

Course Objective:

1. To understand the concepts, principles, problems, and practices of Operations Management.
2. To understand the importance of an effective operations strategy in an organization.
3. To understand the various production and operations design decisions and how they relate to the overall strategies of organizations.

Module I:

Overview of Operations Management and Capacity Planning : Operations in Manufacturing and Services, Responsibility of Operations Manager, Operations Strategy and Competitiveness, Process Analysis, Job Design and Work Measurement; Capacity Planning – Concept, Types of capacity; Aggregate Planning - Relevant cost and strategies.

Module II:

Facility Location and Layout, Inventory Management : Facility location - Factors, Techniques (single facility and multi-facility), Factor Rating Method, Centroid Method; Facility Layout – Concept, Types of layout and Line Balancing, Inventory Management – concept, EOQ, MRP.

Module III:

Scheduling, Project Management and Quality Management: Scheduling; Gantt Chart; Project Management – concept and technique PERT and CPM; Basics of supply chain management; Quality management – concept, quality design, control chart (X,R,P), TQM, introduction to ISO 9000 and 14000 series.

Books:

- Production and Operations Management, K. Aswathappa, K. S.Bhat, HPH
- Operations Management, Chase et.al – Tata McGraw Hill.
- Production and Operations Management , Panneerselvam , PHI
- Production and Operations Management , S.N Chary , Tata McGraw Hill
- Operations Management, Meenakhi Kumari, Cengage
- Production and Operations Management, Kaniska Bedi, Oxford
- Production & Operations Management, SP Singh, Vikas Publication
- Essentials of Operations Management by Scott T Young – Sage Publication