

International Management Research and Technology Consortium – LLC - USA

CERTIFIED LEAN SIX SIGMA GREEN BELT (CSSGB)



www.imrtc.org



consortium@imrtc.org

Bridging The Gap Between Academia and The Industry Worldwide!



CERTIFIED LEAN SIX SIGMA GREEN BELT CERTIFICATION PROGRAM



Introduction:

There is a global need for market and requires competent Six Sigma Certified Green Belt Managers, who can understand Lean System and Optimization of Business processes through Project Management Techniques. We as a recognized institute and offers a comprehensive training curriculum in this area. IMRTC after recognizing the need and in consultation with senior members, executives and trainers have come up with a comprehensive certification program:

THE CERTIFIED LEAN SIX SIGMA GREEN BELT (CLSSGB)

About CLSSGB:

LEAN SIX SIGMA GREEN BELT is require and need to develop necessary expertise and skills for Quality Management System, Production, Operations and Services People. The ultimate goal of this certification that management can increase their productivity by reducing cost effective through lean processes with efficiency and effectiveness. LEAN SIX SIGMA GREEN BELT covers the areas from Quality Management, Qualitative Cycle, Lean Quantitative Assessment of Processes and strategic approaches operational Management businesses through information technology and ERP, CRM systems. The program follows a systematic learning format with hands on approach including lot of exercises, quizzes, audio-visual aids, case studies, practice sessions and case studies for development of project.

The Audience:

Anyone involved in Quality, Production, Service industry and/or Manufacturing Industry, and excellent professional qualification for Managers, executive assistants and supervisor in any sector, which are working in the professional market.

The Credentials:

The Candidates who are looking to have this certification need a proper training Professional Training Hours (PTH) from recognized institute and approved professional trainers of IMRTC. The program also required a selfdevelop project by using project management techniques and resolving the structure to problems in the organization. The project required in soft form and submitted to our concerned training partners or chapters for assessment and after approval the candidate can sit in the final examination of IMRTC. After passing the certification examination the candidates can use the credentials CERTIFIED LEAN SIX SIGMA GREEN after their name.

Pre-Requisite:

- Bachelor's degree (high school professional diploma, associate's degree or the global equivalent)
- 2-3 years of professional experience in Quality, Manufacturing or Service Industry



PROGRAM CONTENT



Detail of content of Lean Six Sigma Green Belt covers theory, process and practice of the Application of Six Sigma, Methodologies, TQM and another advance Project Management, and identify qualitative and quantitative aspects of Problem solving tools will cover.

MAJOR AREAS THAT ARE COVERED

I. Why Six Sigma?

- a. Definition and Graphical View of Six Sigma
- b. Comparisons Between typical TQM and Six Sigma Programs
- c. Origins and Success Stories

II. How to Deploy Six Sigma

- a. Description of the Roles and Responsibilities
- b. Project Focus
- c. Overview of DMAIC Methodology

III. DEFINE: Project Definition

- a. Define Objectives
- b. Work Breakdown Structure
- c. Pareto Diagrams
- d. Process Maps
- e. Matrix Diagrams
- f. Project Charters
- g. Reporting

IV. DEFINE: Project Scheduling

- a. Activity Network Diagram
- b. PERT Analysis
- c. GANNT Chart

V. DEFINE: Change Management/Teams

- a. Problems with Change
- b. Achieving Buy-In
- c. Team Formation, Rules, and Responsibility



PROGRAM CONTENT

- d. Stages of Team Development
- e. Overcoming Problems
- f. Consensus Building Tools
- g. Affinity Diagram
- h. Nominal Group Technique
- i. Prioritization Matrix

VI. MEASURE: Tools and Objectives

- a. Objectives
- b. Flowcharts
- c. Process Maps
- d. SIPOC
- e. Box-Whisker Plots
- f. Cause and Effect Diagrams
- g. Check Sheets
- h. Interrelationship Diagram
- i. Stem and Leaf Plots

VII. MEASURE: Establishing Process Baseline

- a. Enumerative v. Analytic Statistics
- b. Process Variation
- c. Benefits of Control Charts
- d. Requirements v. Control
- e. Control Chart Interpretation

VIII. MEASURE: X -Bar Charts

- f. Uses
- g. Construction and Calculations
- h. Assumptions
- i. Rational Subgroups
- j. Sampling Considerations
- k. Interpretation







