

COURSE DETAIL

ELECTROMAGNETISM: THEORETICAL PHYSICS

Country

Sweden

Host Institution

Lund University

Program(s)

Lund University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Physics

UCEAP Course Number

130

UCEAP Course Suffix**UCEAP Official Title**

ELECTROMAGNETISM: THEORETICAL PHYSICS

UCEAP Transcript Title

ELECTROMAGNETISM

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

The course covers electromagnetism based on Maxwell's equations and the Lorentz force. Students learn how to apply and solve Maxwell's equations, the potential formulation, how to treat polarization and magnetization phenomena, energy transport, boundary conditions, electromagnetic waves, basic vector analysis, and related integral theorems needed to solve electromagnetic problems.

Language(s) of Instruction

English

Host Institution Course Number

FYTB13

Host Institution Course Title

ELECTROMAGNETISM: THEORETICAL PHYSICS

Host Institution Campus

Lund

Host Institution Faculty

Science

Host Institution Degree

Host Institution Department

Theoretical Physics

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