

NIRMA UNIVERSITY

Institute:	Institute of Technology
Name of Programme:	Master of Computer Application (2-Years Programme)
Course Code:	3MCAD304
Course Title:	Enterprise Resource Planning
Course Type:	Departmental Elective
Year of Introduction:	2021-22

Credit Scheme

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Course Learning Outcomes (CLO):

At the end of the course, students will be able to –

1. explain various fundamentals and modules of Enterprise Resource Planning (ERP)
2. apply CRM concept and implementation of various ERP packages
3. analyze and compare various decision-making processes using ERP
4. evaluate ERP life cycle, E-Business, E-Commerce, SCM, CRM

Syllabus:

Total Teaching hours: 45

Unit	Syllabus	Teaching hours
Unit-I	ERP and Related Technologies: Introduction, the E-Business Backbone, evolution, definition, advantages, Business Modelling, Business Process Reengineering, Management Information System, Decision Support System, Executive information System, Data Warehousing - Data Mining, Online Analytical Processing	06
Unit-II	ERP Manufacturing Perspective: Material Requirement Planning, Bill of Material, Manufacturing Resource Planning, Distributed Requirement Planning, Product Data Management, Make to Order and Make to Stock, Assemble to Order, Engineer to Order, Configure to Order	06
Unit-III	ERP Modules: Finance, Sales & Distribution, Manufacturing, Human Resources, Plant Management, Quality Management, Material Management	05
Unit-IV	Benefits of ERP: Reduction of Lead-Time, On-Time shipment. Reduction in Cycle Time, Improved Resource Utilisation, Better Customer Satisfaction, Improved Supplier Performance, Increased Flexibility, Reduced Quality Costs, Improved Information Accuracy and decision-making capacity and other	04
Unit-V	ERP Implementation Life Cycle: Pre-Evaluation Screening, Package Evaluation, Project Planning, Gap Analysis, Reengineering, Configuration, Implementation Team Training, Testing, Going Live, End-User Training, Maintenance	06
Unit-VI	E-Commerce to E-Business: Flexible Business Design, Definition of Value, E-Business Communities, Customization and integration, E-Business Architecture	06

Unit-VII	Business Engineering: Customer Relationship Management, Business Process Model, Customer Centric Business, Pre Order, Point of Order and Post Order Customer Support, Supply Chain Management, Business & Technology Forces - Driving Needs For SCM, Managing Order Acquisition Process, Elements of SCM	07
Unit-VIII	ERP Packages: Introduction to SAP, Baan, Oracle, People-Soft implementation scenarios	05

Self-Study: The self-study contents will be declared at the commencement of semester. Around 10% of the questions will be asked from self-study contents.

- Suggested Readings/References:
1. Alexis Leon, Enterprise Resource Planning, Tata McGraw Hill.
 2. Ravi Shankar & S. Jaiswal, Enterprise Resource Planning, Galgotia.
 3. Vinod Kumar Garg, Enterprise Resource Planning Concepts and Practices, PHI Learning Pvt Ltd
 4. Annetta Clewto and Dane Franklin, Network Resource planning using SAP R/3 Baan and People soft: A Practical Guide to Planning, ERP Application, McGraw-Hill.
 5. Jose Antonio, The SAP R/3 Handbook, McGraw Hill.

Suggested List of Experiments: -NA-

Suggested Case List: -NA-