COURSE DETAIL

STRUCTURAL DYNAMICS
Country Germany
Host Institution Technical University Berlin
Program(s) Technical University Berlin
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Engineering Civil Engineering
UCEAP Course Number 103
UCEAP Course Suffix
UCEAP Official Title STRUCTURAL DYNAMICS
UCEAP Transcript Title STRUCTURAL DYNAMICS
UCEAP Quarter Units 5.50
UCEAP Semester Units 3.70

Course Description
This course covers the following topics: definitions, notations and repetition of basic principles of mechanics; elastic body in general spatial movement, theoretical foundations for the modeling elastic bodies in MKS programs; fundamentals for solving dynamic tasks using FEM or other discretizing methods; model reduction; algorithms for solving the large-scale general matrix eigenvalue problem; response spectra method; attenuation; measurement of modal parameters (modal analysis) and model updating; controllability and observability. It is a combination of lecture and an exercise class going over problems.

Language(s) of Instruction
German

Host Institution Course Number
0530 L 279

Host Institution Course Title
STRUKTURDYNAMIK

Host Institution Course Details

Host Institution Campus
FAKULTÄT V VERKEHRS- UND MASCHINENSYSTEME

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mechanik

Course Last Reviewed

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