

### ME412 Supply Chain Management

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

**Objective:** To understand the key considerations at the various stages involved in the supply of product in order to maintain the smooth flow from source to the point of consumption so that overall organizational performance may improve.

Syllabus		Contact Hours
<b>Unit-1</b>	<b>Introduction</b> Perspective of Supply Chain Management, Managing uncertainty, Key issue in supply chain management.	<b>6</b>
<b>Unit-2</b>	<b>Inventory Management and Risk Pooling</b> Inventory management, Classification of inventory, centralized versus Decentralized Warehousing and Risk pooling, Value of Information, Quantification of Bullwhip effect, Causes and remedies of Bullwhip effect.	<b>6</b>
<b>Unit-3</b>	<b>Resource planning</b> Aggregate Production Planning- Chase and leveling strategies, MRP, MRP-II, Agile manufacturing Systems	<b>8</b>
<b>Unit-4</b>	<b>Procurement and Outsourcing strategies</b> Introduction, outsourcing benefits and risks, Make/Buy decision, e-procurement, Vendor selection and quota allocation.	<b>8</b>
<b>Unit-5</b>	<b>Strategic Alliances</b> Introduction, third party logistics, Demand driven strategies, Distribution strategies- direct shipment, cross docking, transshipment, Supplier relationships management, Customer relationship management.	<b>8</b>
<b>Unit-6</b>	<b>International Issues in Supply Chain Management</b> Concepts in Globalization, Globalization forces, Risks and Advantages of International supply chains, Issues in International supply chain management, Regional differences in logistics.	<b>6</b>
	<b>Total</b>	<b>42</b>

Reference Book:	
1	Designing and Managing the Supply Chain: concepts, strategic and case studies by David Simchi-Levi, Philip kaminsky, Edith Simchi-Levi, Ravi Shankar, Tata McGraw-Hill, ISBN- 0072357568.
2	Supply Chain Management by Chopra S. and Meindl P., Pearson, ISBN- 8131789209, 2012.
3	Supply Chain Management: Text and Cases by ShahJanat, Pearson Education, ISBN- 8131715175, 2009.

#### Course Outcomes

CO1	Students will be able to understand the different types of uncertainties and issues in supply chain management.
CO2	Students will be able to know the importance of inventory management with concepts of risk pooling and Bullwhip effect in a supply chain
CO3	Students will have knowledge of resource planning to meet the fluctuating demand of the products and services in the market.
CO4	Students will have knowledge of sourcing, outsourcing and procurement of the materials
CO5	Students will have knowledge of supplier relationship management and integration with other supply chain partners.
CO6	Students will be able to know about globalization of supply chain activities and their requirement.

**CO-PO/PSO Matrix**

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