

BUS366 Lean Six Sigma

Level: 3

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY SEMESTER

Synopsis:

BUS366 Lean Six Sigma provides foundational understanding of the main principles, concepts, tools and techniques of Lean Six Sigma to support quality management and continuous improvement. It highlights key considerations and critical success factors to guide an organisation towards successful Lean Six Sigma project deployment. On completion of this course, students should be able to understand the theory and practical application of Lean Six Sigma methodologies within a holistic process improvement framework. The theory and practical applications of Lean Six Sigma enable an organisation's operations to become more effective and efficient.

Topics:

- Introduction to Lean Six Sigma
- Management of Total Quality Management and Continuous Improvement
- The 7 Quality Tools
- The 7 Management and Planning Tools
- The 5S Methodology
- Lean Enterprise Principles in Process Improvement
- Six Sigma Data Centric Fundamentals to Problem Solving
- Application of Lean Six Sigma DMAIC Framework [Design, Measure, Analyse, Improve, and Control]
- Organisation Considerations in Lean Six Sigma Deployment
- Managing Success in Lean Six Sigma Projects

Textbooks:

Howard Gitlow: A Guide to Six Sigma & Process Improvement 2nd Pearson
ISBN-13: 9780133925456

Howard Gitlow: A Guide to Six Sigma & Process Improvement 2nd Pearson
ISBN-13: 9780133925456-AA

Learning Outcome:

- Contrast concepts of total quality management, lean and six sigma
- Discuss the fundamental philosophy of six sigma
- Appraise Lean Six Sigma principles and approaches to improve process performance
- Examine the sequential steps in the DMAIC framework [Define, Measure, Analyse, Improve and Control]
- Recommend tools and techniques used to support the DMAIC framework
- Evaluate the conditions for successful Lean Six Sigma deployment
- Compare the benefits and impact of Lean Six Sigma to an organisation
- Relate the strategies and techniques in Lean Six Sigma to the work environment
- Employ 7 Management and Planning Tools to support Lean Six Sigma
- Use 5S methodology to support Lean Six Sigma
- Apply Lean Six Sigma knowledge in a simulated DMAIC project to improve process performance

Assessment Strategies:

Continuous Assessment Component	Weightage (%)
PRE-COURSE QUIZ	2
GROUP BASED ASSIGNMENT	38
PRE-CLASS QUIZ	2
PARTICIPATION	6
PRE-CLASS QUIZ	2
Sub-Total	50

Examinable Component	Weightage (%)
ECA-REPORT	32.50
ECA-POWERPOINT	5
ECA-VIDEO	12.50
Sub-Total	50

Weightage Total **100**