oriented modelling with programming, 7.5 ECTS credits, or Introduction to object-oriented programming, 5 ECTS credits, or equivalent

Learning Outcomes
Upon completion of the course, students should be able to:
1. explain and apply concepts used in relation to software architectures,
2. describe methods for the design and evaluation of software architecture,
3. carry out basic design and evaluation of a software architecture,
4. explain and apply advanced modelling principles for architectural design, and
5. reflect upon and analyse the relationship between software architecture and quality.

Content

The aim of the course is for students to acquire a basic understanding of software development and its role in the development of software systems. Interactive and practical activities such as workshops provide students with the opportunity to develop their skills in relation to the course components and intended learning outcomes.

Reading List
See separate document.

Examination
All learning outcomes are assessed based on an individual written and oral presentation. Learning outcome 3 is also assessed based on written hand-in assignments completed in groups.

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 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.