APT 3080: MANAGEMENT INFORMATION SYSTEMS

Prerequisite: APT 1050: Database System

3 Credit Units

Rationale

The goal of this course is to provide real-world understanding of management information systems for students of Applied Computer Technology. It provides a firm foundation in business-related information technology on which they can build successful careers. The fundamental guiding principle is that information systems are everywhere in business. This is because information is the single most powerful resource nin every business function in every industry. The course provides a balance between technical information and real-world applications.

Course Description

Management Information Systems comprises an introduction to the foundations, technology and applications of Management Information Systems (MIS). The course emphasizes 'Systems Thinking;' i.e., the conceptualization of Information Systems as structured configurations of elements behaving collectively to serve the information needs of an organization.

Course Content

Overview of information successes and failures and some of their causes. Basic concepts of Systems Theory and Information. Basic architecture of the World-Wide Web and some of its governing protocols. Overviews and comments on a variety of special information systems topics such as Business Intelligence, Geographic Information Systems, operating systems, etc. Information Systems Auditing and Governance.

Learning outcomes

At the end of this course the students should be able to:

1. Conceptualize information systems as Systems of Information; i.e., be able to apply basic concepts of Systems Theory and Information to real-world management information systems.
2. Conceptualize information systems as complexes of hardware and software technologies and represent these complexes in system theoretical terms.
3. Provide a brief overview of programming languages, their categories and current trends.
4. Explain the relationships, both historical and current, between the use of information systems and business productivity.
5. Provide an overview of information successes and failures and some of their causes.
6. Convert between various number counting systems (decimal, binary, octal, hexadecimal, etc.) and perform simple arithmetic operations in these systems.
7. Describe the basic architecture of the World-Wide Web and some of its governing protocols.
8. Provide an overview of protocols, standards and standard-setting agencies and organizations in IS.
9. Explain the relational data model and some of its integrity constraints.
10. Explain the principles and role of Open Source Software and its major players and representatives.
11. Be able to provide overviews and comments on a variety of special information systems topics such as Business Intelligence, Geographic Information Systems, operating systems, etc.
12. Explain the practice and relevance of Information Systems Auditing and Governance.

13. Research, report and lead a class discussion on a special MIS topic.

Course Text

Stair & Reynolds, Principles of Information Systems (Special COB/MIS edition).

Teaching Methodology

The primary teaching methods will be lectures and demonstrations. The student will attend lectures and demonstrations participate in discussion on assigned readings, complete assigned projects, and complete required tests and examinations.

Instructional material & equipment

Textbooks, whiteboard, handouts, electronic projector and laptop, Internet access, and library.

Methods of evaluation

Laboratory Work	20%
Project	20%
Assignments	10%
Mid-semester	20%
Final semester exams	30%
Total	**100%**