

Faculty of Engineering & Technology

Structural Mechanics 2

Information :

Course Code : SCM 314

Level : Undergraduate

Course Hours : 3.00- Hours

Department : Department of Structural Engineering & Construction Management

Instructor Information :

Title	Name	Office hours
Professor	Bahaa sharaf ismail tork	16
Professor	Bahaa sharaf ismail tork	16
Professor	Bahaa sharaf ismail tork	16
Assistant Lecturer	Dina Yehia Zakaria Ewais	16
Assistant Lecturer	Dina Yehia Zakaria Ewais	16
Assistant Lecturer	Nada Mohamed Abd El Hamid Ali Mohamed	8
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Area Of Study :

Upon successful completion of this course, the student should be able to:

- Understand the basic concepts and main principles
- Calculate the values of the essential terms

Regarding virtual work general method of deformations three moments equation moment distribution

Description :

Desemesterination of deformations: differential equation, method of virtual Work, Analysis of statically indeterminate structures: method of consistent deformations, method of moment distribution, Influence lines for statically indeterminate structures.

Course outcomes :

a.Knowledge and Understanding: :

- 1 - Define the main terms of virtual work
- 2 - Describe the main concept of general method of deformations

b.Intellectual Skills: :

- 1 - Solve problems regarding virtual work
- 2 - Analyze the system of general method of deformations
- 3 - Analyze the system of three moments equation
- 4 - Solve problems regarding moment distribution

c.Professional and Practical Skills: :

- 1 - Prepare technical reports for general method of deformations

d.General and Transferable Skills :

1 - Search for information and self-learning discipline

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
virtual work	12	9	3
general method of deformations	16	12	4
three moments equation	12	9	3
moment distribution	16	12	4
Revision	4	3	1

Teaching And Learning Methodologies :

Interactive Lec.
Discussion
Problem Solving
Report / Present.

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Final exam	40.00		
Mid- Exam I, II	30.00		
Quizzes / Assig.	15.00		
Report / Present.	15.00		

Course Notes :

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Recommended books :

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Periodicals :

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Web Sites :

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