

Lean Sigma Experts Australia

**Lean Six Sigma Certification
Black Belt Level (5 Days)
Classroom Sessions
Accelerated Course**



**please see calendar dates on web*
**Price: \$2,500 plus GST
(Includes Internal Exam &
Certification)**

Internationally Accredited By:



**Lean Sigma Experts Australia (ABN 81 604 347 604)
Regional Office (for Correspondence):**

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Lean Six Sigma Certification



BLACK BELT CLASSROOM TRAINING – 5 DAYS

Lean Six Sigma is a proven systematic approach to improve measurable results for any organization – whether manufacturing or service (logistics, health, hospitality, finance, councils & public administration). The Lean Six Sigma Black Belt training takes organizations to the next level by uniting product and process excellence with goals such as improving customer service and/or enhancing shareholder value creation. Leaders in today's organizations are turning to the Lean Six Sigma Black Belt training to enhance competitive edge, improve service and build the skill base needed to sustain performance improvement.

WHO SHOULD ATTEND

Chief Executive Officers, Managing Directors, Executive Officers, General Managers, Managers, Executives, Engineers and Continuous Improvement Specialists & Others.

DEPARTMENTS

Business Process Improvement, Change Management, Continuous Improvement, Project Management, Industrial Engineering, Production Management, Quality Management, Logistics, Contract Department, Innovation Department, Commercial Department, Business Development, Strategic Planning, Human Resource, Finance & Others.

LSS BLACK BELT PROGRAMME CONTENT:

Training Objectives:

During the training, the project will emphasize on the workshops that entails the project outputs that are required.

- The Black Belt Course is designed to improve process performance, deliver high-impact projects and achieve significant cost savings.
- The Certified Lean Six Sigma Black Belt is a professional who can explain Lean Six Sigma philosophies and principles, including supporting systems and tools.
- Black Belts will demonstrate team leadership, understand team dynamics and assign team member roles and responsibilities.
- Black Belts will gain thorough understanding of all aspects of the DMAIC model in accordance with Six Sigma principles.
- Black Belts will gain knowledge of Lean enterprise concepts, are able to identify non-value-added elements and activities.

SESSION 1: DEFINE & MEASURE PHASE (1 Day)

DEFINE & MEASURE PHASE / 1 Day

- Introduction & Overview of Six Sigma
- Cost of Poor Quality (COPQ)
- Drill Down Tree & Pareto Chart
- Project Charter Development
- Voice of Customers (VOC) & Kano Model
- SIPOC & Basic Process Mapping
- Financial Analysis and Cost Savings
- Root Cause Analysis (RCA) Tools
- Data Collection Plan
- Basic Statistics and Sampling Techniques
- Capability Analysis and Sigma Value
- Detailed Process Mapping
- Fishbone Diagram
- Failure Modes and Effects Analysis (FMEA)

SESSION 2: ANALYSE PHASE (1 Day)

ANALYZE PHASE / 1 Day

- Graphical & Value Analysis
- Hypothesis Testing
- Advanced Graphical Analysis
 - Sigma Value / Z-Bench
 - Graphical Tools for Statistics
 - Pareto Charts
 - Run Charts
 - Dot Plots
 - Scatter Plots
 - Matrix Plots
 - Histograms
 - Time Series Plots
- Regression Analysis
 - Correlation Analysis
 - Multiple Regression
 - Simple Linear Regression
- Value Stream Mapping (VSM)
- Summarising Potential Factors and Potential Solutions

SESSION 3: IMPROVE & CONTROL PHASE (1 Day)

IMPROVE & CONTROL PHASE / 1 Day

- Generating Improvement Ideas
- Evaluating & Selecting Best Solutions
- Solution & Training Implementation Plan
- Develop & Execute Pilot Plan

- Lean Concepts and Error Proofing / Kaizen
- Cost & Benefit Analysis (ROI)
- Process Control Plan
- Standard Operating Procedures (SOP)
- Statistical Process Control (SPC)
- Best Practice and Replication Opportunities
- Process Ownership and Dashboards

SESSION 4: ADVANCED DEFINE & MEASURE PHASE (1 Day)

