

COURSE DETAIL

FINITE ELEMENT METHOD

Country

Sweden

Host Institution

Lund University

Program(s)

Lund University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Physics Mechanical Engineering Engineering

UCEAP Course Number

146

UCEAP Course Suffix**UCEAP Official Title**

FINITE ELEMENT METHOD

UCEAP Transcript Title

FINITE ELEM METHOD

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course provides a method for solving physical problems that are described by partial differential equations. The course project gives students an experience and theoretical understanding in solving comprehensive physical problems using the finite element method. The course content includes: strong and weak formulation of differential equations; approximating functions; Galerkin's method; finite element formulation of heat conduction; finite element formulation of deformable bodies; finite element formulation of bending; and isoparametric elements and numerical integration.

Language(s) of Instruction

English

Host Institution Course Number

FHLF20

Host Institution Course Title

FINITE ELEMENT METHOD

Host Institution Campus

Host Institution Faculty

Engineering

Host Institution Degree

Host Institution Department

Engineering - Solid Mechanics

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