



Kadi Sarva Vishwavidyalaya
Faculty of Engineering & Technology
Third Year Bachelor of Engineering (Information Technology)
(In Effect From Academic Year 2019-20)

Subject Code: IT605F-N	Subject Title: Enterprise Resource Planning
Pre-requisite	

Teaching Scheme (Credits and Hours)

Teaching scheme				Total Credit	Evaluation Scheme					
L	T	P	Total		Theory		Mid Sem Exam	CIA	Pract.	Total
Hrs	Hrs	Hrs	Hrs		Hrs	Marks	Marks	Marks	Marks	Marks
3	0	2	5	4	3	70	30	20	30	150

Course Objective:

The aim of this course is to make students aware about 'Enterprise Resource Planning - ERP', which is a process by which a company manages and integrates the important parts of its business. An ERP management information system integrates areas such as planning, purchasing, inventory, sales, marketing, finance, human resources, etc.

Outline of the Course:

Sr. No	Title of the Unit	Minimum Hour
1	Introduction to ERP	5
2	ERP and Related Technologies	6
3	ERP Manufacturing Prospective	8
4	ERP Modules	6
5	Benefits of ERP	4
6	ERP Implementation Lifecycle	5
7	ERP Case studies	8
8	E-Business Architecture	3
9	Introduction to ERP tools	3

Total hours (Theory): 48

Total hours (Practical):32

Total hours: 80



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Detailed Syllabus

Sr. No	Topic	Lecture Hours	Weight age(%)
1	Introduction to ERP: Enterprise : An Overview, Integrated Management Information, Business Modeling, Integrated Data Model, Common ERP myths, Evolution of ERP, Advantages, Characteristics, Process integration with ERP.	5	10
2	ERP and Related Technologies: Business Processing Reengineering(BPR), Data Warehousing, Data Mining, On-line Analytical Processing(OLAP), Supply Chain Management (SCM),Customer Relationship Management(CRM), MIS - Management Information System, DSS - Decision Support System, EIS - Executive Information System.	6	13
3	ERP Manufacturing Prospective: MRP - Material Requirement Planning, BOM - Bill Of Material, MRP - Manufacturing Resource Planning, DRP - Distributed Requirement Planning, PDM - Product Data Management.	8	17
4	ERP Modules: Finance, Plant Maintenance, Quality Management, Materials Management	6	13
5	Benefits of ERP: Reduction of Lead-Time, On-time Shipment, Reduction in Cycle Time, Improved Resource Utilization, Better Customer Satisfaction, Improved Supplier Performance, Increased Flexibility, Reduced Quality Costs, Improved Information Accuracy and Design-making Capability	4	8
6	ERP Implementation Lifecycle: Pre-evaluation Screening, Package Evaluation, Project Planning Phase, Gap Analysis, Reengineering, Configuration, Implementation Team Training, Testing, Going Live, End-user Training, Post-implementation (Maintenance mode)	5	10
7	ERP Case studies: E-Commerce to E-business E-Business structural transformation, Flexible Business Design, Customer Experience, Create the new techno enterprise, New generation e-business leaders, memo to CEO, Empower	8	17
8	E-Business Architecture: Enterprise resource planning the E-business Backbone Enterprise architecture planning, ERP usage in Real world, ERP implementation, Future of ERP applications ,memo to CEO E-Procurement, E-Governance, Developing the E-Business Design	3	6
9	Introduction to ERP tools: JD-Edwards-Enterprise One Microsoft Dynamic CRM-Module, ERP Software and Tools, Case Study : SAPR/3 at Tata Steel.Case Study, Pantaloon.	3	6
	Total	48	100



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Learning Outcome:

On successful completion of this course, the student should be able to:

1. Understand the concepts and importance of ERP system.
2. Understand ERP market and vendors.
3. Understand the relationship of ERP and SCM.
4. They should be able to understand the concept ERP implementation.

List of Tutorials:

1. Study of ERP and its application and myths.
2. Study of ERP features.
3. BPR and ERP and SCM.
4. ERP implementation and challenges.

E-Resources:

1. <http://nfra.eresourceerp.com>

Reference Books:

1. Enterprise Resource Planning - Alexis Leon, Tata McGraw Hill.
2. Enterprise Resource Planning – Diversified by Alexis Leon, TMH.
3. Enterprise Resource Planning - Ravi Shankar & S. Jaiswal , Galgotia
4. Enterprise Resource Planning, Ashim Raj Singla, Cengage Learning India Pvt. Ltd., New Delhi, 2008.
5. Enterprise Resource Planning, Alexis Leon, 2nd edition, Tata McGraw Hill Education Pvt. Ltd., New Delhi, 2008.
6. E-Business and ERP: Transforming the Enterprise, Grant Norris, James R. Hurley, Kenneth M. Hartley, John R. Dunleavy, John D. Balls, John Wiley and Sons, 2000.
7. Enterprise Resource Planning: Concepts and Practice, V.K. Garg



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List of experiments:

No	Name of Experiment
1	A Company has five module HR, admin, finance, production and report. A company is of Mechanical and wants to implement ERP system list out the various required information and gathered that in defined format which helps for developing ERP system
2	Case study for identifying resource availability used in ERP Development for Pharmaceutical company with any SIX Modules. 1). Hardware resources, 2). Software resources 3). Database resources.
3	Create chart showing modules of ERP in which Any six modules also show interconnection between all modules, functionalities and its objectives.
4	Design & develop the ERP system for college having main four modules in which HR/Admin, Student, Report attendance, Result and integrated this modules with request information in Star-UML.
5	To study about an ERP system having a huge database for integration different modules creates a uses login or control panel which is other then admin but attached with central database. (Using Star-UML OR M.S. Visio.).
6	Case study for ERP having four modules HR, Reporting, Production, Payroll (you can choose any ERP as per your ideas).
7	Derive or discuss case study for transforming site & discuss points for transforming in to e-business function.
8	Write a brief case study for any One government body which effectively uses E- governance for better sharing of information.