COURSE TITLE : SURVEY PRACTICAL, SURVEY CAMP & VIVA
COURSE CODE : 407
COURSE CATEGORY : A
PERIODS / WEEK : 3
PERIODS /SEMESTER : 48+ survey camp)
CREDITS : 2

TIME SCHEDULE

MODULE	TOPIC	PERIODS
I	Tacheometry-tangential	14
II	Tacheometry – Stadia	16
III	Curves	9
IV	Study of modern surveying Instruments Survey Camp- Two weeks	9
	TOTAL	**48 + Survey camp**

Rationale: *Tachometer is alternative equipment in solving the height and distance problems. Both the stadia tachometry and tangential tacheometry has its applications as the situation warrants. The knowledge about curve setting is essential in fixing the alignment of road, rail way, canal etc.*
In the field of topographic surveying, one notable contribution of digital electronics is the Total Station. The remote sensing technology has made possible the use of GIS and GPS. This course offers an introduction to these topics.

OBJECTIVES

Upon completion of the course the student should be able:

1.1 To Find the difference in elevation and distance between objects using tangential tacheometry
- 1.1.1 To take tacheometric observations
- 1.1.2 To compute the height and distances

2.1 To compute the stadia constants
- 2.1.1 To find the distance and elevation of objects using stadia tacheometry
- 2.1.2 To take stadia observations
- 2.1.3 To compute height & distances.

3.1 To compute the elements of the curve
- 3.1.1 To set out simple curves
- 3.1.2 To set out a curve by using chain and tape, by single theodolite, by double theodolite.

4.1 To Study the working of the modern surveying Instruments such as electronic theodolite, Total station, GPS, etc.
- 4.1.1 Temporary setting of Total station
- 4.1.2 Perform traverse with Total station,
- 4.1.3 Perform survey with prism mode and non prism mode, remote height
- 4.1.4 Find the difference in elevation and distances between objects

4.2 To know the following after performing a survey camp, at the end of the semester for two weeks. (Perform the work with conventional methods and then the same with Total station)
- a. Survey and preparation of key plan
- b. Principles adopted in selection of station points
- c. Types of survey to be adopted for a given situation
- d. Errors in linear and angular measurements
- e. Distribution of errors
- f. Preparation of Gale's traverse table
- g. Computation of areas
- h. Methods of plotting contour lines, determining contour intervals
- j. Topographic features of the ground from map