

Faculty of Arts and Social Sciences Information Systems

# Syllabus

## Software Development

<b>Course Code:</b>	ISGB04
Course Title:	Software Development <i>Programutveckling</i>
Credits:	7.5
Degree Level:	Undergraduate level
Progressive Specialisation:	First cycle, has less than 60 credits in first-cycle course/s as entry requirements (G1F)

### Major Field of Study:

IKA (Information Systems)

#### **Course Approval**

The syllabus was approved by the Faculty of Arts and Social Sciences 2017-03-01, and is valid from the Autumn semester 2017 at Karlstad University.

#### Prerequisites

Information Systems 30 ECTS cr

#### **Learning Outcomes**

Upon completion of the course students should be able to:

- identify object-oriented properties in a written performance specification and translate into a programming language,

- identify imperative properties in a textual performance specification and translate into a programming language,

- describe the relation between specification, design, implementation and documentation,
- give an account of the main features of a program development process,

- give an account of how a project organisation should be built to support the program development process, and

- set up tests to ensure the quality of the software.

#### Content

The aim of the course is that students develop a general understanding of the flow from idea to delivered system. It deals with both imperative and object-oriented analysis and design and addresses basic aspects of test and project management. An overview of the system development process is provided and object-oriented design is translated into an object-oriented programming language. Imperative development is dealt with in laboratory work. Instruction is in the form of lectures, laboratory supervision and seminars.

#### **Reading List**

See separate document.

#### Examination

Assessment is based on hand-in group assignments, and a written individual exam.

#### 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.