



Course syllabus

Faculty Board of Science and Engineering

School of Computer Science, Physics and Mathematics

2ED083 Antennteknik, 7,5 högskolepoäng

2ED083 Antenna technology, 7.5 credits

Main field of study

Electrical Engineering

Subject Group

Electrical Engineering

Level of classification

First Level

Progression

G2F

Date of Ratification

Approved by Organisational Committee 2009-08-11

The course syllabus is valid from spring semester 2010

Prerequisites

At least two years of study in electrical engineering (120 credits) incl. the courses Radio engineering, 7,5 higher education credits (2ED092) + Mobile radio communication, 7,5 higher education credits (2ED103) or the equivalent.

Objectives

The course introduces antenna technology. The student is expected to combine knowledge of mathematics and electromagnetics in order to obtain an overview of a field of application that is based on electromagnetics.

Content

The course comprises the following topics:

- Elementary vector analysis
- Basic electromagnetism
- Antenna concepts
- Maxwell's equations
- Wire antennas, dipoles
- Array antennas

Type of Instruction

Teaching consists of lectures.

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. Written exam.

Course Evaluation

A written course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. 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).