CIV3201 Foundation Engineering

Hours per Semester				Weighted Total Mark	Weighted Exam Mark	Weighted Continuous Assessment Mark	Credit Units
LH	PH	TH	CH	WTM	WEM	WCM	CU
45	30	0	60	100	60	40	4

Course Description

In this course, students acquire knowledge and skills in planning and designing of economical and stable foundation of soils. It involves ground investigations (lab and field tests), providing solutions to difficult soils, prediction of structural behaviour loading the soil and construction aspects.

Objectives

- Understand the physical, mechanical and mathematical principles of soils
- Introduce the learners to different foundation systems both the shallow and deep types.
- Measure soil properties in accordance with accepted standards
- Apply the basic principles of Soil Mechanics, physics and mathematics in solving real Engineering problems.
- Select and design appropriate foundation systems based on economy and safety
- To introduce participants to the different soil retaining systems, their selection criteria and design.
- To introduce the participants to different soil improvement techniques used on the different problematic soils.