

Course Code	Course Name	Teaching Scheme (Hrs/ week)			Credits Assigned			
		L	T	P	L	T	P	Total
MCAE45C	Enterprise Resource Planning	3	--	--	3	--	--	3
		Examination Scheme						
		ISE		MSE		ESE		
		10		30		100 (60% Weightage)		

Pre-requisite Course Codes	MCA14	
Course Outcomes	CO1	Conceptualize the basic structure of ERP.
	CO2	Identify implementation strategy used for ERP.
	CO3	Apply design principles for various business module in ERP.
	CO4	Apply different emerging technologies for implementation of ERP.

Module No.	Unit No.	Topics	Ref.	Hrs.
<b>1.</b>		<b>Introduction to Enterprise Resource Planning (ERP)</b>	<b>1,9</b>	<b>07</b>
	1.1	Information System and Its Components		
	1.2	Value Chain Framework		
	1.3	Organizational Functional Units		
	1.4	Evolution of ERP Systems		
	1.5	Role of ERP in Organization		
	1.6	Three-Tier Architecture of ERP system		
<b>2.</b>		<b>ERP Implementation Life cycle</b>	<b>1, 9</b>	<b>06</b>
	2.1	Project Preparation, Initial Costing		
	2.2	Requirement Engineering, ERP Solution Selection		
	2.3	Technical Planning, Change Management and Training Plan		
	2.4	Implementation and Deployment Planning, Configuration		
	2.5	Custom Coding		
<b>3.</b>		<b>ERP and Related Technologies</b>	<b>1,9</b>	<b>08</b>
	3.1	Business Processing Reengineering(BPR)		
	3.2	Data Warehousing		
	3.3	Data Mining		
	3.4	On-line Analytical Processing(OLAP)		
	3.5	Supply Chain Management (SCM)		
	3.6	Customer Relationship Management(CRM)		
	3.7	Electronic Data Interchange (EDI)		
<b>4.</b>		<b>ERP Manufacturing Perspective</b>	<b>3,4,5</b>	<b>05</b>
	4.1	MRP - Material Requirement Planning, PDM - Product Data Management		
	4.2	BOM - Bill Of Material		

	4.3	MRP - Manufacturing Resource Planning		
	4.4	DRP - Distributed Requirement Planning		
<b>5.</b>		<b>ERP Modules</b>	<b>3,4,5</b>	<b>05</b>
	5.1	Finance		
	5.2	Plant Maintenance		
	5.3	Quality Management		
	5.4	Materials Management		
<b>6.</b>		<b>Benefits of ERP</b>	<b>3,4,5</b>	<b>06</b>
	6.1	Reduction of Lead-Time, On-time Shipment		
	6.2	Reduction in Cycle Time, Improved Resource Utilization		
	6.3	Better Customer Satisfaction, Improved Supplier Performance		
	6.4	Increased Flexibility, Reduced Quality		
	6.5	Costs, Improved Information Accuracy and Design-making Capability		
<b>7.</b>		<b>Introduction to ERP tools</b>	<b>7,8,9</b>	<b>05</b>
	7.1	OpenERP		
	7.2	JD Edwards-Enterprise One		
	7.3	Microsoft Dynamics-CRM Module		
	7.4	SAP.		
			<b>TOTAL</b>	<b>42</b>

#### References:

- [1] Alexis Leon, "Enterprise Resource Planning", Tata McGraw Hill, 3<sup>rd</sup> Edition.
- [2] Alexis Leon, "Enterprise Resource Planning - Diversified", TMH.
- [3] Ravi Shankar & S. Jaiswal, "Enterprise Resource Planning", Galgotia.
- [4] Vinod Kumar Garg, N. K. Venkitakrishnan, "Enterprise Resource Planning : Concepts and Practices".
- [5] AnnettaClewto and Dane Franklin, "ERP a Managerial Perspective by S Sadagopan"
- [6] Guide to Planning ERP Application, , McGraw-Hill, 1997.
- [7] Jose Antonio , "The SAP R/3 Handbook", McGraw – Hill.
- [8] Dr. Ravi Kalakota, "E-Business Network Resource planning using SAP R/3 Baan and Peoplesoft : A Practical Roadmap For Success".
- [9] Veena Bansal, "Enterprise Resource Planning - A Managerial Perspective", PEARSON.