MAWA EVENTS

Address: No. 857, Block A2. Leisure Commerce Square - No 9., 46150 Petaling Jaya, Selangor, Malaysia

Phone: +601116373203 | **Email:** info@mawaevents.net

SIMULATIONS & LEAN SIX SIGMA SYSTEMS

""Applying Process Simulation and Lean Six Sigma Tools to Drive Operational Excellence""

Schedule

Date	Venue	Fees (Face-to-Face)
04 – 05 Mar 2026	Dubai, UAE	USD 1995 per delegate

► **Available delivery methods:** Face-to-Face & Online Training

Introduction

Organizations striving for continuous improvement and operational excellence are increasingly turning to Lean Six Sigma and simulation modeling to optimize performance, eliminate waste, and improve customer satisfaction. Combining these approaches provides powerful insights into real-time process behavior and enables leaders to make data-driven decisions before changes are implemented.

This hands-on two-day course introduces participants to the core tools of Lean Six Sigma and how to apply simulation modeling to analyze, test, and improve complex business processes. Through interactive simulations and practical exercises, attendees will learn how to visualize inefficiencies, predict the impact of changes, and optimize process performance.

Objectives

By the end of this course, participants will be able to:

- Understand the principles of Lean, Six Sigma, and process simulation
- Identify process inefficiencies using Lean tools and Six Sigma metrics
- Model workflows to visualize delays, bottlenecks, and resource usage
- Use simulation to test process improvements before implementation
- Apply DMAIC and process mapping to real-life scenarios
- Improve decision-making with evidence-based analysis

MAWA EVENTS

Address: No. 857, Block A2. Leisure Commerce Square - No 9., 46150 Petaling Jaya, Selangor, Malaysia

Phone: +601116373203 | **Email:** info@mawaevents.net

Why Attend

- Learn by doing through interactive simulations and process improvement labs
- Combine Lean Six Sigma methods with simulation software for greater impact
- Make smarter decisions with real-time performance modeling
- Enhance your continuous improvement projects with validated, low-risk changes
- Build practical skills in team collaboration and structured problem solving

Target Audience

This program is designed for:

- Lean Six Sigma practitioners and process improvement leaders
- Operations and quality professionals
- Project managers and business analysts
- Industrial and systems engineers
- Anyone seeking to apply structured methods to optimize performance

Individual Benefits

Key competencies that will be developed include:

- DMAIC and Lean tools application
- Process simulation and mapping
- Statistical thinking and root cause analysis
- Visualizing and communicating performance insights
- Structured continuous improvement methodology

Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Identify and eliminate inefficiencies and delays
- Validate changes before costly implementation
- Improve quality, speed, and customer satisfaction
- Strengthen a culture of continuous improvement
- Reduce risk in decision-making using simulation data

Instructional Methodology

- Simulation exercises using real-world scenarios
- Visual process mapping tools and software demonstrations
- Case studies of Lean Six Sigma success stories
- Group challenges, games, and team exercises
- Instructor-led debriefs and action planning

MAWA EVENTS

Address: No. 857, Block A2. Leisure Commerce Square - No 9., 46150 Petaling Jaya, Selangor, Malaysia

Phone: +601116373203 | **Email:** info@mawaevents.net

Course Outline

Detailed 2-Day Course Outline

Training Hours: 7:30 AM – 3:30 PM Daily Format: 2–3 Learning Modules | Coffee breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

Day 1 – Lean Six Sigma Fundamentals & Process Analysis

- **Module 1: Introduction to Lean Six Sigma & Process Thinking (07:30 – 09:30)**
- Lean principles and 8 types of waste
- Six Sigma DMAIC overview
- How simulation supports process improvement
- **Module 2: Value Stream Mapping & Process Diagnostics (09:45 – 11:15)**
- Mapping current state processes
- Identifying bottlenecks and non-value activities
- Flow efficiency and lead time metrics
- **Module 3: Simulation Concepts and Tools (11:30 – 01:00)**
- Basics of discrete event simulation
- Building simple models of business processes
- Visualizing resource utilization and queue dynamics
- **Module 4: Workshop – Simulation of a Lean Process (02:00 – 03:30)**
- Teams run simulations and evaluate process redesign options

Day 2 – Applying DMAIC, Root Cause, and Optimization

- **Module 5: Define and Measure – Data and Problem Clarity (07:30 – 09:30)**
- SIPOC, CTQ trees, and process baselining
- Data collection, sampling, and variation types
- Performance metrics and process capability
- **Module 6: Analyze and Improve – Root Cause and Redesign (09:45 – 11:15)**
- 5 Whys, fishbone diagrams, and Pareto analysis
- Using simulation to test “what-if” changes
- Reducing waste, cycle time, and error rates
- **Module 7: Control and Sustain Improvements (11:30 – 01:00)**
- Standardization and visual management
- Monitoring KPIs and process control charts
- Building a continuous improvement culture
- **Module 8: Final Simulation & Team Presentation (02:00 – 03:30)**
- Teams apply tools to a full case scenario
- Present simulation insights and improvement strategy
- Feedback, wrap-up, and certification briefing

Certification

Participants who complete the course will receive a **Certificate of Completion in Simulations & Lean Six Sigma Systems**, recognizing their ability to apply simulation techniques within Lean Six Sigma improvement initiatives.

MAWA EVENTS

Address: No. 857, Block A2. Leisure Commerce Square - No 9., 46150 Petaling Jaya, Selangor, Malaysia

Phone: +601116373203 | **Email:** info@mawaevents.net

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation's unique goals.

In-House / Customized Training Interested in running this course for your team? Please contact us:	TEL: **+601116373203**	EMAIL: **info@mawaevents.net**

© Material published by MAWA Events shown here is copyrighted. All rights reserved. Any unauthorized copying, distribution, use, dissemination, downloading, storing (in any medium), transmission, reproduction or reliance in whole or any part of this course outline is prohibited and will constitute an infringement of copyright.