COURSE DETAIL

NONLINEAR STRUCTURAL ANALYSIS

Country

United Kingdom - England

Host Institution

Imperial College London

Program(s)

Imperial College London

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Civil Engineering

UCEAP Course Number

144

UCEAP Course Suffix

UCEAP Official Title

NONLINEAR STRUCTURAL ANALYSIS

UCEAP Transcript Title

NONLINEAR STRUC ANL

UCEAP Quarter Units

5.00

UCEAP Semester Units

3.30

Course Description

On this course, students will learn the fundamentals of geometric nonlinearity for discrete structural systems. We will examine principles of stability and buckling analysis for discrete structural systems. We will explore nonlinear solution procedures for tracing equilibrium paths and geometrically nonlinear finite elements for one-dimensional structural systems. We will also examine materially nonlinear finite elements for one-dimensional structural systems.

Language(s) of Instruction

English

Host Institution Course Number

CI3-333

Host Institution Course Title

NONLINEAR STRUCTURAL ANALYSIS

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Civil Engineering

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