

# Object Oriented Programming

Programme course

8 credits

Objektorienterad programmering

TDDC77

Valid from: 2017 Spring semester

**Determined by**

Board of Studies for Computer Science  
and Media Technology

**Date determined**

2017-01-25

## Main field of study

Information Technology

## Course level

First cycle

## Advancement level

G1X

## Course offered for

- Information Technology, M Sc in Engineering

## Entry requirements

Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

## Intended learning outcomes

The course aims to enable the students to learn basic programming and object oriented programming. After the course, the students will be able to:

- Explain basic concepts of imperative and object oriented programming
- Write and structure programs of about 1000 lines of code in an object oriented programming language such as Java
- Familiarise themselves with standard libraries for the adopted programming language and use them
- Debug and document their program

## Course content

- Imperative programming
- Object oriented programming
- Object oriented software development methodology
- Problem solving
- Documentation and debugging strategies

## Teaching and working methods

The course consists in lectures, laboratory assignments and a programming project in addition to the PBL-group work. The course runs over the entire autumn semester.

## Examination

DAT1	Written tests	1 credits	U, 3, 4, 5
UPG3	Project assignment	2 credits	U, 3, 4, 5
BAS1	Work in PBL-group	2 credits	U, G
LAB1	Laboratory work	3 credits	U, G

A pass with grade 3 requires a pass in LAB1 and BAS1 with grade 3 in DAT1 and UPG3.

A pass with grade 4 requires a pass in LAB1 and BAS1 with at least grades 3 in DAT1 and UPG3 and such that the sum DAT1+UPG3 is between 7 and 8.

A pass with grade 5 requires a pass in LAB1 and BAS1 with at least grades 4 in DAT1 and UPG3 and such that the sum DAT1+UPG3 is between 9 and 10.

## Grades

Four-grade scale, LiU, U, 3, 4, 5

## Department

Institutionen för datavetenskap

## Director of Studies or equivalent

Ahmed Rezine

## Examiner

Ahmed Rezine

## Course website and other links

<http://www.ida.liu.se/education/ugrad/courses/tf/>

## Education components

Preliminary scheduled hours: 110 h

Recommended self-study hours: 103 h

## Course literature

### Additional literature

#### Books

## Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at [http://stydokument.liu.se/Regelsamling/Innehall/Utbildning\\_pa\\_grund-\\_och\\_avancerad\\_niva](http://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva).