

SYLLABUS

Software Development with Java 7.5 credits D0019N

Programutveckling med Java

Course syllabus admitted: Autumn 2023 Sp 1 - Present

**DECISION DATE
2023-02-15**

Software Development with Java 7.5 credits D0019N

Programutveckling med Java

First cycle, D0019N

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	U G VG *	Systemvetenskap	Informatics/Computer and Systems Sciences

Main field of study

Social Informatics, Information Systems Sciences

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

Selection

The selection is based on final school grades or Swedish Scholastic Aptitude Test.

Course Aim

After the course, the student should be able to:

write application programs at the basic level, use structured methods in problem solving and independently construct and analyze computer programs and motivate the choice of own solutions.

General skills according to the Higher Education Ordinance:

- Demonstrate knowledge and understanding in the main area of education:
- Demonstrate the ability to independently identify, formulate and solve problems and to carry out tasks within given time frames
- Demonstrate the ability to give a written account of problems and solutions in dialogue with different groups

Contents

The course covers programming as a tool for problem solving. This is exemplified by using the programming language Java. Within the course, the fundamental structure of the Java programming language is covered. Furthermore, methods for problem solving are covered. These two parts of course are combined in such that from a problem specification, the student writes well structured programming source code and solves the problem.

Realization

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

The course is divided in several parts. After an introductory part, that might be given in lessons or written instructions, the student will, by its own efforts, study the subject and develop its problem solving and programming skills by practice. Programming exercises and laboratory assignments are set up therefore. To carry out these exercises and laboratory exercises, it is necessary that student have the possibility of installing a programming development environment in its computer. Some parts of the course are object of examination in groups and others individually. The teaching is mostly Internet-based. However, there is going to be some physical and Internet based meetings. Between these meetings, the student uses e-mail and an e-learning platform to communicate with teachers and other students. Students in campus have regular meetings with the teachers and other students in campus. The e-learning platform is used for distributing information, course material and assignments, and webinars are used for e-meetings.

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. Individual written exam (3 p U G VG). The exam examines problem solving, Java's basic structure and structure. All, both distance and campus students, write the individual exam online. Webcam and microphone are a requirement.

Examination assignments (4.5 p U G). Consists of a number of assignments where the student shows the ability to use structured methods in problem solving and in groups construct and analyze computer programs in Java.

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Overlap

The course D0019N is equal to IED401, D0042D, D0014E, D0009E, D0017D, D0017E, L0002B, D0028E

Course offered by

Department of Computer Science, Electrical and Space Engineering

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0005	Compulsory assignments	U G#	4.5	Mandatory	A18	
0006	Examination	U G VG *	3	Mandatory	A18	

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.

Last revised

by Robert Brännström 2023-02-15

Syllabus established

This syllabus was established on February 28, 2007 and is valid from Autumn term 2007.