

PRASAD V. POTLURI
SIDDHARTHA INSTITUTE OF TECHNOLOGY
(Autonomous)
Kanuru, Vijayawada – 520 007
(AICTE approved, NBA accredited and ISO 9001:2008 certified Institution)
(Permanent affiliation to JNTUK, Kakinada)
(Effective for students admitted into first year MBA in 2012-13)

BA2T4- Production and Operations Management

- Unit 1- Introduction:** Overview of Production and Operations Management (POM) –Functions- Historical development of POM- POM scenario today; Product and Process design and development- Manufacturing process technology- CAD/CAM, Value analysis.
- Unit 2- Facilities Management:** Location of facilities, Layout design - Optimization of product/process layout- Flexible manufacturing and group technology; Aggregate planning: Demand forecasting - Determination of feasible production alternatives and optimal production strategy.
- Unit 3- Scheduling:** Scheduling in job shop type production- Shop loading- Assignment and sequencing- Scheduling in Mass, Continuous and project type production- Line balancing - Methods of production control- PERT & CPM.
- Unit 4- Work Study:** Method study- Work measurement- Work design- Job design- Work sampling- Productivity- Basic concepts- Productivity cycle- Productivity engineering and management.
- Unit 5- Quality Management:** Economics of quality assurance – Quality inspection and control- Acceptance sampling- Quality control charts- Control charts for variables and attributes -Total quality management - ISO 9000 series standards, Six sigma

Relevant cases have to be discussed in each unit.

Text Books:

1. Aswathappa K, “Production and Operation Management”, Himalaya Publishing House, Mumbai.
2. Chary SN, “Production and Operations Management”, Tata McGraw Hill, New Delhi, 2008.

Reference Books:

1. Chase, Aquilano, Jacobs, “Operations Management for Competitive Advantage”, Tata McGraw Hill, New Delhi, 2007
2. Elwood S. Buffa and Rakesh K. Sarin, “Modern Production/Operations Management”, Wiley India, New Delhi, 2008.
3. James R. Evans and David A. Collier, “Operations Management”, Cengage Learning India Private Limited, New Delhi, 2009.
4. Mahadevan: “Operations Management”, Pearson Education, New Delhi.
5. Panneeselvam R, “Production and Operations Management”, PHI Learning Private Limited, New Delhi, 2009.
6. Nair NG, “Production and Operations Management”, Tata McGraw Hill, New Delhi, 2009.
7. Upendra Kachru, “Production and Operations Management-Text and Cases”, Excel Books, New Delhi.
8. William J Stevenson, “Operations Management”, Tata McGraw Hill, New Delhi, 2009.