

## 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

Course Topic And Contents :			
Topic	No. of hours	Lecture	Tutorial / Practical
Ùpecifications 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, Pearon, Prentice Hall.1998