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 Course Details
https://kurser.lth.se/kursplaner/21_22%20eng/FHLF20.html

Host Institution Campus

Host Institution Faculty
Engineering

Host Institution Degree

Host Institution Department
Engineering - Solid Mechanics

Course Last Reviewed
2021-2022

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