COURSE DETAIL

SOFTWARE DEVELOPMENT FOR TECHNICAL APPLICATIONS

Country
Sweden

Host Institution
Lund University

Program(s)
Lund University

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Computer Science

UCEAP Course Number
162

UCEAP Course Suffix

UCEAP Official Title
SOFTWARE DEVELOPMENT FOR TECHNICAL APPLICATIONS

UCEAP Transcript Title
SOFTWRE DEVEL TECH

UCEAP Quarter Units
6.00

UCEAP Semester Units
4.00

Course Description

The course consists mainly of an applied program development task based on the finite element method. The program contains both computational code and a graphical user interface. The program development is divided into several subtasks, each representing an assignment to be turned in. The computer code developed must be tested and documented, and be presented at an oral exam. To carry out the task, the student must acquire knowledge in the programming languages to be used. The task is designed in such a way that the degree of difficulty gradually increases for each subtask. In the tasks the following features are included: information about hardware, system software, graphical user interfaces, structuring of computer software, and implementation of element routines, mesh generation and visualization. Furthermore, short descriptions of software and hardware systems for high performance computations, commercial finite element codes and their structure including pre- and post-processors.

Language(s) of Instruction

English

Host Institution Course Number

VSMN20

Host Institution Course Title

SOFTWARE DEVELOPMENT FOR TECHNICAL APPLICATIONS

Host Institution Course Details

Host Institution Campus

Engineering

Host Institution Faculty

Host Institution Degree

Host Institution Department

Engineering- Structural Mechanics

Course Last Reviewed

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