ADVANCE DEFINE & MEASURE PHASE / 1 Day

- Quality Function Deployment
- MGPP – Multi Generation Project Planning
- Advanced Value Stream Mapping
- Cause and Effect Matrix (X-Y Diagram)
- Measurement Systems Analysis (MSA)
- Lean Ways of Working
- Non-Normal Data Analysis

SESSION 5: ADVANCED ANALYSE, IMPROVE & CONTROL PHASE (1 Day)

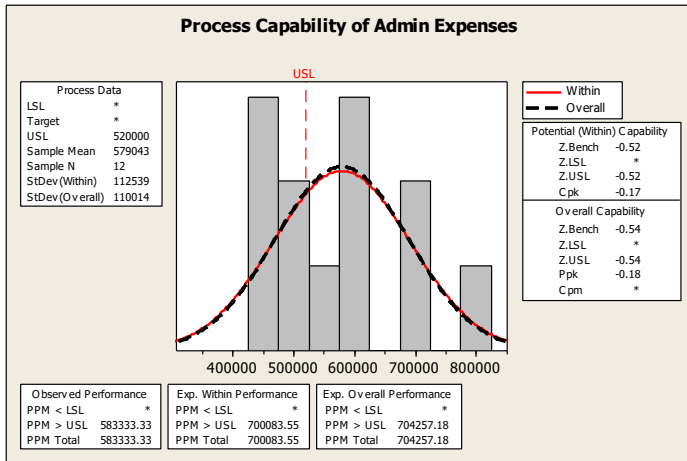
ADVANCE ANALYSE, IMPROVE & CONTROL PHASE / 1 Day

- Advanced Statistical Root Cause Analysis tools:
 - Type 1 & Type 2 error
 - Degree of Freedom
 - Power and Sample Size
 - 1 Sample t-Test
 - 2 Sample t-Test
 - One way ANOVA
 - Test of Equal Variance (TOEV)
 - 1 Proportion Test
 - 2 Proportion Test
 - Paired t-Test
 - Chi-Square Test
 - Non-Parametric Analysis and Two Way ANOVA
 - Best Subset Regression
- Design of Experiments (DOE)
- Advanced Lean Enterprise Modules

MINITAB DURING BLACK BELT LEAN SIX SIGMA TRAINING

Where applicable, during the training course, our consultants will provide the participants with training on how to analyse Quality data using the Minitab software which is widely used by Lean Six Sigma practitioners.

Example of Minitab Software:



**OUR CONSULTANTS WILL
ALSO PROVIDE CANDIDATES
WITH USEFUL EXCEL QUALITY
TEMPLATES AND TOOLS**



Examination and Certification

We will administer an examination for the participants upon completion of their training. The examination consists of the following (on last day of training):

LSS BLACK Belt Level (Internal CSSC Accredited)

- Exam Type: Multiple Choice Questions
- No. of Questions: 50 Questions
- Examination: Open Book Examination
- Passing Rate: 70% and above
- Duration of Exam: 2 Hours
- Location of Exam: At training location
- Cost: Inclusive of training



OPTIONAL IASSC BLACK Belt Level (External Accreditation)

- * Cost USD\$395
- * No prerequisites.
- * Earn an IASSC Globally Recognized Lean Six Sigma Black Belt Certification.
- * Conduct exam directly on your computer from the comfort of your home or office 24/7/365.
- * Voucher and Scheduling instructions will be automatically delivered to you via email after your purchase.

Purchase a voucher and schedule your exam to be conducted at your convenience. Using IASSC testing system a professional IASSC Proctor will personally meet you in virtual online testing environment. Using your webcam you'll provide identification and the Proctor will authorize the execution of your exam session, staying with you through the testing and submission process. The proctor will ensure that the rules are followed and that you have the support you need while you take the IASSC certification exam directly on your computer from the comfort of your home or office 24/7/365. Candidates who successfully complete the IASSC certification exams will achieve certification from the International Association for Six Sigma Certification.

***Book directly from <https://orders.iassc.org/ProductDetails.asp?ProductCode=ODWB-BBV>

Our Accreditations as Lean Six Sigma Training Organisation

Visit us on,

SSC: <https://sixsigmacouncil.org/six-sigma-certification/business-directory/599/lean-sigma-experts-australia/>

IASSC: <http://www.iassc.org/provider/meridian-biz-management-sdn-bhd/>