

**NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY
CIV 172 – SURVEYING II (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 II 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: CIV 171 or equivalent.

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