

<b>ME420 Materials Management</b>										
<b>L</b>	<b>T</b>	<b>P</b>	Credit	Area		<b>CWS</b>	<b>PRS</b>	<b>MTE</b>	<b>ETE</b>	<b>PRE</b>
3	0/1	2/0	4	DEC/GEC		15/25	25	20/25	40/50	-

**Objective:** The key objective of this course is to acquaint the students with Decision making for effective and efficient purchase, storage and flow of materials in manufacturing and service organizations; cost reduction techniques in prepurchase.

<b>Syllabus</b>		<b>Contact Hours</b>
<b>Unit-1</b>	Scope of materials management, integrated materials management, Reasons of materials management, relation with other functional areas of organization, Organizing for materials management, integrated materials management, conventional and modern approaches to organizing materials management	<b>6</b>
<b>Unit-2</b>	Classification, codification, Specification, standardization, simplification and variety reduction of materials, scope of materials management	6
<b>Unit-3</b>	Inventory problems, inventory policies, classification of inventory models, Static inventory models	6
<b>Unit-4</b>	Multi-item Budget Constraint model, Optimal Policy Curve Selective inventory management: ABC, VED, FSN analysis,	6
<b>Unit-5</b>	Inventory models: EOQ-ROP Model, Finite Replenishment Rate Model, Lot Size Model with Planned Backlogging, Sensitivity analysis of Lot Size System, Quantity discount model	<b>10</b>
<b>Unit-6</b>	Vendor development, Make-Buy decision, Store management, Future trends	8
<b>Total</b>		<b>42</b>

<b>Reference Book:</b>	
1	Integrated materials management-A. K. Datta-PHI Learning, ISBN- 8120312511, 2009.
2	Purchasing and Supply Management-Dobbler, Burt D.N., McGraw Hill Education, 6th edition, ISBN-0071141383, 2004
3	Materials Management – P Gopalakrishnan – PHI Learning, ISBN- 8120300270, 2009
4	Purchasing And Materials Management – LeendersFearon Universal Book Stall
5	Purchasing AndInventory Control – K S Menon – WheelerPublishers
6	Materials Management – Varma M M – Sultan Chand And Sons

### Course Outcomes

CO1	Able to learn the scope of materials and spare parts management in an organization.
CO2	Apply the key characteristics of the purchasing system.

CO3	Apply the policies of Inventory Management and Develop overall materials requirement plan.												
CO4	Explain the ERP System for Materials management.												
CO5	Understand the importance of warehouse and supplier development in materials management.												
CO6	Apply the subject knowledge for e-commerce.												

**CO-PO/PSO Matrix**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	1	1	1	2	2	1	1	1	1	2	2	1	3
CO2	3	3	2	2	2	2	2	1	1	1	1	3	3	2	2
CO3	3	3	3	2	2	2	1	1	1	1	1	2	2	1	3
CO4	3	3	3	3	2	2	2	1	1	1	1	2	3	1	2
CO5	3	3	3	3	3	2	2	1	1	1	1	3	3	2	3
CO6	3	3	3	3	3	2	2	2	1	1	1	2	3	2	3