



Course syllabus

Faculty of Technology

Department of Computer Science and Media Technology

2DV704 Digital forensik, 7,5 högskolepoäng

Digital Forensics, 7.5 credits

Main field of study

Computer Science

Subject Group

Informatics/Computer and Systems Sciences

Level of classification

First Level

Progression

G2F

Date of Ratification

Approved by Faculty of Technology 2019-06-10

The course syllabus is valid from spring semester 2020

Prerequisites

60 credits in Computer Science, including Computer Security 7.5 credits (1DV700), Operating systems (1DV512) and Computer Network - an introduction 7.5 credits (1DV701) or the equivalent.

Objectives

1. Knowledge and understanding

Upon completion of the course the student should be able to:

- account for the history of forensic science and where digital forensics stands today
- explain the different steps in a forensic investigation
- explain the legislation at national and international level that regulates forensic work
- describe the different methods used in forensic work with computers, mobile devices and networks.

2. Skills and abilities

Upon completion of the course the student should be able to:

- use the most important basic forensic tools currently used in the industry
- perform a forensic examination and produce a report according to accepted standard.

3. Judgement and approach

Upon completion of the course the student should be able to:

- reflect on and evaluate how different laws and regulations affect a forensic investigation
- assess when forensic work, especially when not in connection with a criminal investigation, may adversely affect the privacy of individuals.

Content

The course provides the student with both practical and theoretical knowledge of techniques, methods, laws and rules that apply when extracting data from digital devices. The goal is to be able to be part of a group that works with incident management within the corporate world or digital forensic investigation as part of a criminal investigation.

The course deals with the following elements:

- History of forensics
- Digital forensics and digital evidence
- The process of digital forensics
- Legislation and international collaborations in digital forensics
- Standards in the field and the requirements of an organization that works with digital forensics
- Computer forensics
- Forensics for mobile devices and embedded systems
- Network forensics

Type of Instruction

Teaching takes place in the form of mandatory seminars and laboratory work. At the seminars the content of the course is discussed. Laboratory work is individual.

Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

The course is graded as a weighted grade based on the seminars and the written reports. Laboratory work is accounted for partly by structured written reports, partly by discussions at seminars.

Repeat examination is offered in accordance with Local regulations for courses and examination at the first and second-cycle level at Linnaeus University.

If the university has decided that a student is entitled to special pedagogical support due to a disability, the examiner has the right to give a customised exam or to have the student conduct the exam in an alternative way.

Course Evaluation

During the implementation of the course or in close conjunction with the course, a course evaluation is to be carried out. Results and analysis of the course evaluation are to be promptly presented as feedback to the students who have completed the course. Students who participate during the next course instance receive feedback at the start of the course. The course evaluation is to be carried out anonymously.

Other

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

Required Reading and Additional Study Material

Arnes André, editor. *Digital Forensics*. Wiley. 320 pages. Latest edition