

Six Sigma/Lean Green Belt Training ES-401

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NOTE: This course is not an ASQ SSGB Preparation/Refresher course

RU: 5.6

Prerequisites: Active in a Process Improvement Team

What is Six Sigma/Lean Green Belt?

- It has application to manufacturing, healthcare, non-profit, service, and educational organizations.
- It improves the efficiency and effectiveness of processes (those that create the product or deliver a service and those processes that support product and service delivery - e.g. a support process is IT or accounting) and it reduces cost, and increases customer satisfaction.
- The training model is learn/apply, which returns value to the organization in projects completed or in progress. Organizations can see the ROI and effectiveness of the training.

COURSE CONTENT

The course is delivered as eight full-day sessions of training focused on enabling individuals and teams to utilize Six Sigma's Define, Measure, Analyze, Improve, and Control Methodology (DMAIC) to improve processes.

The training is broken into three modules:

- The first module consists of five full-day sessions of training focused on the Define, Measure, Analyze and Improve stages of the methodology
- The second module is six-week period in which the students apply their learning to an improvement project at their company
- The third module is three full-day sessions for follow-up that encompasses review of student projects and the training in the Control stage of the methodology and a report-out to management on project progress/completion to date

This sequence of modules will provide training in the utilization of the DMAIC methodology.

Topics covered during the course include:

- Introduction to Six Sigma as a metric and methodology
- Origin of the methodology
- Examples of companies using Six Sigma
- How is adoption progressing
- What are the business reasons (financial, customer) for utilizing the Six Sigma DMAIC (Define, Measure, Analyze, Improve, Control) as an improvement methodology.

Learning objectives at each stage of the DMAIC are:

- **Define:** how to select an improvement project that supports the goals of the company, gain management support, define the problem to be resolved and result anticipated, map the process and create a project plan
- **Measure:** gathering data (process measures), measures of location and measures of variation
- **Analyze:** analysis and interpretation of data - Six Sigma Metrics, Histogram, Trend Charting, Process Capability, and FMEA
- **Improve:** selection and trial of an improvement - Root Cause Analysis, Scatter Diagram, Force Filed Analysis, and improvement Pilot Test
- **Control:** how to monitor and maintain improvement gains - creating a Control Plan, utilization of SPC, and presentation to management of project results