

Course Syllabus

Software Engineering 7.5 Credits, First Cycle

Learning Outcomes

Knowledge and Understanding

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

- explain basic concepts in object-oriented programming

Skills and Abilities

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

- develop language-independent algorithms when developing programs
- create applications using the standard library of the programming language
- use program statements to control the execution of a program
- create custom classes that represent the behaviour and attributes of an object
- use data structures to permanently and temporarily store and manipulate data during execution

Valuation and Approach

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

- discuss selected software development methods

Course Content

The course deals with basic knowledge and skills in programming.

The course deals with concepts in object-oriented programming (OOP), basic language elements, and programming statements. Emphasis is placed on classes and objects used in writing object-oriented programs. It also covers how data are read, stored, and manipulated in data structures and files.

Assessment

- Assignments

Grades

The grading scale used for the final course grade is U–G.

Grades are reported as follows:

- Assignment 1 - 1.5 Credits | U–G
- Assignment 2 - 1.5 Credits | U–G
- Assignment 3 - 1.5 Credits | U–G
- Assignment 4 - 3 Credits | U–G

Prerequisites

General entry requirements

Other Information

Instruction and materials may be in English.

This course cannot be counted towards the same degree along with courses that have equivalent content.

If the student has received a decision/recommendation granting study support from Dalarna University because of a disability, then the examiner has the right to offer an alternative examination arrangement. The examiner takes into account the objectives in the course syllabus when deciding whether the examination can be adapted in accordance with the decision/recommendation.

Subject:

Information Systems

This course can be included in the following main field(s) of study:

1. Information Systems

Progression Indicator within (each) main field of study:

1. G1N

Approved:

Approved 29 November 2022

Valid from 29 November 2022