

**MNG 205**  
**OPERATIONS MANAGEMENT**  
**Credit: 4 Class Hours-40**

**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**– Operations in Manufacturing and Services, Responsibility of Operations Manager, Operations Strategy and Competitiveness, Process Analysis, Manufacturing Process and Service Process Selection and Design, Job Design and Work Measurement.

**Module II: Facility Location, Layout & Capacity Planning**– Locational Factors, Techniques; Factor Rating Method, Centroid Method; Facility Layout, Process Layout, Product Layout and Line Balancing, Fixed Position Layout, Service Operations Layout, Modern Layouts, Types of Capacity, Capacity Planning & Strategies, Economics of Scale and Scope.

**Module III: Aggregate Planning, Scheduling & Project Management**– Aggregate Planning; Relevant Cost and Strategies, Scheduling; Priority Rules and Techniques, Gantt Chart; JIT; Project Management, PERT/CPM- Network Diagram and Critical Path, Slack & Float.

**Module IV: Quality Management and Supply Chain Management**– Concept of Supply Chain Management; Concept of Quality; Design of Quality Control System, Statistical Quality Control, Types of Control Chart – X Chart, R Chart, P Chart, TQM (Total Quality Management) Concepts, Introduction to ISO 9000 & 14000 Standards.

**Module – V:** The concerned faculty shall have the liberty to define the course contents under this module and teach students accordingly.

**Reference Books:**

1. Operations Management, Mahadevan, Pearson
2. Operations Management, Chase et.al – Tata McGraw Hill.
3. Production and Operations Management , S.N Chary , Tata McGraw Hill
4. Operations Management, Meenakhi Kumari, Cengage
5. Production and Operations Management, Kaniska Bedi, Oxford
6. Production and Operations Management, K. Aswathappa, K. Shridhar Bhat, HPH
7. Production & Operations Management, SP Singh, Vikas Publication
8. Production and Operations Management , Panneerselvam , PHI
9. Essentials of Operations Management by Scott T Young – Sage Publication