COURSE DETAIL

STRESS ANALYSIS 1

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 Engineering

UCEAP Course Number
105

UCEAP Course Suffix
Y

UCEAP Official Title
STRESS ANALYSIS 1

UCEAP Transcript Title
STRESS ANALYSIS 1

UCEAP Quarter Units
4.00

UCEAP Semester Units

2.70

Course Description

This course introduces the basic concepts and methods of stress analysis. It explains the mathematical descriptions of stress analysis and demonstrates the physical significance of stress and strain and the importance and application of Hooke's Law. The course introduces the fundamental concepts of elasticity including Youngs Modulus and Poission ratio. The course then uses these descriptions to show how to solve a range of stress analysis problems including plane frames, stress and strain, pressure vessels and beams.

Language(s) of Instruction
English

Host Institution Course Number
MECH40005

Host Institution Course Title
STRESS ANALYSIS 1

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

Host Institution Campus
Imperial College London

Host Institution Faculty
Faculty of Engineering

Host Institution Degree

Host Institution Department
Department of Mechanical Engineering

Course Last Reviewed

2021-2022

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