

Faculty of Engineering & Technology

Structural Analysis 2

Information :

Course Code : SCM 212

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	3
Associate Professor	MOHAMED GALAL KHALIL IBRAHIM ELSHERBINI	9
Associate Professor	MOHAMED GALAL KHALIL IBRAHIM ELSHERBINI	9
Assistant Lecturer	Nada Mohamed Abd El Hamid Ali Mohamed	4
Assistant Lecturer	Muhammad Diab Saadeldin Abdl aal	
Teaching Assistant	Mohamed Ahmed Reda Abas Ahmed	13
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Area Of Study :

- Determine the influence line for beams, frames and trusses.
- Determine the properties of sections
- Determine the straining actions.

Description :

Analysis of beams subjected to moving loads, Introduction to space structures, Influence lines for statically determinate structures.

Course outcomes :

a. Knowledge and Understanding: :

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| 1 - | - Define basic concepts of structural modeling. |
| 2 - | - Understand the behavior of structures |

b. Intellectual Skills: :

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| 1 - | Ability to analyze the engineering problems |
| 2 - | Ability to derive different solution alternatives for engineering problems |
| 3 - | Ability to assess the obtained results accuracy |

c. Professional and Practical Skills: :

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| 1 - | Ability to handle different types of structures |
| 2 - | Ability to handle different structural systems |
| 3 - | Ability to assess the effect of live loading and moving loads |

d.General and Transferable Skills: :

1 -	- Ability to practice team work and present results
2 -	Manage time and meet deadlines
3 -	Analyze problems and use innovative thinking in their solution

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Influence line of reactions	4	4	1
Influence line of beams	8	8	2
Influence line of frames	8	8	2
Influence line of Trusses	8	8	4
Properties of sections and plane areas	4	4	1
Determination of straining actions for stress calculations	10	10	4

Teaching And Learning Methodologies :

Lectures
Tutorials

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
final exams	40.00		
mid term exmas	25.00		
oral exmination	10.00		
semester work	25.00		

Course Notes :

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Recommended books :

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Periodicals :

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Web Sites :

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