

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 Course Details**Host Institution Campus**

Engineering

Host Institution Faculty**Host Institution Degree****Host Institution Department**

Engineering

Course Last Reviewed

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