

SYLLABUS

Object oriented programming in Java 7.5 credits Z0022E

Objektorienterad programmering i Java

Course syllabus admitted: Autumn 2022 Sp 1 - Present

**DECISION DATE
2022-09-06**

Object oriented programming in Java 7.5 credits Z0022E

Objektorienterad programmering i Java

First cycle, Z0022E

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	U G VG	Datalogi	Computer Technology

Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language and The course requires basic programming skills (Java or other programming languages) corresponding to Initial Programming in Java, 7.5 hp (D0017D)

Selection

Examiner

Susanne Fahlman

Course Aim

After course completion, the student should be able to demonstrate knowledge and understanding as well as practical skills in independently constructing a well-structured program with a graphical user interface and file management in the Java programming language according to object-oriented principles.

Contents

Object-oriented programming involves handling of classes and objects. Furthermore, the course includes construction of graphical user interfaces and different types of file management. The course covers the parts: - Classes and objects -Methods -Inheritance -Abstract classes and interfaces -Graphical user interface (GUI) -Applets -File management -Introduction to database connection -Separation of GUI and logic -Introduction to UML (Unified Modeling Language)

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

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The course is organized as an online course without physical meetings. In the course you will use an Internet-based learning environment where there will be support in the form of study guidance, study questions, discussion forums and more. The student will independently develop a program in several steps, from class design to user-friendly GUI and file management functionality.

The course requires the following equipment and software:

- An Internet-connected computer with the ability to install software
- A headset is recommended

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.
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Compulsory laboratory assignments and a scheduled distance-based home exam. Oral presentation of solution to home exam.

Remarks

The course is at basic level but require previous knowledge in Java programming. The home exam is given in the end of the course and requires a web-camera and microphone connected to your computer.

Transition terms

2402

Literature. Valid from Autumn 2022 Sp 1

Java: How to Program, Late Objects, Global Edition av Harvey M Deitel, Edition: 11, Utgivningsdatum: 2019-09-11, ISBN: 9781292273730

E-book:

Java How To Program, Late Objects, eBook, Global Edition av Harvey Deitel, Paul Deitel Utgivningsdatum: 2019-08-05, ISBN: 9781292273747

Course offered by

Department of Computer Science, Electrical and Space Engineering

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Assignment report 1	U G VG	1	Mandatory	A22	
0002	Assignment report 2	U G VG	1	Mandatory	A22	
0003	Assignment report 3	U G VG	2	Mandatory	A22	
0004	Assignment report 4	U G VG	1	Mandatory	A22	
0005	Take-Home Examination	U G VG	2.5	Mandatory	A22	

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Syllabus established

by Robert Brännström, HUL SRT 2022-09-06