

**NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY  
CIV 171 – SURVEYING I (3 CR.)**

**Course Description**

Introduces surveying equipment, procedures and computations including adjustment of instruments, distance measurement, leveling, angle measurement, traversing, traverse adjustments, area computations and introduction to topography. Part I of II. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

**General Course Purpose**

To introduce the student to the principles of surveying, surveying equipment, surveying procedures, the analysis of field data, and the preparation of topographic maps.

**Course Prerequisites/Corequisites**

Prerequisite: none

**Course Objectives**

Upon completing the course, the student will be able to:

have a thorough knowledge of the basic instruments of surveying and their use, be able to analysis field data, and be able to prepare topographic maps.

**Major Topics to be Included**

- a) Mathematics of surveying
- b) Measurement of distances
- c) Measurement of angles
- d) Analysis of traverses
- e) Vertical curves
- f) Basic and complex horizontal curves
- g) Stadia surveying
- h) Analysis and preparation of topographic maps