

Course name: SURVEYING FOR ARCHITECTS

Course code: CE 262

Course hours: Credit hours 2, Contact hours 3

Course Pre-requisites: None

Course Description

This course introduces concepts in land surveying, divisions and importance of surveying for Architects, connecting the knowledge about surveying division to understand the linear and angular devices and measurements and direction computations. Including the leveling measurements, contouring, and traversing and its practical applications for Architectural surveying and land registration.

Course Main Objective

In this course, the students will be to:

- To introduce basic surveying branches, main surveying instruments and units of measurement.
- To improve students' understanding of linear measurements and calculate their corrections kinds.
- To provide the students and perform the height difference measurements and levels computations
- To develop students' skills in computing horizontal, vertical angles from measurements and in computing the azimuths and bearings for the traverse sides.
- To present the traverse computations and main characteristics of contour mapping.

Course Learning Outcomes

After the completion of this course, the students will be able to;

- Understanding how to define basic surveying branches, main surveying instruments and units of measurement.
- Understanding how to define types of scales and draw appropriate scale bar.
- Ability Performing linear measurements and calculate their corrections kinds.
- Ability Performing height difference measurements and levels computations.
- Ability Performing horizontal and vertical angles measurements.

Course evaluation

- Quizzes, practical assignments
- Weekly/biweekly reviews
- Midterm examination
- Attendance
- Final examination

Course recommended books

- B. F. Kavanagh, "Surveying Principles and Applications", Prentice Hall, Ninth Edition, international edition, 2014.
- Charles D. Ghilani, Paul R. Wolf, 2011, "Elementary Surveying: An Introduction to Geomatics", 13th Edition, Prentice Hall.

Course References

- Scientific journals.