Linnæus University

# Course syllabus

Faculty Board of Science and Engineering

School of Computer Science, Physics and Mathematics

## 4ED014 Antennteori, 7,5 högskolepoäng
## 4ED014 Antenna Theory, 7.5 credits

**Main field of study**
Electrical Engineering

**Subject Group**
Electrical Engineering

**Level of classification**
Second Level

**Progression**
A1N

**Date of Ratification**
Approved 2009-08-11
Revised 2010-08-03 by School of Computer Science, Physics and Mathematics.
Revision of prerequisites and course evaluation.
The course syllabus is valid from spring semester 2011

**Prerequisites**
Bachelors degree 180 credits in electrical engineering, or the equivalent, and Antenna technology, 7.5 credits or the equivalent.

## Objectives
The course gives a specialization in antenna technology. The student is expected to combine knowledge of mathematics and antenna technology to obtain an overview of the design and computation problems of the field.

## Content
The course comprises the following topics:

- antenna synthesis, Schelkunoff's polynomial
- integral equations for the computation of current distributions
- an orientation on antenna types
- aperture antennas, spectral analysis
- Microstrip antennas.

## Type of Instruction
Teaching consists of lectures and laboratory sessions.

## Examination

The course is assessed with the grades U, 3, 4 or 5.

On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts. Assignments and exam.

## Course Evaluation

A course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The result of the course evaluation will be filed at the department.

## Required Reading and Additional Study Material

**Required reading**

Balanis C. A., *Antenna theory*, 3rd ed., Wiley, 2005. Pages 300 (1100).