

# Gujarat Technological University

## Master of Computer Applications

### Semester-I

Subject Name: **Enterprise Resources Planning (ERP)**

Subject Code: **2610002**

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#### **Learning Objectives:**

ERP has revolutionized the way corporate treat information today. The subject will provide awareness about the ERP concepts and the technologies, which bridges gap between you, your business associates and customers. The fitting requirements of ERP packages in different industrial domains are also emphasized. It also helps in understanding how companies have implemented ERP successfully.

**Prerequisite:** NIL

#### **Contents:**

- 1) **Introduction of ERP :** **[4 Lectures]**  
Concept of Enterprise, ERP Overview, Integrated information system, The role of Enterprise, Business Modeling, Myths about ERP, Basic ERP Concepts, Intangible benefits of ERP, Justifying ERP investment, Risks of ERP, Benefits of ERP
- 2) **ERP and related Technology :** **[8 Lectures]**  
Business Intelligence, Data ware housing, Data mining, OLAP, Business Process Reengineering, SCM, CRM, ERP Security,
- 3) **Modules of ERP: Basic modules of ERP Package** **[15 Lectures]**  
Human Resources Management, Financial Management, Inventory Management, Quality Management, Sales and Distribution
- 4) **ERP for Industries :** **[14 Lectures]**  
(A) ERP for manufacturing Industry: ERP for petroleum, GAS companies, ERP for Automobile Industry, ERP for Pharma, ERP for FMCG, ERP for Mining industry  
(B) ERP for Service Industry: ERP for retail, ERP for healthcare, ERP for Educational Institution, ERP for Telecom, ERP for banks, ERP for Insurance companies
- 5) **ERP Implementation :** **[7 Lectures]**  
ERP Lifecycle implementation, implementation Methodologies, ERP package selection, Reasons for failure and reasons for success of ERP implementation

**Text Books:**

- 1) Alexis Leon “ERP Demystifies” of TMH, Second Edition
- 2) Rajesh Ray “ERP text and cases “ of TMH, First Edition

**Reference Books:**

- 1) David L. Olson, “Managerial issues of Enterprise Resource Planning systems” Of TMH Edition 2004.
- 2) `Ellen Mon, Bret Wagner “Concepts in ERP”, Second Edition of Cengage Learning.
- 3) Ashim Raj Singla “ Enterprise Resource Planning”, of Cengage Learning, First Edition

**Chapter Wise coverage from the Text book:**

Book #1 : Chap- 1,2,3,4,5,6, 7,,15,16,40,

Book #2: Chap- 2, 5, 9, 13, 18, 20, 21, 22, 26, 29,33,35,36

**Suggestion for CEC Component:**

- The different functionality and requirements for other business modules like Plant maintenance, Marketing management, SCM, CRM, PLM, Material Management etc. could be studied.
- Case studies related to various ERP Technologies , ERP implementation and problems faced and how solution is achieved can be given to the student.
- There are different vendor which provide ERP solutions to the enterprise. The comparative studies about the different ERP modules and its functionality between different packages can be done.

**Accomplishment after the Course:**

Student will be able to understand the concept of ERP and related technology. They will be able to identify the reason for the successful /failure ERP implementation. They will learn various functionality of different ERP modules. At the same time they can understand the usage of ERP in manufacturing as well as Service industry.