

LOG351 Lean Six Sigma for Supply Chains

Level: 3

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JULY

Synopsis:

This course brings together the key aspects of Lean manufacturing and Six Sigma management principles into a structured approach to improve supply chain performance. Lean Six Sigma combines the effects of both Lean which balances the flow of the process, and Six Sigma which reduces process variation, to balance and focus the process. This course aims to provide students with an overview of the Lean Six Sigma framework, and the tools and techniques that are frequently used in Lean Six Sigma applications to improve supply chain performance. It also highlights several critical success factors that can guide an organisation to successful Lean Six Sigma deployment.

Topics:

- Understanding Lean Six Sigma
- A Walk Through DMAIC: Define, Measure, Analyse, Improve, Control
- DMAIC Toolkit for Define Phase
- DMAIC Toolkit for Measure Phase
- DMAIC Toolkit for Analyse Phase
- DMAIC Toolkit for Improve and Control Phases
- Financial Concepts and Ratio Analysis
- Supply Chain Strategies
- Innovations in Lean Supply Chains
- Innovations in Lean Six Sigma Applications
- Pitfalls in Lean Six Sigma Deployment
- Managing Success in Lean Six Sigma

Textbooks:

Martin, J.W: Lean Six Sigma for Supply Chain Management: The 10-Step Solution Process

MCGRAW

ISBN-13: 9781307268454

Learning Outcome:

- Show the importance of Lean Six Sigma to improve supply chain performance.
- Analyse supply chain processes and operations using DMAIC techniques.
- Propose suitable tools and techniques to complete activities in the Define, Measure and Analyse, Improve and Control phases of DMAIC.
- Apply financial metrics in Lean Six Sigma projects.
- Appraise the Lean Six Sigma innovations to improve supply chain operations.
- Examine the conditions for successful Lean Six Sigma deployment.

Assessment Strategies (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PARTICIPATION 1	10
	TUTOR-MARKED ASSIGNMENT 1	20
	GROUP BASED ASSIGNMENT 1	20
Overall Examinable Components	Written Exam	50
Total		100

Assessment Strategies (Online Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PRE-CLASS QUIZ 1	2
	PRE-CLASS QUIZ 2	2
	PRE-COURSE QUIZ 1	2
	DISCUSSION BOARD 1	10
	GROUP BASED ASSIGNMENT 1	10
	PARTICIPATION 1	6
	TUTOR-MARKED ASSIGNMENT 1	18
Overall Examinable Components	Written Exam	50
Total		100