COURSE DETAIL

STRESS ANALYSIS 2
Country United Kingdom - England
Host Institution Imperial College London
Program(s) Imperial College London
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mechanical Engineering
UCEAP Course Number 127
UCEAP Course Suffix
UCEAP Official Title STRESS ANALYSIS 2
UCEAP Transcript Title STRESS ANALYSIS 2
UCEAP Quarter Units 5.00
UCEAP Semester Units 3.30

Course Description

This course builds on previous stress analysis courses by extending the concepts of linear elasticity to two and three dimensions, as the basis for advanced stress analysis. Topics covered include complex stresses and strains, Mohr's circle, failure criteria, shear stresses in beams, thick-walled cylinders, plastic failure and buckling of struts. The course enables students to develop sufficient familiarity with stress analysis and strength of materials to design a safe and reliable load-bearing component of simple geometry (or to assess the safety of an existing one).

Language(s) of Instruction
English

Host Institution Course Number
MECH50002

Host Institution Course Title
STRESS ANALYSIS 2

Host Institution Course Details
https://www.imperial.ac.uk/mechanical-engineering/study/undergraduate/detailed-...

Host Institution Campus
Imperial College London

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mechanical Engineering

Course Last Reviewed
2023-2024

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