COURSE DETAIL

HANDS-ON PROJECTS TO FINITE ELEMENT ANALYSIS
Country Germany
Host Institution Technical University Berlin
Program(s) Technical University Berlin
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mechanical Engineering
UCEAP Course Number 106
UCEAP Course Suffix
UCEAP Official Title HANDS-ON PROJECTS TO FINITE ELEMENT ANALYSIS
UCEAP Transcript Title FINITE ELEM ANAL
UCEAP Quarter Units 5.50
UCEAP Semester Units 3.70

Course Description

Handling commercial finite element software, solving a complex stress analysis problem, obtaining background information on advanced strength of materials theory, solving engineering problems collaboratively in teams, presenting and documenting results. Preparatory lecture series: introduction to components and materials of microelectronics and the surface mount technology (SMT), basic mechanics of elastoplastic deformable bodies, introduction to the concepts of the commercial finite element software ABAQUS. Homework assignments: learning and using the finite element software ABAQUS. Project period: literature review, finite element based stress and durability analysis of a SMT component, presentation and documentation of achieved results.

Language(s) of Instruction
English

Host Institution Course Number
0530 L 164

Host Institution Course Title
HANDS-ON PROJECTS TO FINITE ELEMENT ANALYSIS

Host Institution Course Details
https://moseskonto.tu-berlin.de/moses/modultransfersystem/bolognamodule/beschre...

Host Institution Campus
Technische Universität Berlin

Host Institution Faculty

Host Institution Degree

Host Institution Department
Institut für Mechanik

Course Last Reviewed

2023-2024

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