Gautam Buddha University, Greater Noida

School of Engineering (Mechanical Engineering)

Degree	Course Name	Course Code	Marks:100
M. Tech.	Manufacturing & Enterprise Resource Planning	MEI 501	SM+MT+ET 25+25+50
Semester	**Credits**	**L-T-P**	**Exam.**
I	3	3-0-0	3 Hours

Unit - I

Introduction: An Overview of ERP and enterprise; Benefits of ERP; ERP and related technologies; Business process reengineering (BPR); Data warehousing; Data mining; OLAP; Supply chain management (SCM); Customer relationship management (CRM). **(07 Hours)**

Unit - II

ERP Modules and Their Selection Method: Eevolution of enterprise systems - from internally focused client/server systems to externally focused e-business; Historical development; Modules of ERP. **(07 Hours)**

Unit - III

Business Modules: Business modules in an ERP package; Finance; Manufacturing; Human resources; Plant maintenance; Materials management; Quality management; Sales and distribution. **(07 Hours)**

Unit - IV

ERP Implementation: Installation; Training; ERP and supply chains; ERP security; Trends in ERP; Business intelligence and ERP systems; Trends in ERP; Business process redesign and best practices. **(08 Hours)**

Unit - V

Commercial Vendors of ERP: ERP market place; SAP AG; People soft; Baan; JD Edwards; Oracle; QAD; SSA; MS project. **(08 Hours)**

Unit - VI

ERP – Present and Future: Turbo charge the ERP system; EIA; ERP and e-Commerce; ERP and internet; Future directions. **(08 Hours)**

Recommended Books:
1. ERP Demystified; Alexis Leon; Tata McGraw Hill; New Delhi; 2000
2. Managerial Issues of Enterprise Resource Planning Systems; L. David Olson; McGraw Hill Higher Education; 2004.
3. Why ERP? A Primer on SAP Implementation; F. Robert Jacobs and D. Clay Whybark; McGraw Hill Higher Education; 2000.
4. The Leadership Moment: Nine True Stories of Triumph and Disasters and Their Lessons for Us All; Michael Useem; Three Rivers Press; 1998
5. Concepts in Enterprise Resource Planning; Joseph A Brady; Ellen F Monk; Bret Wagner; Thompson Course Technology; USA; 2001.
6. Enterprise Resource Planning – Concepts and Practice; Vinod Kumar Garg and N. K. Venkitakrishnan; Prentice Hall of India; New Delhi; 2003
7. Concepts in Enterprise Resource Planning; Third Edition (Paperback) by Ellen Monk; Bret Wagner Publisher: Course Technology (2008).
8. Mission Critical: Realizing the Promise of Enterprise Systems by Thomas H. Davenport; Hardcover - (2000) Harvard Business School Press.
9. E-Business & ERP: Transforming the Enterprise Norris; Grant; Hurley; R. James; K. M. Hartley; John R. Dunleavy; and John D. Balls; Hardcover; Wiley; John & Sons; Incorporated.