



HÖGSKOLAN I GÄVLE

Information and Communication Technology Security 7.5 cr

Datakommunikation och IT-säkerhet 7,5 hp

Set by Faculty of Engineering and Sustainable Development

Version	Set at	Valid from
	12/9/15	HT2016

Level	G1F
Education level	First cycle
Course identifier	DVG324
Credits	7.5 cr
Main field of study	Computer Science
Subject group	Computer Technology
Disciplinary domain	Technology 100.0 %

Learning outcomes After completion of the course, the student shall be able to:

1. use current terminology in the area of data communication and IT security to describe security targets, threats against security and security principles
2. explain causes and relationships in different security issues in a broad perspective
3. apply theoretical knowledge of data communication and IT security in practical exercises.

Course content Definition of security targets, threat scenarios, resource protection, security controls and security principles
Encryption methods, security in development and maintenance of software, security standards
Familiar attacks, such as data viruses, trojans, spam, phishing
Communication security in computer networks, firewalls
Security management, the basics of risk analysis
Computer ethics, computer crime, computer law

Teaching Lectures, laboratory sessions and seminars

Prerequisites Computer Sciences 30 cr including Computer Systems 7,5 cr and Introduction to Data Communication 7,5 cr or equivalent.

Examination Written examination, written assignments and laboratory sessions.

Grade A, B, C, D, E, Fx, F

Other regulations Grading criteria are provided by the course coordinator or examiner at the beginning of the course.

Sustainable environment A minor part of the course content deals with sustainable development.

Module

0010	Written examination	4.5 cr	Grade: AF
0020	Assignment and laboratory work	3 cr	Grade: UG