

BUS366 Lean Six Sigma

Level: 3

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JULY

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:

JMP Pro for Academic Multi-Use (JMP18) 18th JMP Statistical Discovery LLC
ISBN-13: SW-0254

BUS366 Study Guide (UDC - SUSS) SUSS
ISBN-13: SG-1542

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

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 - Regular Semester (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	TUTOR-MARKED ASSIGNMENT 1	20
	GROUP BASED ASSIGNMENT 1	20
	PARTICIPATION 1	10
Overall Examinable Components	ECA-REPORT	32.5
	ECA-POWERPOINT	5
	ECA-VIDEO	12.5
Total		100

*The information listed is subject to review and change.