COURSE SYLLABUS

Säker nätverksdrift A1N
Network Security Operations A1N
7.5 credits

1 Name, Scope and Level of the Course
The course is provided by the University of Skövde and is named Network Security Operations A1N. It comprises 7.5 credits and is on advanced level. The level of progression of the course is A1N.

2 Objectives
After completed course the student should be able to:

- explain the basic concepts in Intrusion Detection,
- explain common network based attacks,
- describe and discuss the content of research directions in the field,
- autonomously critically review reports and orally presented materials from intrusion detection research and
- install, operate and maintain an intrusion detection system.

3 Course Content
The course is divided into a theoretical and a practical part. The theoretical part aims to provide the students with deeper knowledge about the methods and tools that are common in Intrusion Detection. The practical part aims to give students the opportunity to apply their knowledge in intrusion detection, such as practically secure a system and to detect malicious traffic. The students will also give presentations at seminars to deepen and discuss achieved knowledge of current research directions in the field.

4 Forms of Teaching
The teaching comprises lectures, laboratory sessions and seminars/group discussions.

The teaching is conducted in English.

5 Examination
The course is graded A (Excellent), B (Very good), C (Good), D (Satisfactory), E (Sufficient) or F (Fail).

Registration of examination results:

<table>
<thead>
<tr>
<th>Name of examination</th>
<th>Credits</th>
<th>Grading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seminar assignments¹</td>
<td>5 credits</td>
<td>A/B/C/D/E/F</td>
</tr>
<tr>
<td>Practical assignment</td>
<td>2.5 credits</td>
<td>G/U</td>
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</table>

¹ Determines the final grade of the course.

Students with a permanent disability who have been approved for special educational support may be offered adapted or alternative examinations.

6 Admission Requirements
A Bachelor degree (equivalent to a Swedish Kandidatexamen) within the fields of Informatics or Computer science or similar.

A further requirement is proof of skills in English equivalent of studies at upper secondary level in Sweden, known as English course 6 / English course B. This is normally demonstrated using an internationally recognized test, e.g. IELTS, TOEFL or the equivalent.
7 Subject, Main Field of Study and Disciplinary Domain
The course forms a part of the academic subject area of Informatics. The course is a part of the main field of study in Informatics at the University of Skövde. The disciplinary domain of the course is Technology.

Every course at the University of Skövde belongs to a subject. The division of subjects is used for follow-up and quality assurance. A main field of study is an area in which a degree can be awarded. Disciplinary domain is a division which is used by the government for the allocation of resources for studies at basic level and advanced level.

8 Approval of Course and Course Syllabus
The course was approved by the Curriculum Committee for Informatics on 29 May 2019. This course syllabus was approved by the Curriculum Committee for Informatics on 29 May 2019. It is valid from 1 January 2020 and replaces the course syllabus approved 29 May 2019.

9 Overlapping with Another Course
This course cannot constitute a part of a degree also containing a course the content of which is totally or partly equivalent to the content of this course.

10 Additional Information
Further information will be available on the university’s website before a course is given.

National and local regulations for higher education are available on the university’s website.

Upon completion of the course there will be a follow-up. The main purpose of this follow-up is to contribute to improvements of the course. The students’ experiences and views constitute one of the criteria for the follow-up and are gathered by means of course evaluations. The students will be informed of the results of the follow-up and any decisions regarding actions that are to be taken.

11 Course Literature and Other Educational Materials
Selected materials will be announced by the lecturers during the course. This includes recent research articles, whitepapers, and technical reports.