

Branch Name:	Management
Program Code:	MS101
Course Title:	Operations Management
Course Code:	24-BAM211-2C
Pre-requisite Course:	Principles of Management, Business Environment, Fundamentals of Production Management, Basic Statistics, Fundamentals of Marketing, Basic Financial Management

Course Objectives:

Operations Management introduces students to the fundamental principles and practices essential for managing business operations efficiently. This course covers various production systems, process design, quality management, and emerging trends in operations management. Students will learn to optimize processes, implement quality management principles, and adapt to technological and sustainable advancements, preparing them to manage operations in a dynamic business environment.

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)				
Lecture (L)	Tutorial (T)	Practical (P)	Credit	Theory (Marks)		Practical (Marks)		Total (Marks)
				University Assessment	Continuous Assessment	University Assessment	Continuous Assessment	
01	01	-	02	25	25	-	-	50

Course Contents:

Unit No	Topic	Total Hours	Weightage (%)
1	Introduction to Operations Management - Meaning and Importance - Objectives and Scope - Functions of Operations Management - Production Systems - Operations Strategy	15	50%
	Process Design and Analysis - Process Selection - Types of Processes - Process Analysis Tools - Capacity Planning - Facility Layout - Factors Affecting Layout		
2	Quality Management - Concept of Quality - Total Quality Management (TQM) - Six Sigma - Lean Manufacturing - Quality Tools	15	50%
	Emerging Trends in Operations Management - Sustainable Operations - Technology in Operations (AI, IoT, Automation) - Industry 4.0 - Global Operations		

	Total Hours	30	100%
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Text Books:

- Operations Management by William J. Stevenson
- Operations Management: Processes and Supply Chains by Lee J. Krajewski, Manoj K. Malhotra, and Larry P. Ritzman
- The Goal: A Process of Ongoing Improvement by Eliyahu M. Goldratt and Jeff Cox
- Introduction to Operations and Supply Chain Management by Cecil C. Bozarth and Robert B. Handfield

Reference Books:

- Operations Management – William J. Stevenson
- Operations Management: Processes and Supply Chains – Lee J. Krajewski, Manoj K. Malhotra & Larry P. Ritzman
- Operations Management – Jay Heizer, Barry Render & Chuck Munson
- Production and Operations Management – K. Aswathappa & K. Shridhara Bhat
- Modern Production/Operations Management – Elwood S. Buffa & Rakesh K. Sarin

List of Open-Source Software/learning website:

- <https://swayam.gov.in/>
- <https://nptel.ac.in>

Course Learning Outcomes (CLO):

1. Understand the core principles of operations management and their significance in enhancing efficiency, quality, and customer satisfaction.
2. Analyze different production systems and develop strategies aligned with business objectives.
3. Optimize operational processes through effective process design, layout decisions, and capacity planning.
4. Implement quality management principles to enhance product/service quality and reduce defects.
5. Evaluate emerging trends in operations management, such as sustainable operations and technological advancements.

Mapping of CLO with PO and PSO

Course Learning Outcomes	Program Outcomes (POs)							Program Specific Outcomes (PSOs)
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1
CLO1	M			M			M	H
CLO2	H	M				M		L
CLO3				H	L			M
CLO4		L	H				L	
CLO5	L			H		H		H

H: High, M: Medium, L: Low