Wiley Sides of Management Income is becoming Department

IX. MEASURE: Individuals Data

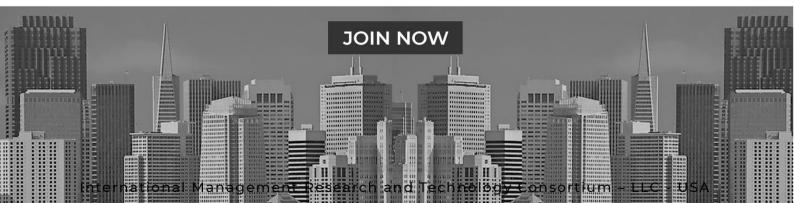
- a. Uses
- b. Construction and Calculations
- c. Assumptions
- d. Sampling Considerations
- e. Interpretation
- f. Overview of Other Individuals Charts
 - i. Run Charts
 - ii. Moving Average Charts
 - iii. EWMA Charts
 - iv. CuSum Charts

X. MEASURE: Process Capability

- a. Histograms
- b. Probability Plots
- c. Goodness of Fit Testsd.
- d. Capability and Performance Indices
- e. Relative to Process Control
 - I. Interpretation
 - II. Estimating Error

XI. MEASURE: Attribute Charts

- a. Uses
- b. Selection
- c. Construction and Calculations
- d. Sampling and Considerations



PROGRAM CONTENT

XII. ANALYZE: Lean Thinking

- a. Definition of Waste
- b. Analyzing Processes for NVA
 - i. Cycle Efficiencies
 - ii. Lead Time and Velocity
- c. Methods to Increase Velocity
 - i. Standardization
 - ii. Optimization
 - iii. Spaghetti Diagrams
 - iv. 5S
 - v. Level Loading
 - vi. Flow
 - vii. Setup Reductions

XIII. ANALYZE: Introduction to Regression Analysis

- a. Scatter Diagrams
- b. Linear Model
- c. Interpreting the ANOVA Table
- d. Confidence and Prediction Limits
- e. Residuals Analysis
- f. Overview of Multiple Regression Tools

XIV. IMPROVE: Tools and Objectives

- a. Improve Stage Objectives
- b. Tools to Prioritize Improvement Opportunities
- c. Tools to Define New Process Flow
- d. Tools to Define and Mitigate Failure Modes
 - i. PDPC
 - ii. FMECA
 - iii. Preventing Failures
- e. Reference to Tools for Defining New Process Levels

XV. CONTROL: Tools and Objectives

- a. Control Stage Objectives
- b. Control Plans
- c. Training
- d. Measuring Improvement





PROCESS OF CERTIFICATION

To give the certification, 32-Professional Training-hours as PTH is mandatory required from any concern professional trainer or Partner and participants should have to submit their credentials with the Examination Application Form with the attachments of bachelor degree and other experience certificates. The Paper is based on 150 Question with MCQs and 70% passing marks is required to pass the exam. Further, if the Project is also included in your exam, then marks will be distributed according to course & certification.

TERMS & CONDITIONS RELATED TO EXAMINATION AND CERTIFICATION

- 8. The 32-Training-hours as PTH are valid up to three year.
- 9. If the candidate is failed in the examination then S/he has one more chance to attempt the paper within one year, and if you have not passed the exam then you have to pay the examination fee and re-appear in the examination.
- 10. If the candidate has not passed the examination within one year and after sometime S/he would like to appear in the examination then candidate must to submit 32-Training-hours as PTH again required to appear in the examination.
- 11. The examination system is online and candidate can book anytime the exam according to his or her availability.
- 12. Those countries, who would not have the facility of online examination facility then they can give the paper based examination, which can be sent to authorized partner / trainers / examiner. The assessment time will be a month and we will be sent the results to partner.
- 13. The candidate will get the certificate after one month and administration will courier to your defined partners or your address accordingly.
- 14. To maintain the worth and eligibility in the market the candidate must have to renew their membership on yearly basis.





EXAMINATION SYSTEM

The Examinations shall be online through our accredited testing partner centers worldwide in each country chapter; In case chapter or partner is not available in a particular country then candidates can directly approach IMRTC USA examination body through email:

examination@imrtc.org
and they will be advised accordingly. The passing criteria shall be 70% of Whole Exam.

IMRTC – USA – Principal Office: LLC L24000411080

P. O. Box 409, 9300 Conroy Windermere, Windermere, FL-34786, USA United States of America.

https://www.imrtc.org | consortium@imrtc.org

