**EHS 2208 BUILDING TECHNOLOGY I (4 CU)**

**Course description:** This course describes the criteria for choosing and preparing appropriate building sites, basic surveying methods, and common equipment used in land surveying and quantity surveying.

**Course Objectives**

By the end of this course the student, should be able to;

1. Determine the criteria of choosing a suitable building site.
2. Interpret and evaluate building designs and drawings.
3. Undertake simple land surveying
4. Perform basic quantity surveys
5. Prepare basic bills of quantities.

**Detailed Course Outline**

* Introduction to Building Technology and terminologies commonly used
* Basic features of a good building plan
* Selection of construction sites and site clearing works
* Purpose of land and quantitative surveying
* Forms of land surveying (plane and geodetic, construction or engineering, cadastral, topographical)
* Common tools and equipment used in site clearance and surveying
* Specifying and quantifying the materials required for different construction works
* Preparing a bill of quantity
* Standard method of measurement for a simple building project
* Practical/site or field visits

**Mode of delivery:**

* Lectures, Practical/field work

**Mode of Assessment:**

- Continuous assessment, tests, field assignments **(40%)**.

- End of semester exam: MCQ’s, short answer and long assay questions **(60%)**.

**Suggested Reading List**

1. Lecture handouts and additional materials on reserve at the MUSPH Resource Centre.

2. Stern, P. et al.1990. Field engineering: An introduction to development work and construction in rural areas. *Intermediate technology publications.*

# 3. McMullan, R., (2002). *Environmental Science in Building*. 5th Edition. Macmillan.

4. Allen [Edward](http://www.allbookstores.com/author/Edward_Allen.html), [Joseph Iano](http://www.allbookstores.com/author/Joseph_Iano.html), Fundamentals of Building Construction: Materials and Methods.

 John Wiley & Sons Inc

5. Barry, B. A. Construction Measurements

6. Surveying Handbook, Edited by Russell C. Brinker and Roy Minnick, 1987.