



COURSE SYLLABUS

Web Security, 7.5 credits

Webb-säkerhet, 7,5 högskolepoäng

Course Code: TWSR22	Education Cycle: Second-cycle level
Confirmed by: Dean Mar 1, 2021	Disciplinary domain: Technology
Valid From: Jan 1, 2022	Subject group: DT1
Version: 1	Specialised in: A1N
	Main field of study: Informatics

Intended Learning Outcomes (ILO)

After a successful course, the student shall:

Knowledge and understanding

- show familiarity with concepts within web security
- display knowledge of different threats and attacks from a web security perspective
- show familiarity with protocols and specifications for secure communication

Skills and abilities

- demonstrate the ability to review, present and critically assess state-of-the-art papers in relevant areas within web security
- demonstrate the ability to find, review, and assess preventive measures and mitigation techniques for known web security threats

Judgement and approach

- demonstrate an understanding of how different preventive measures and mitigation techniques for known web security threats compare

Contents

The course starts with a brief introduction to information security to set the context. After, insights into both the client-side and the server-side of web security are presented.

The course includes the following elements:

- Browser-related flaws and issues
- Server-side flaws and issues
- Attacks (such as injection, cross-site scripting and denial-of-service)
- Mitigation techniques
- Cloud security

Type of instruction

The course consists of lectures and an assignment.

The teaching is conducted in English.

Prerequisites

The applicant must hold the minimum of a bachelor's degree (i.e the equivalent of 180 ECTS credits at an accredited university) with at least 90 credits in Informatics, Computer Engineering, Computer Science or equivalent. Proof of English proficiency is required.

Examination and grades

The course is graded 5,4,3 or Fail.

Registration of examination:

Name of the Test	Value	Grading
Examination ¹	4 credits	5/4/3/U
Assignment	3.5 credits	U/G

¹ Determines the final grade of the course, which is issued only when all course units have been passed.

Course literature

The literature list for the course will be provided one month before the course starts.