

CB343 Structural Analysis II

COURSE INFORMATION

Prerequisites	Academic Year & Level		Teaching Methods			Credit Hrs.
	Year	Semester	Lecture	Tutorial	Laborator y	
CB242	3	5	4	2	0	3

COURSE AIM

The course aims is to teach students the methods of the structural analysis of different statically indeterminate structural forms.

COURSE WEEKLY CONTENTS

- 1 Introduction to statically indeterminate structures. Methods of structural analysis of statically indeterminate structures.
- 2 Method of consistent deformations (1, 2), Worked examples.
- 3 Method of consistent deformations (1, 2), Worked examples. continue
- 4 Method of three- moment equation for continuous beams, Worked examples.
- 5 Virtual work method for the analysis of statically indeterminate structures, Worked examples (1, 2).
- 6 Virtual work method for the analysis of statically indeterminate structures, Worked examples (1, 2) continue
- 7 Midterm Exam
- 8 Slope-deflection method, Worked examples.
- 9 Slope-deflection method, Worked examples. continue
- 10 Moment Distribution method, Worked examples.
- 11 Stiffness method, Worked examples.
- 12 Stiffness method, Worked examples (Continue) and 12th week Assesment.
- 13 Computer validation (1, 2).
- 14 Computer validation (1, 2). continue
- 15 Week No.15; Computer validation (1, 2). continue

STUDENT GRADING & ASSESSMENT

Weeks	Exams	Assign.	Quizzes	Reports	Present.	Lab.	Total
1 to 7	20 Midterm	←	10	MARKS		→	30
To be freely distributed among possible assessments							
8 to 12	←		20	MARKS		→	20
13 to 15	←		10	MARKS		→	10
16 or 17	40 Final						40
Total	Exams	Assign.	Quizzes	Reports	Present.	Lab.	100

REFERENCES

Textbook Structural Analysis, Aslam Kassimali, Cengage Learning, 5th Edition, 2015.

Other Fundamental of Structural Analysis, W.J.Spencer, Macmillan Education LTD, USA, 1991.

Theory of Structures, RAMAMRUTHAN S. Publisher: Dh anpat Rai and Sons, 1993.