



**PRODUCTIVITY &  
QUALITY INSTITUTE**

A complex graphic with a green color scheme. It features a large '6' and 'sigma' symbol, a globe, a bar chart, and a line graph. The text 'the 6 way' is visible, along with 'Taking Business to the Sixth Degree'.

the  
**6**  
way  
Taking Business to the Sixth Degree

## **GREEN BELT PROGRAM ROADMAP (SSGB)**

### **PROGRAM CANDIDATES:**

Green Belts who are groomed in the Six Sigma methodology help deploy the Six Sigma approaches and techniques throughout your organization. They serve as candidates on the improvement teams formed to tackle improvement areas. They are employees at all levels and functions of your organization who are committed to business improvement using Six Sigma methodology. Potential delegates include directors, managers, process owners, quality practitioners and consultants committed to improving business processes.

### **PROGRAM LENGTH:**

10 days training session (6 hours/day)

## DAY ONE AND TWO (SIX SIGMA OVERVIEW AND HOW TO DEPLOY)

Learn How to:	Program Contents
<ul style="list-style-type: none"> <li>• Define Six Sigma in terms of operation</li> <li>• Establish difference between Six Sigma and other quality initiatives</li> <li>• How to measure Six Sigma level</li> <li>• Develop indicators to measure cost</li> <li>• Choose between different Six Sigma methodology</li> <li>• Identify a project for Six Sigma</li> <li>• Assess Six Sigma projects in terms of financial benefits</li> <li>• Set objectives within DMAIC</li> <li>• Use Priority Matrix for selecting projects</li> <li>• Manage the roadmap for your projects</li> </ul>	<ul style="list-style-type: none"> <li>• What is Six Sigma</li> <li>• Six Sigma application</li> <li>• DPMO and Six Sigma level</li> <li>• 3 Sigma vs 6 Sigma process</li> <li>• Hidden factory</li> <li>• Six Sigma vs TQM</li> <li>• Historical view of Six Sigma</li> <li>• How to deploy Six Sigma</li> <li>• Six Sigma Projects</li> <li>• Pareto priority index</li> <li>• DMAIC overview</li> <li>• Prioritization matrix</li> <li>• Managing Six Sigma projects</li> </ul>

## DAY THREE AND FOUR (DEFINE: PROJECT DEFINITION, PROJECT SCHEDULING, AND CHANGE MANAGEMENT)

Learn How to:	Program Contents
<ul style="list-style-type: none"> <li>• Define and scope project</li> <li>• Identify elements of Six Sigma project</li> <li>• Select projects aligned to company objectives</li> <li>• Use WBS to break down projects</li> <li>• Select opportunities use Pareto diagram</li> <li>• Determine critical path</li> <li>• Manage milestone date</li> <li>• Generate and categorize ideas</li> <li>• Select important ideas</li> <li>• Select ideas based on specific criteria</li> </ul>	<ul style="list-style-type: none"> <li>• Project characteristics</li> <li>• Project charter</li> <li>• Matrix Diagram</li> <li>• Work breakdown structure</li> <li>• Pareto diagram</li> <li>• Process mapping</li> <li>• Project schedule</li> <li>• Activity network diagram</li> <li>• Gantt chart</li> <li>• Six Sigma teams</li> <li>• Affinity group</li> <li>• Nominal group technique</li> <li>• Prioritization matrix</li> </ul>

## DAY FIVE AND SIX, (MEASURE: ESTABLISH PROCESS BASELINE, MEASUREMENT SYSTEM ANALYSIS )

Learn How to:	Program Contents
<ul style="list-style-type: none"> <li>• Measure process baseline</li> <li>• Use different metrics to evaluate process</li> <li>• Formulate a model for your project</li> <li>• Determine flow down function using Box-Plot and C&amp;E diagram</li> <li>• Measure variation in your process</li> <li>• Differentiate between special and common causes of variation</li> <li>• Baseline a process using capability metrics</li> <li>• Evaluate measurement system</li> </ul>	<ul style="list-style-type: none"> <li>• Tools to define process such as flow charts, process map, and SIPOC</li> <li>• Process As-IS</li> <li>• Types of Metrics such as CTQ, CTC, and CTS</li> <li>• The business model <math>Y = f(X)</math></li> <li>• Box-Plot</li> <li>• Cause and Effect Diagram</li> <li>• Evaluate process using SPC</li> <li>• Concept of Variation</li> <li>• Gage R&amp;R study</li> </ul>

## DAY SEVEN AND EIGHT (ANALYZE: LEAN METHODS, VALUE STREAM, AND REGRESSION ANALYSIS)

Learn How to:	Program Contents
<ul style="list-style-type: none"> <li>Analyze value stream map</li> <li>Analyze source of variation</li> <li>Determine process drivers</li> <li>Increase velocity of a process</li> <li>Investigate inter-dependence between two variables</li> <li>Interpret regression models</li> <li>Use regression with design experiments</li> </ul>	<ul style="list-style-type: none"> <li>What is Lean</li> <li>Lean and Six Sigma</li> <li>Value stream analysis</li> <li>5S</li> <li>Regression analysis</li> <li>Regression model</li> <li>ANOVA analysis</li> <li>Multiple regression</li> </ul>

## DAY NINE AND TEN (IMPROVE AND CONTROL)

Learn How to:	Program Contents
<ul style="list-style-type: none"> <li>Estimate cost savings associated with proposed solutions</li> <li>Compare proposed solutions against performance criteria</li> <li>Evaluate best in class</li> <li>Minimize impact of external source of variation</li> <li>Measure realized bottom-line impact</li> </ul>	<ul style="list-style-type: none"> <li>Financial analysis, Pareto diagram, and Prioritization matrix</li> <li>PDPC and FEMA</li> <li>Benchmarking</li> <li>Robust Design</li> <li>Control Plans</li> </ul>

## CERTIFICATION

We also offer the option of Formal Green Belt Certification supplied by ASQ. This requires that:

- Green Belt training is completed
- On line assessment test is passed (with additional fees)
- A laptop computer preloaded with Adobe Acrobat is required.



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