Software Testing

Programvarutestning
6 credits

Programme course

726A88

Valid from: 2022 Autumn semester

Determined by	**Main field of study**	
Course and Programme Syllabus Board at the Faculty of Arts and Sciences	Information Technology, Computer Science and Engineering, Computer Science	
Date determined	**Course level**	**Progressive specialisation**
2020-05-05	Second cycle	A1N
Revised by	**Disciplinary domain**	
Chairman of the Course and Programme Syllabus Board at the Faculty of Arts and Sciences	Technology	
Revision date	**Subject group**	
2023-01-13	Informatics/Computer and Systems Sciences	
Offered first time	**Offered for the last time**	
Spring semester 2020		
Department	**Replaced by**	
Institutionen för datavetenskap		

Course offered for

- Bachelor´s programme in Information Systems Analysis
- Master Programme in IT and Management

Entry requirements

General entry requirements for undergraduate studies
and
Social Studies and Mathematics corresponding to the level in Swedish upper secondary education (Samhällskunskap 1b or 1a1 and 1a2 and Matematik 2a/2b/2c or Matematik B)
and
Problem Solving and Programming, 7,5 hp
and
Object Oriented Programming in Java, 7,5 hp
and
Data Structures and Algorithms, 7,5 hp

Intended learning outcomes

After the course, students shall be able to:

- Apply general software testing principles and fundamental test processes
- Describe and apply software test management techniques such as test planning, automated test frameworks and test monitoring.
- Evaluate software testing methods.

Course content

Techniques and concepts for testing software. Topics cover software testing at unit, module and system levels, automatic and manual techniques for generating and validating test data, static and dynamic analysis. Tools and techniques for BDD.

Teaching and working methods

Lectures, lessons and laboratory work.

Examination

If special circumstances prevail, and if it is possible with consideration of the nature of the compulsory component, the examiner may decide to replace the compulsory component with another equivalent component.

If the LiU coordinator for students with disabilities has granted a student the right to an adapted examination for a written examination in an examination hall, the student has the right to it.

If the coordinator has recommended for the student an adapted examination or alternative form of examination, the examiner may grant this if the examiner assesses that it is possible, based on consideration of the course objectives.

An examiner may also decide that an adapted examination or alternative form of examination if the examiner assessed that special circumstances prevail, and the examiner assesses that it is possible while maintaining the objectives of the course.

Students failing an exam covering either the entire course or part of the course twice are entitled to have a new examiner appointed for the reexamination.

Students who have passed an examination may not retake it in order to improve their grades.

Grades

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

Other information

Planning and implementation of a course must take its starting point in the wording of the syllabus. The course evaluation included in each course must therefore take up the question how well the course agrees with the syllabus.

The course is conducted in such a way that there are equal opportunities with regard to sex, transgender identity or expression, ethnicity, religion or other belief, disability, sexual orientation and age.

If special circumstances prevail, the vice-chancellor may in a special decision specify the preconditions for temporary deviations from this course syllabus, and delegate the right to take such decisions.