

Course Name: Introduction to Geomatic Engineering SE 311 (for Surveying Eng)

Prerequisite: SE 211

Instructor: Prof. Ismat El Hassan

Course Objectives:

The student will be able to use survey measurement techniques that he studied during the first course SE 211 to make the necessary observations and computations for control fixing.

Course Contents:

- EDM and Total Station
- Traverse control fixing: field measurements of angles and distances
Computations and simple adjustment methods
- Triangulation: Selection of control positions, field observations and necessary computations.
- Resection and Intersection techniques of positioning
- Trilateration positioning technique
- Precise leveling

Field and Lab Tasks:

- Field observations and office computations for control fixing using:
- Traverse survey, Triangulation and Trilateration
- Training on Precise leveling
- Training on Total Station

Tutorial: See Tutorial Links

Outcome Assessment:

Field work, reports:	20 marks
Tutorial problems :	10
Midterm Exam:	20
Final Exam:	50
Total:	100