

Devi Ahilya Vishwavidhyalaya, Indore, India Institute of Engineering & Technology					III Year B.E. (Mechanical Engineering) (Full Time)	
Course Code & Name	Instructions Hours per Semester and Credits					
5RMPE4: MANAGEMENT INFORMATION SYSTEM	Classroom Instruction (CI)		Lab Instruction (LI)	Term Work (TW) and Self Learning (SL)	Total no. of Hours Per semester	Total Credits (Total Hours/30)
	L	T	P	TW+SL	120	4
	20	10	20	70		

Course Objective:

The course is designed

1. To study basic concepts of Information Systems (IS) and enables the students about new approaches to improve efficiency and efficacy of business models.
2. This course will equip the students with understanding of role, advantages and components of an Information System.
3. The objective of the course is to help students to integrate their learning from functional areas and decision making process in an organization
1. The objective of the course is to help students integrate their learning with role of Information Systems to have a vintage point in this competitive world.

Pre requisite(s): Basic Concepts of Management.

COURSE CONTENTS

UNIT I:

Basic Concepts of Information System (IS):

Basic Concepts of Information System (IS), Role of data and information, Organization structures, Business Process, Systems Approach and introduction to Information Systems.

UNIT II:

Types of Information System:

Resources and components of Information System, integration and automation of business functions and developing business models. Role and advantages of Transaction Processing System, Management Information System, Expert Systems and Artificial Intelligence, Executive Support Systems and Strategic Information Systems.

UNIT III:

Architecture & Design of IS

Architecture, development and maintenance of Information Systems, Centralized and Decentralized Information Systems, Factors of success and failure, value and risk of IS.

UNIT IV:

Decision Making Process

Programmed and Non- Programmed decisions, Decision Support Systems (DSS), Models and approaches to DSS

UNIT V:

Introduction to Enterprise Management technologies

Business Process Reengineering, Total Quality Management and Enterprise Management System viz. ERP, SCM, CRM and Ecommerce. Introduction to SAD System Analysis and Design. Models and Approaches of Systems Development.

References:

- Management Information Systems, Effy OZ, Thomson Learning/Vikas Publications
- Management Information Systems, James A. O'Brein, Tata McGraw-Hill
- Management Information System, W.S Jawadekar, Tata Mc Graw Hill Publication.
- Management Information System, David Kroenke, Tata Mc Graw Hill Publication.
- MIS: Management Perspective, D.P. Goyal, Macmillan Business Books.
- MIS and Corporate Communications, Raj K. Wadwha, Jimmy Dawar, P. Bhaskara Rao, Kanishka Publishers.
- MIS: Managing the digital firm, Kenneth C. Landon, Jane P. Landon, Pearson Education.

Course Outcome:

Students earned credits will develop ability to

CO1. Understand basic concept of MIS.

CO2. Understand different types of Information system and their application.

CO3. Students can understand the concepts of Architecture & Design of IS.

CO4. Understand different types of technologies that can be used in an organization regarding implementation of MIS.

CO5. Understand the concepts of Enterprise Management technologies

LIST OF EXPERIMENTS

Following experiments/ case studies will be performed by the students:

1. Case related to basic concepts of Information System.
2. Case related to types of information system.
3. Case related to Expert Systems and Artificial Intelligence related to MIS.
4. Case related to architecture & design of IS.
5. Case related to decision making process.

Course Objective: The course is designed

1. To study basic concepts of Information Systems (IS) and enables the students about new approaches to improve efficiency and efficacy of business models.
2. This course will equip the students with understanding of role, advantages and components of an Information System.
3. The objective of the course is to help students to integrate their learning from functional areas and decision making process in an organization
4. The objective of the course is to help students integrate their learning with role of Information Systems to have a vintage point in this competitive world.

Course Outcome:

Students earned credits will develop ability to

CO.No.	CO	PO
CO1	Understand basic concept of MIS.	1,2,3
CO2	Understand different types of Information system and their application.	2,3,,4
CO3	Students can understand the concepts of Architecture & Design of IS.	4,5,6
CO4	Understand different types of technologies that can be used in an organization regarding implementation of MIS.	1,2,4,6
CO5	Understand the concepts of Enterprise Management technologies	1,2,5,6,10

CO-PO Relationship

CO	PO -1	PO -2	PO -3	PO -4	PO -5	PO -6	PO -7	PO -8	PO -9	PO-10	PO-11	PSO 1	PSO 2	PSO 3
CO1	3	1	1	2	3	0	0	0	1	2	3	1	2	-
CO2	3	2	1	2	1	1	2	1	1	2	1	1	2	-
CO3	3	1	1	1	1	1	1	0	0	0	2	1	2	3
CO4	2	2	1	0	1	1	2	3	1	1	2	1	2	-
CO5	3	1	2	2	2	1	2	2	1	1	2	1	2	3

*Institute of Engineering & Technology, Devi Ahilya University, Indore, (M.P.), India. (Scheme
Effective from July 2026*

* CO (rows) mention nil/very small/insignificant contribution to the PO(column)

1 → relevant and small significance 2 → medium or moderate and 3 → strong