

Course-Plan

School	: Engineering
Department	: Computer Science and Engineering
Course Code	: CS 536
Credit Structure	: 2-0-1
Course Name	: Computer Applications and Information Management
Course is offered for	: Post Graduate and Under Graduate students without prior studies of Computer Science/IT courses.
Instructor	: Rajib Goswami

1. **Abstract:** The course Computer Applications and Information Management (CS 536) is an introductory course on Information & Communication Technology (ICT) and Management Information System (MIS). The course covers the basic concepts of MIS, database management, Internet and Web technology, Electronic Data Processing (EDP) with electronic spread sheets, word processing and presentation software. The course also gives brief introduction to basic computer hardware and ICT.

2. **Objective:** Objective of this course is to train students about managing information and designing MIS by applying concepts of database management, Internet/Intranet, Web technologies & ICT etc. with the help of (computer application) software.

3. **Prerequisites of the course:** Nil.

4. Course outline

- **Basic Concepts:** Basic computer organization, Computer software, Computer languages, Operating Systems, Data communication and computer network.
- **Word Processing and Documentation:** Preparing and processing text documents, Basic word processing using Microsoft word or similar tools or products.
- **Electronic Spread Sheet and Data Analysis:** organization and management of data via spreadsheets and database tools; Organizing and analysing data using MS-Excel.
- **Fundamentals of Database Management Systems (DBMS) :** Basic Concepts of Data base Entity, Attributes of entities, Database Tables, Fields, Records, Key field, Primary Key, Basic Entity Relationships, Designing database tables, data entry forms and Designing Database Reports, Introduction to DBMS package like MS-Access.
- **Internet Services:** Concept of Internet Protocol, Internet services, Client- server organization, FTP, HTTP, Telnet, world wide web, E-mail, Domain Name System, Uniform Resource Locator, Internet Browsers, Searching the web, Search engines, Basics of HTML and web page designing, information security, crime, and ethics.
- **Management Information System:** Concepts of Management Information System (MIS), Management by Objectives, Management Support Systems, Decision Support Systems and Functional Information Systems and Applications of MIS.

Suggested reading:

Text Books

1. Sinha, P.K., *Computer Fundamentals*, (BPB Publications, 2002).
2. Godbole A. S., Kahate A., *Web Technologies*, (Tata McGraw-Hill, 2006)
3. Kumar N., Mittal R., *Management Information System*, (Anmol, New Delhi, 2004)

5. (a)Time-Plan

Topic	No. of contact hours	Text Book
Definition and Design of Management Information System Applications of MIS.	3(L)	3
Basics of Business processes and how they are related to information systems.	1(L)	3
Computer Fundamentals	2(L)	1
Basic Application Software and Word Processing	2(P)	1
DBMS	4(L) 6(P)	1
Electronic Spread-sheet	2(L) 4(P)	1
Presentation and Image processing s/w	2(P)	1
Internet, Web-Technology and basics of HTML/Web page.	4(L) 4(P)	2
Total	16(L) 18(P)	

(b) Evaluation plan

Test

I	25
II	25
III (Major I)	40
IV	25
II (Assignment)	25

<u>Semester End Exam (Major II)</u>	<u>60</u>
Total	200

6. Pedagogy :

Teaching-learning methods to be used

- Lecture and Discussion
- Presentations
- Laboratory assignments/projects

7. Expected outcome: After completion of this course students should be able to design and develop MIS by managing information using ICT.