

## **Six Sigma Green Belt Program & Certification Exam Preparation for IQF- International Quality Federation, USA ([www.iqfnet.org](http://www.iqfnet.org))**



**Course #: QL0200**

**Earned PDU: 35 PDU**

**Duration: 5 Days**

The Six Sigma Green Belt certification program teaches the six sigma problems solving methodology (DMAIC), and the statistical tools. In our Six Sigma Green Belt Certification program, the focus is on mastering the application skills rather than on the theoretical understanding. The Six Sigma Green Belt certification program makes extensive use of MS-Excel for data analysis. At the end of the Six Sigma Green Belt certification program the Certified Green Belts can lead six sigma projects as well as effectively support Black Belts in breakthrough projects.

Even though doing real-life project is not a requirement for certification, in this Six Sigma Green Belt certification program, the Green Belts are encouraged to do projects during the training duration and take advantage of the e-mentoring. The projects should be an on-going activity where the application skills are sharpened through implementation. Skilled Green Belts can bring significant bottom-line results to the company and grow professionally faster.

Green Belts can make significant improvements in any functional areas by combining their functional experience and six sigma skills. Thus, Green Belts will grow in their functional areas.

The Six Sigma Green Belt certification training is a stepping-stone for the more challenging role of Black Belts. Those who wish to make six sigma a career are advised to go for the Six Sigma Black Belt program six months after clearing the Six Sigma Green Belt certification program. For further information on Six Sigma Green Belt certification programs, contact our Business Partner website @ [www.isl.co.in](http://www.isl.co.in)

### **Course Outline:**

#### Six Sigma Green Belt Certification MODULE 1

Six Sigma Concepts and Philosophy

Six Sigma Deployment

Metrics: DPU, DPMO, RTY

Champion, Black Belt and Green Belts

Selecting Projects

#### Six Sigma Green Belt Certification MODULE 2

Define Stage: Creating Project Charter, Identifying Customers & Their Needs and Requirements, Creating SIPOC

Measure Stage: Identifying CTQs, Selecting Sampling Strategy and Collect the data, Establish the Baseline Performance

Basic Statistics: Concept of Variation, Data Types; Normal, Exponential, Binomial, Poisson distributions, Measures of central tendency - Mean, Median, Mode, Measures of Dispersion - Range, Standard deviation, Variance, Central Limit Theorem

Visualization Techniques: Process Mapping, Quality Function Deployment (QFD)

Measurement System Analysis: Types of errors in Measurement System, R&R for Variable measurement, R&R for Visual Inspection

#### Six Sigma Green Belt Certification MODULE 3

Analysis Stage : Sources of variation, Identifying root cause and Validation

Data Analysis: common and special causes of variation, Control charts, Xbar and Range Chart, Individual and Moving Range Chart, Histogram, p-chart, c-chart, Pareto analysis, Pre-control charts

Process Capability: Cp, Cpk, Pp, Ppk

Cause Analysis: Cause and Effect diagram, Why-Why analysis.

Diagnostic Techniques: Multi-Vari chart, Paired comparison

Six Sigma Green Belt Certification MODULE 4

Improving Stage: Generating Potential Solutions, Select the Best One, Developing Mistake-Proof Measures, Process Optimization, Validating the Results

Advanced Statistics: Sampling distribution, Estimation, Hypothesis Testing, ANOVA, Correlation and Regression

Design of Experiments (DoE): Fractional Factorial designs, Full Factorial designs.

Six Sigma Green Belt Certification MODULE 5

Control Stage: Defining the Process Control System, Modifying the Documentation System, Conducting Training, Institute the Process Audit System, Quantifying the Gains

Control Plans

Failure Modes and Effects Analysis (FMEA).

Team Working

Six Sigma Green Belt Certification MODULE 6 (IQF Bok –Basic Topics)

Distributions

Statistical Inference & ANOVA

Measurement Assurance

SPC

Process Capability

One-Way ANOVA

**Who Should Attend?**

Project managers, team members, project engineers, design engineers, project leaders, industrial engineers, program managers, operations managers, functional managers, information technology professionals, and all Individuals need to prepare be part of the overall Organizational Six Sigma Projects in order to achieve high quality results via processes improvements. Additionally, all those who are interested to attend the IQF Six Sigma Green Belt Certification. Please visit: [www.iqfnet.org](http://www.iqfnet.org)

**Course Materials:**

- Comprehensive Course-In-Book Training Study Slides
- Six Sigma Course in a Book
- Soft Copy of the overall materials in a CD
- An Online Access Account for to attend the IQF examination and get Six Sigma Green Belt Certification.
- Completion Certificate (35 Contact Hours)

**Course Fees:      USD 2,100**

**Schedule:**            [www.pmctquest.com/schedule.html](http://www.pmctquest.com/schedule.html)