Faculty of Engineering & Technology

Surveying

Information :

Course Code :	SCM 223	**Level :**	Undergraduate	**Course Hours :**	2.00- Hours

Department : Department of Architectural Engineering

Instructor Information :

Title	Name	Office hours
Professor	Tamer Fathy Fathallah Ahmed Soror	
Associate Professor	Abdelwahab Mohamed Abdelwahab Mohamed Amer	1
Associate Professor	Ahmed Emad Hafez Mustafa Raghib	11
Assistant Lecturer	Ahlam Ibrahim Sadek Elgendy	1
Assistant Lecturer	Ahlam Ibrahim Sadek Elgendy	1
Teaching Assistant	Abdelrahman Zaki Mohamed Zeidan	

Area Of Study :

Upon successful completion of the course, the student should be able to:
Different units systems and how to transform among them.
Distance measurements operations and its usage in mapping.
Scales used in mapping.
Surveying application in mapping.
Leveling process.
Angular measurements using theodolite.
Theodolite application through Tacheometry.
Surveying using total station.

Description :

Basic elements of surveying and their architectural applications, Plotting scales, verniers, linear of angular and simple angular measurement devices, Chain surveying, Leveling & theodolites, Map drawing, Photogrammetry and its architectural applications.

Course outcomes :

a.Knowledge and Understanding: :	
1 -	Define basic concepts of surveying operations.
2 -	Define the basic surveying instruments.
b.Intellectual Skills: :	
1 -	Derive various solutions for distance measurement obstacles.
2 -	Differentiate between mapping scales.
3 -	Use surveying for mapping purposes.
4 -	Analyze leveling data for elevation calculation.

5 -	Assess angular measurements.
c.Professional and Practical Skills: :	
1 -	Distinguish distance measurement tools and instruments.
2 -	Identify different types of surveying levels.
3 -	Categorize surveying level and theodolite screws and parts.
4 -	Handle and practically work with the level and theodolite.
d.General and Transferable Skills: :	
1 -	Work in team.
2 -	Write observations and results.

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Introduction.	4	2	2
Distance measurement operations.	10	4	6
Surveying for mapping.	6	2	4
Usage of scales for mapping.	4	2	2
Leveling process.	16	6	10
Basic Concept of Theodolite.	6	2	4
Angular measurements using theodolite.	6	2	4
Theodolite Application ï Tacheometry	4	2	2
Total Station	60	24	36

Teaching And Learning Methodologies :

Lectures.
Tutorials.
Practical work

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Finam Exam	40.00		
In Class Quizzes	15.00		
Performance & Participation	10.00		
Practical Examinations	10.00		
Semester Work	25.00		

Course Notes :

No Course Notes.

Recommended books :

1. Students Lecture Notes
2. Handouts

Periodicals :

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Web Sites :

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