

# LOG203 Inventory Management

**Level:** 2

**Credit Units:** 5 Credit Units

**Language:** ENGLISH

**Presentation Pattern:** EVERY JULY

## Synopsis:

Maintaining inventory is costly. The challenge of inventory management is to recommend the appropriate inventory level to be held for each item stocked by the organisation as well as the size and frequency of inventory replenishments. The aim is to determine the inventory level needed to manage the supply chain and support the organisation's customer service level. LOG203 Inventory Management provides students with an understanding of the importance of inventory in an organisation and different approaches for effective management of inventory. It considers cases when customer demand is known in advance as well as when demand is uncertain and discusses ways to forecast the demand in these cases. The course explores best practices to manage inventory in global supply chains that have become increasingly complex and uncertain.

## Topics:

- Introduction to Inventory Management
- Fundamentals of Inventory Management
- Order Quantities
- Variations of the Economic Order Quantity Model
- Safety Stock and Service Level
- Uncertainty in Demand
- Forecasting in Inventory Management
- Inventory Performance Measurement
- Production Planning and Control
- Material Requirements Planning
- Managing Inventory in Global Supply Chains
- Innovation in Inventory Management

## Textbooks:

: Inventory Control and Management (eBook)  
ISBN-13: 9781118585214

**Learning Outcome:**

- Recognise the role of inventory management and inventory systems in an organisation.
- Solve for the optimal order quantity when demand is known in advance.
- Analyse the need for safety stock and impact of demand uncertainty on order quantities.
- Discuss the importance of forecasting techniques in inventory management and different performance measures.
- Apply material requirements planning to have the right material in the right quantities available at the right time.
- Review best practices and innovative solutions to manage inventory in global supply chains.

**Assessment Strategies (Evening Class):**

<b>Components</b>	<b>Description</b>	<b>Weightage Allocation (%)</b>
Overall Continuous Assessment	PRE-CLASS QUIZ 1	2
	PRE-CLASS QUIZ 2	2
	PRE-CLASS QUIZ 3	2
	PARTICIPATION 1	6
	TUTOR-MARKED ASSIGNMENT 1	18
	GROUP BASED ASSIGNMENT 1	20
Overall Examinable Components	Written Exam	50
<b>Total</b>		<b>100</b>