

Centre for Management Studies

Dibrugarh University

Course Code : 40200

Course Name : Information Systems

Course Type : Core

Prerequisites : 10700 (CAM)

Objective : The main objective of the course is to introduce students to a whole range of Computer Based Information Systems (CBIS) with a good look at managerial issues concerning these.

Credit : 3 (2 – 0 – 1)

Pedagogy : Lectures, Presentations, Case Studies & Practicals

Evaluation : Internal assessment: 40 marks (2 Sessional Examinations – 10 marks each totaling 20 marks, Practical – 15 marks, Class Participation – 5 marks); End Semester Examination: 60 marks

Instructor : Himadri Barman (himadri@cmsdu.org)

Web links : <http://himadri.cmsdu.org>, <https://classroom.google.com>

Outcomes : Learners will have a working idea of the various CBIS used in a business organization. Additionally, they will be able to design and implement databases and work with simple SQL queries.

Unit	Topics	No. of Lectures	No. of Tutorials	No. of Practicals
1	CBIS, Balanced IS, CBIS and MIS	4	0	0
2	SDLC; Database Design, Basic SQL Queries, Interface Design	8	0	28
3	TPS, Office Systems, MIS, SCM – role of IS, CRM – role of IS	5	0	0
4	DSS, ESS, Expert Systems, Artificial Intelligence	5	2	0
5	Information Systems Security and Control, International Information Systems, Web-based Information Systems, ERP	6	0	0

Total Lectures : 28

Total Tutorials : 0

Total Practicals : 0

Suggested Readings:

1. Management Information Systems: Managing the Digital Firm, 11th Edition, K C Laudon, J P Laudon, PHI / Pearson
2. Management Information Systems: Conceptual Foundations, Structure and Development, 2nd Edition - G B Davis, M H Olson, Tata McGraw Hill
3. Introduction to Artificial Intelligence and Expert Systems, - D W Patterson, PHI
4. Fundamentals of Database Systems - R Elmasri, SB Navathe, D V Somayajulu, S K Gupta, Pearson

Detailed Course Outline

Unit 1:

CBIS – definition and types, approaches, scope, (1) management issues and impact thereof, infrastructure, (2) concept of balanced IS, (3) CBIS and MIS – conceptual similarities (4)

Unit 2:

Important Steps - SDLC; (5) Database design – ER Modelling, normalisation (till 3NF), (6 – 9) Basic SQL queries – creating tables, select and insert statements ; (10 – 11) Interface Design – important concepts, guidelines (12)

Unit 3:

TPS – need, types and applications; (13) Office Systems – role in knowledge management; (14) MIS – its differentiation as a special type of IS and its role in operations management; (15) SCM – role of IS; (16) CRM – role of IS (17)

Unit 4:

DSS – types, components, applications; (18) ESS – benefits, Expert Systems – rule based systems; (19) Artificial Intelligence – basic concepts on fuzzy logic, neural networks, genetic algorithms (20 – 21)

Unit 5:

Information Systems Security and Control – basic concepts; (23 -24) International Information Systems – architecture, technology and strategies for implementation; (25) Web-based Information Systems – infrastructure, intranets and extranets; (26) ERP I & ERP II – basic concepts (27)

Practicals:

MS Access 2007/2010 would be used to design databases, develop forms, reports and queries through SQL.

Numbers in the brackets indicate session number. Session Numbers 22 and 28 will be review sessions.