QUS 4202 Quantity Surveying 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

The course builds up from principles of measurements and description of building works but with specific attention to measurements of multi storied framed buildings, external works and civil engineering works.

Objective(s)

To enable the students to translate technical drawings of multi storied framed buildings, external works and civil engineering works into quantifiable work items as per the standard method of measurements, with appropriate descriptions and right trade specifications.

Course contents

A detailed study of the sections of the Standard Method of Measurement (SMM); application of rules of standard method of measurement to measurement of

1. Multi-storied framed buildings [9 CH]

- Foundation and column bases
- Ground slabs
- Columns
- Beams
- Walls/retaining walls
- Suspended slabs, flat roofs and coverings stair cases and balustrades

2. Complex foundations [6 CH]

- Pad foundations
- Raft foundations
- Deep strip foundations

- Combined foundations

3. Steel framed structures [9 CH]

- Grillages
- Stanchions
- Girders
- Roof trusses
- Purlins and rails
- Claddings and roof coverings
- Concrete casings

4. External/Site works and drainage [15 CH]

- Surface water drainage
- Landscaping
- Estate roads, car parks, footpaths
- Gates and fencing

5. Standard method of measurement for civil engineering construction. [6CH]

- Introduction to CESMM
- Contrasts with measurements(SMM) of building works
- Basic principles of measurements of earth works, piling, roads etc.
- ICE standard method of measurements

6. Exhaustive practical exercise as decided by lecture [15 CH]

Learning outcomes.

In the end, Students should be able to interpret measure and thus take off quantities for Multi framed buildings, external works and civil engineering works. They should be able to understand the relevant clauses for the measured works in the method of measurements.

Method of delivery.

The course will be conducted through a mixture of lectures, tutorials, group discussions and practical 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, classroom tests and practical exercises. 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%.

Reference books and materials.

1. Edmeades D.H. 1973. ***Building Economics and measurement*** Part: Estate Gazette, London

2. Seeley I.H. 1988. ***Building Quantities Explained,*** Macmillan, London

3. Seeley I.H. (1987), ***Civil Engineering Quantities,*** 4th Edn. Macmillan Education, London.

4. Reynolds, C.J. (1980), ***Measurement of Civil Engineering Works.*** Granada, London.

5. Institute of Architects, Kenya (1970), ***Standard Methods of Measurement of Building Works for East Africa,*** (1st Edn.) Architectural Association of Kenya, Chapter of Quantity Surveyors, Nairobi.

6. Institute of Civil Engineers (ICE) and Federation of Civil Engineering Contractors 1985. ***Civil Engineering Standard Method of Measurement*** (CESMM). Institute of Engineers, London.