



CIQS Syllabus		Original:	May 25, 1993
Course No:	A104	Rev. No:	4
Course Title:	Surveying Principles and Applications	Rev. Date:	March 31, 2012

Course Description:

This course introduces the student to the equipment, methods and calculations used in land surveying. The candidate will study the various types of instrument along with the ability to interpret and record data from the various types of surveys and survey drawings.

Suggested Prerequisites: None

Learning Outcomes:

The candidate will be able to:

1. Identify the various types of instruments used and their appropriate application,
2. Demonstrate a basic knowledge of surveying fundamentals,
3. Identify the types of surveys normally undertaken and the methods and procedures necessary to produce such surveys,
4. To accurately interpret the data recorded on the survey drawings.

Course Content:

1. Surveying fundamentals
2. Levelling
3. Transits and theodolites
4. Electronic surveying measurement
5. Traverse surveys
6. Topographic surveying and drawing
7. Construction control surveys
8. Pipe and tunnel construction surveys
9. Culvert and bridge construction surveys
10. Building construction surveys

Required Textbooks and Materials:

1. Surveying with Construction Applications, 7th Edition, by Barry F. Kavanagh

Testing:

Emphasis in testing will be placed upon:

1. Identification of the proper instrument to be used in a given situation.
2. Identification of the various types of survey drawings.
3. Accuracy in measurement of quantities from these drawings.
4. Knowledge of information that may be obtained from the various types of survey drawings.