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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