**BLS2208; DATABASE MANAGEMENT AND INFORMATION RETRIEVAL**

**Short** **Description**

The course introduces learners to the techniques of developing and managing database. It will also focus on appropriate skills for information retrieval.

**Aim**

To enable learners acquire techniques of developing and managing databases and retrieving information

**Learning outcome**

At the end of this course, learners should be able to:

* Design a database
* Enter and edit data in a database
* Manage databases
* Retrieve information from an information system
* Evaluate information storage and retrieval systems

**Intellectual, Practical and Transferable skills**

* + Database design skills
  + Data entry and editing skills
  + Skills in searching and retrieval of information from a database
  + Knowledge of evaluating information storage and retrieval systems

**Teaching and Learning Pattern**

By use of lectures, practical, student led group projects

**Indicative Content**

Definition, concepts and methods in the management of databases; types of databases, Architecture of a DBMS; Data Models: relational, hierarchical and network models; Relations, attributes, domains, etc; Database design, Database architecture and schema, Logical and physical views of data schemas and sub schemas, normalization; Form design, indexing, tables and program design. Data manipulation languages; programming in a database environment: database security, integrity, recovery, and concurrence Database administration, Information search and retrieval, evaluation of information storage and retrieval systems.

**Assessment** **method**

* Coursework, project and test to constitute 30%
* Final examination (70% marks).

**Indicative sources**

* 1. Begg, C. 2002. Database Management Systems. New York: Heinemann.
  2. Connlly, T and Begg C. 2000. Database systems: practical approach to design, implementation and management. Addison Wesley.
  3. Hoffer, J, et al. 2005. Modern database management. New Jersey: Pearson.
  4. Jacso, P. and Lancaster, F.W. 1999. Build your own database: Chicago:ALA.
  5. Lucas, Henry C. 1992. The analysis, design and implementation of information systems. 4th ed. New York: McGraw-Hill.
  6. Ramakrishnan, R. & Gehrke,J. 2003. Database management system. Boston: McGraw-Hill