COURSE SYLLABUS

Nätverkssäkerhet 1
Network security 1

4 ECTS credit points (4 högskolepoäng)

Course code: ET1489
Educational level: Basic level
Course level: G1F
Field of education: Technology
Subject group: Electrical Engineering

1 Course title and credit points
The course is titled Network security 1/Nätverkssäkerhet 1 and awards 4 ECTS credits. One credit point (högskolepoäng) corresponds to one credit point in the European Credit Transfer System (ECTS).

2 Decision and approval
This course is established by 2015-03-18. The course syllabus was revised by Head of Department of Computer Science and Engineering and applies from 2017-10-01.
Reg.no: BTH-4.1.1-1793-2017

3 Objectives

4 Content
Key concepts in the course are:
• Network security concepts
• Securing Network Devices
• Authentication, Authorization and Accounting (AAA)
• Firewalls
• Intrusion Prevention
• Introduction to Virtual Private Networks
• Securing a Local Area Network

5 Aims and learning outcomes
Upon completion of the course, the student shall be able to:
• describe and explain common fundamentals of a secure network and different attack methodologies seen in a computer network
• practical knowledge on how to secure network devices and configure AAA.
• Explain and correctly use different kind of intrusion prevention systems such as firewalls.

6 Learning and teaching

7 Assessment and grading

Examination of the course

<table>
<thead>
<tr>
<th>Code</th>
<th>Module</th>
<th>Credit</th>
<th>Grade</th>
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</thead>
<tbody>
<tr>
<td>1510</td>
<td>Written exam[1]</td>
<td>2 ECTS</td>
<td>A-F</td>
</tr>
<tr>
<td>1520</td>
<td>Laborations</td>
<td>2 ECTS</td>
<td>A-F</td>
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1 Determines the final grade for the course, which will only be issued when all components have been approved.
The course will be graded A Excellent, B Very good, C Good, D Satisfactory, E Sufficient, FX Insufficient, supplementation required, F Fail.

8 Course evaluation
The course coordinator is responsible for systematically gathering feedback from the students in course evaluations and making sure that the results of these feed back into the development of the course.

9 Prerequisites
Passed courses in Introduction to security 4 hp and Data Communications and Network Technologies 12 hp

10 Field of education and subject area
The course is part of the field of education and is included in the subject area Electrical Engineering.

11 Restrictions regarding degree
The course cannot form part of a degree with another course, the content of which completely or partly corresponds with the contents of this course.

12 Course literature and other teaching material
Online-material från Cisco NetAcad www.netacad.com
Material från institutionen