

Lean Six Sigma Green Belt

Course Code: SC-07-01

What is Six Sigma?

Six Sigma is a data driven, customer focused, and result oriented methodology, which uses statistical tools and techniques to systematically eliminate the defects and inefficiencies to improve processes. It is a systematic method to measure and analyze the business processes to identify critical factors affecting business results, thereby improving the processes and establishing controls around the improved processes.

Six Sigma is a widely accepted quality concept in the corporate world today. Six Sigma started its journey in the 1980s as a data driven method to reduce variation in electronic manufacturing processes in Motorola Inc. in the USA. Six Sigma became famous when Jack Welch made it vital to his successful business strategy at General Electric in 1995. Today it is used as a business performance improvement methodology all over the world in diverse industry including general manufacturing, construction, banking and finance, healthcare, education, government, KPO/BPO, IT/ Software. At present IT/ ITES sector companies are dynamically implementing Six Sigma and it is no more confined into manufacturing sector.

The term 'Six Sigma' comes from statistics and is used in statistical quality control (SQC), which evaluates process capability i.e. the numerical measure of the ability of a process to meet the customer specifications. It was originated from terminology associated with manufacturing which refers the ability of manufacturing process to produce a very high proportion of output within specifications. The sigma rating of a process indicates its yield or percentage of defect-free outputs it produces. A Six Sigma process is the one, which produces 99.99966% statistically defect-free outputs, which is equivalent to 3.4 defects per million opportunities (DPMO).

Six Sigma uses a set of quality management and statistical methods and creates a team of experts within the organization (Executive Leadership, Champions, Black belt, Green Belt, Yellow Belt etc.) having specific skill sets required to carry out the Six Sigma project. Each Six Sigma project carried out within an organization follows a defined sequence of phases with quantifiable value targets e.g. reduction in process cycle time, reduce cost,

increase in quality rating/ customer satisfaction index, reduction in defect rate.

Why Six Sigma?

Growing popularity and acceptability of Six Sigma and Lean has created a great demand for certified professionals in the job market. Grab the opportunity and join this growing community.

Learning Objective:

Lean Six Sigma Green Belt course focuses on providing students with an understanding of the various Six Sigma and Lean tools and techniques useful to improve the production process and minimize defects in the end product with a greater focus on the practical implementation of these tool and techniques in the organization.

Course Methodology:

This course adopts the traditional classroom style methodology to prepare for the Lean Six Sigma Green Belt exam as well as prepare you for real world applications. The course is carefully designed to use an optimum mix of slides, quizzes, case study and group exercises. Covers important six sigma and lean concepts:

Six Sigma:

- Change Management
- Leadership and Organizational Culture
- Team Dynamics and Performance
- Project management Basics
- Project Risk analysis
- Writing effective problem and opportunity statements
- Voice of the Customer (VOC)
- Voice of Process (VOP)
- Supplier Input Process Output Customer (SIPOC)
- Cause & Effect Diagrams and '5-Whys' root cause analysis
- Pareto Charts/Analysis
- Data Collection Strategies
- Failure Mode and Effects Analysis (FMEA)
- Mistake/Error Proofing
- Visual Management
- Kanban

- Impact/Effort Analysis
- Prioritization Matrix Analysis
- Kaizen and Kaizen Blitz
- Productive Maintenance (PM)
- Control Plan (Sustainability)
- Measurement System Analysis (MSA)
- Capability Analysis
- Graphical Analysis
- Design of Experiment (DOE)
- Poka Yoke
- DFSS (Design for Six Sigma)
- Introduction Statistical Process Control (SPC)
 - Define Deliverable
 - Measure Deliverable
 - Analyze Deliverable
 - Improve Deliverable
 - Control Deliverable

Lean:

- Introduction to lean concepts and techniques
- Value-added and non-value-added activities
- Lean principles
- Waste identification and reduction
- Benefits of Lean approach
- Value Stream Mapping (VSM)
- Process Mapping and Process Optimization
- Value Added Assessment
- Lean Metrics and Capability Analysis
- A3 Methodology
- Change Over optimization techniques
- 5S (6S)
- Standardized Work
- Model factory/Workplace

Course Fee:

\$2,200 + HST payable in full before the course start date. Limited time offer: 60% off, you pay **Cdn 880+tax** (includes in-class instruction & exam).

Course Fee Includes:

- 2-day instructor led training
- In-class case study giving you valuable experience to implement Lean Six Sigma in your organization
- Group exercises
- Exam tips and techniques
- Complimentary online course is provided with the certification exam
- Lean Six Sigma Green Belt exam from 6sigmastudy
- Learn from a senior industry professional

- Participants will also receive a certificate of completion from Can-Consult on completion of two-day in-class course

Lean Six Sigma Green Belt Exam Eligibility Requirements:

Preferably Six Sigma Yellow Belt (but not mandatory). A free online course and certification exam on Six Sigma Yellow Belt is included in the course fee.

Lean Six Sigma Green Belt Exam Format:

- Multiple Choice
- 100 questions per exam
- One mark awarded for every right answer
- No negative Marks for wrong answers
- 120 minutes duration
- Proctored on-line exam

Audience Profile:

This course is highly recommended for employees and organizations requiring a standardized approach to problem solving for the purpose of continuous improvement in Quality Management.

Registration and Payment Procedure:

Seats are limited; registration is mandatory (no walk-ins please). Registration and payment can be completed at www.canconsultprojects.com

Cancellation Policy:

The course fee is fully refundable (less administration charge of \$ 100 + HST) if written cancellation request is received 14 business days prior to course start date. Requests for refunds will not be entertained after this time.

Can-Consult reserves the right to cancel the course no later than seven (7) days prior to course start date due to low enrolment or other reasons. If the course is cancelled by Can-Consult, a full (100%) refund will be provided to the registrant.

Course Instructor:

Khurram Shah who is a **Lean Six Sigma Black Belt**, PMP, Masters in Engineering, Masters in Total Quality Management, Masters in IT and a Business Process Management.

*Can-Consult Services Inc. is a 6sigmastudy
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