

ME 703 Operations Management (3-0-0:3)

Operations Management and Capacity Planning:

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.

Facility Location and Layout

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.

Project Management

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 of Quality, TQM, Quality Management – Concept, Quality Design, Control Chart (X, R, P), TQM, Introduction to ISO 9000 and 14000 Series.

Text Books and References

1. R.Panneerselvam, "Production and Operations Management", PHI, 3rd edition, 2012.
2. R.B.Chase,F.R.Jacobs,N.J.Aquilano & N.K.Agarwal "Operations Management for Competitive Advantage" TMH, 11th edition, 2006.
3. K. Aswathappa and K. S.Bhat, "Production and Operations Management", HPH, 2nd edition, 2015.