Lean Six Sigma Yellow Belt Certification

by

School of Mechanical Engineering

Universiti Sains Malaysia

Overview:

The purpose of this training is to provide a **'Lean Six Sigma Yellow Belt Certification'** that will increase job performance and promote a culture of continuous improvement within the company. The training program consists of ten modules that cover the key concepts and tools of lean management. Participants will then be guided to conduct one case study using Plan-Do-Check-Act (PDCA) method. Participants who successfully complete the program will receive a **Lean Six Sigma Yellow Belt Certification** from Universiti Sains Malaysia (USM).

Modules:

SCHOOL OF MECHANICAL ENGINEERING
PUSAT PENGAJIAN KEJURUTERAAN MEKANIK

LEAN SIX SIGMA TRAINING

No	TOPIC	CONTENT
1	Lean Management	Lean Management Overview, Lean Principles, Lean vs Six Sigma, Lean Management System, Voice of Customer (VOC), Value, Lean Applications (Case Study)
		Hands on Simulation (LegoPlane)
2	Change Management	Change Management Overview, 7 Steps of Change Management, Application of Change Management
3	Lean Culture and Leadership	Lean Culture Overview, Lean Culture Principles and Practices, Lean Leadership, Lean Coaching, Lean Mental Model
4	Employee Engagement	Employee Engagement Overview, 7 Tactics of Employee Engagement, Group Activities
5	Waste Elimination	Waste Elimintion Overview, Transportation, Inventory, Motion, Underutilization Skill, Waiting, Overproduction, Overprocessing, Defect, Application of Waste Elimination (Case Study)
6	PDCA	PDCA Overview, Plan-Do-Check-Act Phase, Basic Lean Tools in PDCA, Application of PDCA (Case Study)
		Hands on Simulation (Hotel/BurgerShop)
7	Visual Management	Introduction to Visual Management, Visual Display, Visual Standard, Visual Measure, Visual Control, Application of Visual Management, Group activities (Guess What)
8	5S	5S Overview, Sort, Set-in-order,Shine, Standardization,Sustain, Safety in 5S, Application of 5S (Case Study)
		Hands on Simulation (Numbers Game/Stationery Game)
9	Root Cause Analysis	Root Cause Analysis Overview, 5-Why, FishBone, Effort & Impact Diagram, Prioritization Matrix, Process Mapping, Application of Root Cause Analysis (Case Study) Group Activities (Based on Hotel/BurgerShop)
10	Statistical Process Control	Statistical Process Control Overview, Run Chart, Scatter diagram, Histogram, Pareto Chart, In-class exercise (M&M games)
	Exam	Final Exam (Socrative)

Training Format:

The training program will be delivered through in-person face to face workshops, or live webinars. Participants will be required to complete all ten modules and completed a case study project based on Plan-Do-Act-Check method to receive the **Lean Six Sigma Yellow Belt Certification**.

Training Duration:

- 5 days training for 10 modules
- Flexible based on industry / client propose schedule.
- Participants will team up (3 person per group) and received guidance & consultation for PDCA project.
- Lean convention is scheduled on the final day of training to showcase and share the PDCA projects. Awards will be given to the 'Best Project', 'Best Poster' and 'Best Presenter'.

Expected Outcomes:

Upon completion of the program, participants will be able to:

- Understand the principles and practices of lean management
- Implement change management strategies to successfully implement lean management
- Create a culture of continuous improvement
- Engage employees in the lean process
- Use the PDCA method to identify problems, analyse data, and implement solutions.
- Implement the 5S methodology for workplace organization.
- Use visual management to improve communication, increase efficiency, and reduce waste.
- Identify and eliminate different types of waste in the workplace.

Main Trainers:

IR. DR. NUR AMALINA MUHAMMAD

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Senior Lecturer / Program Chairman / Yellow Belt and Advanced Lean Practitioner

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Nur Amalina binti Muhammad is a Senior Lecturer at the School of Mechanical Engineering, Universiti Sains Malaysia. She obtained a B.Eng. degree in Manufacturing Engineering with Management from Universiti Sains Malaysia in 2012. Both M.Sc. and PhD in Manufacturing Technology from Universiti Sains Malaysia in 2014 and 2019, respectively. Her research interests are related to Lean Six Sigma, Production Management, Project Management, Ergonomics, and Engineering Management. She holds Lean Six Sigma Black Belt and actively involved in Lean Six Sigma Yellow Belt training in USM since 2013. She has published several papers in indexed journals, proceedings, and international and local conferences. She also frequently engaged with various industrial projects during his services at Universiti Sains Malaysia

Hasnida Binti Ab Samat graduated from the School of Mechanical Engineering at Universiti Sains Malaysia (USM) in 2015 with a PhD after completing her M.Sc. in 2010 and her B.Eng. (Hons) in Manufacturing Engineering with the Management programme. In the School of Mechanical Engineering USM, she is currently the Program Chairman for the Manufacturing Engineering with Management programme. Her areas of interest in research include lean manufacturing, maintenance management, manufacturing systems, and production management. She has certifications in Yellow Belt and Advanced Lean Practitioner by Bose System Malaysia.

Fees Structure:

Fee Per Module: RM 5,000.00

Total no. of Module: 10

Fee for PDCA Consultation: RM 4,000.00

TOTAL OVERALL FEE: **RM 54,000.00** (Inclusive of Sales and Services Tax).

Details:

- Date: Flexible (Based on client schedule)
- Duration: 5 days for 10 modules
- Venue: USM or client place
- Number of participants: Min 6 – Max 18 pax

Conclusion:

The **Lean Six Sigma Yellow Belt Certification** will provide participants with the knowledge and skills needed to implement lean management in the workplace. By completing the program, participants will be able to increase efficiency, reduce waste, and improve quality, ultimately leading to increased job performance and a culture of continuous improvement within the company.