



Exam Preparation Course Learning Outcomes

CLSSGB

Certified Lean Six
Sigma Green Belt



International
Supply Chain
Education Alliance

CLSSGB exam preparation course

Learning Outcomes

Module 1: History

1. Identify which Quality Programs, including Six Sigma, that seek macro-level and/or micro-level specific improvement
2. Identify which Quality Standard includes Six Sigma
3. Identify which Gurus supported Six Sigma principles such as Financials, Management Accountability, and the 4 Absolutes of Quality
4. Define knowledge management and understand how it helps organizations
5. Define the main Steps/Phases of Six Sigma

- Project Management
- Project selection
- Project Charter
- Project Management Tools
- Gantt Chart
- Work Breakdown Structure
- Critical Path Method (CPM)/ Program Evaluation Review Technique (PERT)
- Interview Process
- Language Processing
- Prioritization Matrix
- System Map
- Stakeholder Analysis
- Thought Process Map
- Value Stream Mapping

Module 2: Roles

1. Identify the need to train executives and managers
2. Identify Six Sigma executives provide financial support
3. Identify the most technically trained roles
4. Identify what type training senior management should receive
5. Identify which Six Sigma role acts like a coach for the organization

Module 4: Measure

- Define the steps in Benchmarking
 - Define Measurement Systems Analysis
 - Identify bias
 - Identify Gauge R&R
 - Identify how non-numeric information can be generated in a designed experiment (DOE)
 - Define Evolutionary Operations (EVOP) experiments
- Basic Statistics for Six Sigma Projects
- Probability and Statistics

Probability and statistics is described in the following topic areas:

- Measure
 - Hypothesis Testing
 - Analysis of Variance
 - Quality Function Deployment
 - Flowdown
 - Measurement System Analysis
 - Graphical Methods
 - Process Behavior Charts

Module 3: Define

1. Identify what is required to enforce internal quality for such Industries as the petroleum industry
2. Identify what are the major flow chart symbols and what they are associated with
3. Define SWOT analysis and SIPOC Models along with their corresponding strengths and weaknesses
4. Define the need for feedback in all models and flow charts
5. Define the benefits of market segmentation in identifying market trends

Module 5: Analyze

- Process Capability Analysis
- X-Y Map
- FMEA
- Multi-Vari Chart
- Chi-Square
- Regression
- Buffered Tolerance Limits

Module 6: Improve

- Factorial Design of Experiments
- Fractional Factorials
- Data Mining
- Blocking
- Response Surface Methodology
- Multiple Response Optimization
- Theory of Constraints

Module 8: Lean

- Visual Systems
- 5-S
- TPM
- Mistake-Proofing
- SPC/APC

Module 7: Control

- Solution Selection/ Implementation
- Control Plans
- Control Charts
- Hypothesis Tests
- Process Capability Assessment
- Best Practice Sharing/Translation

| Course Details

Pre-requisites: None

Classroom time: 15 hours

| Certification Exam Details

Assessment Method: Multiple Choice Exam

Pass Grade: 70%

Regulatory Authority: IISB
(ISCEA International Standards Board)

| About IISB

IISB (ISCEA International Standards Brand) is the authority behind ISCEA's International Supply Chain Standards. It is conformed by a 24 member Board of Directors led by a Secretary-General and a President. IISB designates multiple committees conformed by a selected group of Global Supply Chain Experts from Public and Private Organizations, to develop the BoK (Body of Knowledge) for each certification program.

| About ISCEA

The International Supply Chain Education Alliance (ISCEA) was the first organization certifying Supply Chain Professionals around the globe, and it remains the worldwide authoritative resource for Supply Chain Career Validation with thousands of certificate holders commanding top-tier salaries.

ISCEA's mission is to provide Total Supply Chain Knowledge to manufacturing and service industry professionals through Education, Certification and Recognition.

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