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|---|---|
| **Course Title:** | Enterprise Resource Planning |
| **Course Code:** | FC-302 (A) |
| **Course Credit:** | 2 |
| **Session Per Week:** | 3 |
| **Total Teaching Hours:** | 40 Hours |

## AIM

The course would make students aware about ERP theory and practice. This course provides the students with the knowledge of evolution of ERP systems, business process reengineering, ERP technologies, process mapping, ERP life cycle and ERP auditing and risk issues.

## LEARNING OUTCOMES

The student would be able
1) To comprehend the technical aspects of ERP systems.
2) To learn concepts of reengineering and how they relate to ERP system implementations.
3) To understand the success and failure factors of ERP implementation.
4) To understand the steps and activities in the ERP life cycle.
5) To identify and describe typical functionality in an ERP system.

## DETAIL SYLLABUS

**Unit-1**                                                                                      **10 Hours**

Introduction to Enterprise and ERP
• An overview of Enterprise
  o Introduction
  o Business Functions and Business Processes
  o Integrated Management Information
  o Role of the Enterprise in Implementing the ERP System
  o Business Modeling
• Introduction to ERP
  o Introduction
  o Common ERP Myths
  o A Brief History of ERP
  o The Advantages of ERP
  o Why ERP Package Now
  o Over Expectation in ERP
  o Roadmap for successful ERP implementation
  o The Role of CIO
• Basic Concepts of ERP
  o Will ERP fit the ways A Company does Business?
  o Why is ERP important to A Company?
  o ERP market has Grown and will continue to Grow
  o How does ERP create Value?

**Unit-2**

Risk, Benefits and Technologies related to ERP 10 hours
- Risks and Benefits of ERP
    - o Risks of ERP
    - o Risk Factors of ERP Implementation
        - People Issues
        - Process Risks
        - Technological Risks
        - Implementation Issues
        - Operation and Maintenance issues
    - o Benefits of ERP
        - Information Integration
        - 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
        - Better Analysis and Planning Capabilities
- ERP and Related Technologies
    - o Introduction
    - o Business Process Reengineering (BPR)
    - o Data Warehousing
    - o Data Mining
    - o On-line Analytical Processing (OLAP)
    - o Product Life Cycle Management (PLM)
    - o Supply Chain Management (SCM)
    - o Customer Relationship Management (CRM)
    - o Geographical Information Systems (GIS)
    - o Intranet and Extranets
    - o Advanced Technology and ERP Security
    - o Middleware
    - o Security and ERP

**Unit-3**

ERP – Functional Modules, ERP- Implementations
- ERP-Functional Modules
    - o Introduction
    - o Functional Module of ERP Software
        - Financial Module
        - Manufacturing Module
        - HR Module
        - Materials Management Module
        - Production Planning Module
        - Plant Maintenance Module
        - Quality Management Module
        - Purchasing Module
        - Marketing Module
        - Sales and Distribution Module

• ERP-Implementation
    o ERP-Implementation Basics
     Why ERP?
     Technological, Operational, and Business Reasons for Implementing ERP
     Implementation Challenges
    o ERP Implementation Life Cycle
        Objectives of ERP Implementation
        Different Phases of ERP Implementation

**Unit-4**                                                                                                        **10 Hours**
Success & Failure Factors of an ERP Implementation, Present & Future
• Success & Failure Factors of an ERP Implementation
    o Success Factors
    o Failure Factors
• Present and Future
    o ERP and eBusiness
        eBusiness – Supply Chain Integration
        The eBusiness Process Model
        ERP / eBusiness Integration
    o ERP, Internet and WWW – ERP II
        ERP, Internet and WWW
        ERP to ERP II – Bringing ERP to the ERP Enterprise

**TEXTBOOK:**
Enterprise Resource Planning (Second Edition)
Publisher: McGraw Hill
By Alexis Leon
    Chapter - 1 (Excluding – Integrated Data Model)
    Chapter - 2 (Excluding – The Future of ERP Packages)
    Chapter - 3 (All the topics)
    Chapter - 4 (Risks of ERP, Risk Factors of ERP Implementation, Benefits of ERP)
    Chapter - 5 (Excluding – Technological Advancements, Computer Security, Crime Security)
    Chapter - 7 (Introduction, Functional Module of ERP Software)
    Chapter - 8 (All the topics)
    Chapter - 9 (Objectives of ERP Implementation, Different Phases of ERP Implementation)
    Chapter - 15 (Success Factors, Failure Factors)
    Chapter - 18 (eBusiness-Supply Chain Management, The eBusiness Process Model, ERP/eBusiness Integration)
    Chapter - 19 (ERP, Internet and WWW, ERP to ERP II – Bringing ERP to the Entire Enterprise)

**REFERENCE BOOKS:**
    1. ERP Demystified (Second Edition)
    Publisher: McGraw Hill
    By Alexis Leon
    2. Enterprise Resource Planning
    Publisher: MacMillan Publications
    By Mahadeo Jaiswal and Ganesh Vanapalli
    3. Enterprise Resource Planning (Edition-2008)