

# Web programming

Webbprogrammering 6 credits

Programme course

732A56

Valid from: 2023 Spring semester

Determined by	Main field of study	
The Quality Board at the Faculty of Arts and Sciences	Computer Science and Engineering	
Date determined	Course level	Progressive specialisation
2017-06-13	Second cycle	A1F
Revised by	Disciplinary domain	
Course and Programme Syllabus Board at the Faculty of Arts and Sciences	Technology	
Revision date	Subject group	
2022-12-06	Computer Technology	
Offered first time	Offered for the last time	
Spring semester 2017		
Department	Replaced by	
Institutionen för datavetenskap		

### Course offered for

• Master's Programme in Statistics and Machine Learning

## **Entry requirements**

- 180 ECTS credits passed including 90 ECTS credits in one of the following subjects:
  - statistics
  - o mathematics
  - applied mathematics
  - o computer science
  - o engineering
- Passed courses in:
  - o calculus
  - o linear algebra
  - statistics
  - programming
- English corresponding to the level of English in Swedish upper secondary education (Engelska 6)
  - **Exemption from Swedish**
- At least 6 ECTS credits passed from semester 1 Master's Programme in Statistics and Machine Learning, or the equivalent

# Intended learning outcomes

After completion of the course the student should on an advanced level be able to

- describe the techniques used in web programming
- describe the content management system and its use
- use technologies such as HTML, CSS, Javascript, Python, Flask, SQL and JSON in applications that involve interactive web content.
- develop applications for both client and server environments
- give an account of issues related to web services, creating such services and using existing ones.

#### Course content

The course covers the following areas:

- Overview of WWW, HTML, Javascript and other client-server techniques.
- Programming languages Python, Flask, SQL, Websockets, JSON and other server-side technologies



# Teaching and working methods

The course will consist of lectures and dator laboratory exercises. Homework and independent study are a necessary complement to the course. Language of instruction: English.

#### **Examination**

Project work and laboratory work. Detailed information about the examination can be found in the course's study guide.

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

ECTS, EC



## 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.

