

## YEAR FOUR

### SEMESTER ONE

#### QUS 4101 Construction Technology IV

Hours Per Week			Hours per Semester	Weighted Total Mark	Weighted Exam Mark	Weighted Continuous Assessment	Credit Units
LH	PH	TH	CH	WTM	WEM	WCM	CU
3	1	4	60	100	60	40	4

#### Course description

This course is meant to introduce students to particular aspects of civil engineering works.

#### Objective(s)

To enable students to understand, translate and interpret technical drawings of civil engineering works.

#### Course contents

1. Retaining Structure [15 CH]
  - 1.1 Basement soil stabilization,
  - 1.2 rock anchoring
  - 1.3 Other retaining structures.
  - 1.4 underpinning
2. Piling and special foundations. [15 CH]
3. Civil engineering construction. [15 CH]
  - 3.1 tunneling
  - 3.2 simple bridges
  - 3.3 culvert
  - 3.4 railway trunks
  - 3.5 Civil engineering plant and equipment.
4. Studio/practical exercises [15 CH]

**Learning outcomes.**

The student shall be able to understand civil engineering drawings with thorough comprehension of the construction technology, detailing and relevant specifications.

**Method of delivery.**

The course will be conducted through a mixture of lectures, group discussions and reading assignments. Basic lecture materials and data will be provided by the Lecturer and this will be supplemented by individual reading effort by students.

**Method of assessment.**

Assessment will be done through continuous coursework and final written examination. Continuous assessment will include assignments and classroom tests. A final examination will be offered at the end of each semester and will carry 60% of the total mark. Coursework will carry a total of 40% and will be divided into: assignments 20%, and written tests 20%.

**Reference books and materials.**

1. Barry, R. 1980. *The Construction of Buildings* Vol. 5 Granada Publishing
2. *Manual of Tropical Housing and Building*: Part 1 - Climatic Design. Longman, London and New York.
3. Seeley I.: 1980. *Building Technology*. Macmillan, London
4. Fullerton, R.L.: 1988. *Building Construction in Warm Climate* Vol. 2. Oxford University Press, London
5. Fullerton R.L. 1978. *Building Construction in Warm Climate* Vol. 3, Oxford University Press, London