COURSE DETAIL

STRUCTURAL ANALYSIS I

Country
South Africa

Host Institution
University of Cape Town

Program(s)
University of Cape Town

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Civil Engineering

UCEAP Course Number
108

UCEAP Course Suffix

UCEAP Official Title
STRUCTURAL ANALYSIS I

UCEAP Transcript Title
STRUCT ANALYSIS I

UCEAP Quarter Units
5.00

UCEAP Semester Units
3.30

Course Description
This course analyzes structural systems, conditions of equilibrium, and external and internal structural indeterminacies. Topics include analysis of statically determinate structures: determination of actions in trusses, beams, and frames; axial force, shearing force, and bending moment diagrams; calculation of displacements by the method of successive integration, virtual work method, buckling of struts and geometric instability, and thermal stresses. Computer-based methods for analyses of statically determinate structures are introduced.

Language(s) of Instruction
English

Host Institution Course Number
CIV2041S

Host Institution Course Title
STRUCTURAL ANALYSIS I

Host Institution Campus
Engineering

Host Institution Faculty

Host Institution Degree

Host Institution Department
Engineering

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