

Faculty of Engineering & Technology
Engineering Applications of Surveying

Information :

Course Code : SCM 523

Level : Undergraduate

Course Hours : 3.00- Hours

Department : Department of Structural Engineering & Construction Management

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
- Carry out the related tests

Regarding specifications of surveying projects pre-analysis of surveying projects setting out of structures partition of lands monitoring of high rise structures detection of vertical movements detection of horizontal movements

Description :

Specifications of surveying projects, Design and pre-analysis of surveying projects, Planning and setting out of structures, Planning and partition of lands, Monitoring of high rise structures, Detection of vertical movements, Detection of horizontal movements.

Course outcomes :

a. Knowledge and Understanding: :

- | | |
|-----|-------------------------------------------------------------|
| 1 - | List the main items of specifications of surveying projects |
| 2 - | Explain the principals of setting out of structures |
| 3 - | Describe the main concept of partition of lands |

b. Intellectual Skills: :

- | | |
|-----|-------------------------------------------------------------|
| 1 - | Assess issues of pre-analysis of surveying projects |
| 2 - | Solve problems regarding setting out of structures |
| 3 - | Solve problems regarding monitoring of high rise structures |

c. Professional and Practical Skills: :

- | | |
|-----|-------------------------------------------------------------------|
| 1 - | Prepare technical reports for partition of lands |
| 2 - | Apply Code provisions regarding detection of vertical movements |
| 3 - | Apply Code provisions regarding detection of horizontal movements |

d. General and Transferable Skills: :

- | | |
|-----|---------------------------------------|
| 1 - | Cooperate and communicate effectively |
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Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Specifications of surveying projects	8	6	2

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Pre-analysis of surveying projects	8	6	2
Setting out of structures	8	6	2
Partition of lands	8	6	2
Monitoring of high rise structures	8	6	2
Detection of vertical movements	8	6	2
Detection of horizontal movements	8	6	2
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	40.00		
First Mid Term	15.00		
Quizzes / Assig.	15.00		
Report / Present.	15.00		
Second Mid Term	15.00		

Course Notes :

Handout notes on MOODLE

Recommended books :

"Surveying", by Stanley Raymond, Raymond Raker, and A.Bannister, 7th Edition, Pearson, Prentice Hall.1998