



Lean Six-Sigma Yellow to Green Belt Upgrade

Course Code TGLS005

Lean and Six Sigma deliver business goals and objectives though the rigorous application of proven improvement methodologies. Combining both these methodologies eliminates waste, increases value and reduces variation. By focusing on the customer and delivering benefits quickly it is possible to improve quality performance and profitability simultaneously.

Thornley Group Green Belt training is carried out by professional trainers who are experienced as senior management practitioners in both Six-Sigma and Lean. After completion of the training, you will be equipped and eligible to sit the exam for certification as a Lean Six-Sigma Green Belt (exam fee additional). Course details are as follows:

Course Duration

• 3 days classroom or 5 x 2.5-hour online live Zoom classes.

Entry Requirements

- Candidates must have a basic working knowledge of algebra and be familiar with numerical data (See separate maths skills test on our <u>resources page</u>). A familiarity with spreadsheets is also required.
- Candidates should ideally have the authority to work on a project in their organisation as this will improve the credibility with prospective employers. This should be a cost saving, defect reduction or other customer impact project.

Equipment Needed by Candidates

• Scientific Calculator.

Course Contents

Our Green Belt upgrade training gives an extensive grounding in Lean Six-Sigma which covers in detail the gap between Yellow Belt and Green Belt. Thornley Group Green Belt training is targeted at people who spend a significant amount of time involved in process improvement. This could either be as a process owner or a member of a team working on an improvement project. The training provides the depth required to ensure that attendees gain all the knowledge required to be effective as a Green Belt. The Green Belt can be upgraded to a Black Belt certificate with a further 5 days of training.

Using their practical experience of improvement programmes, our trainers can take candidates through the process of applying the tools and techniques that they learn.

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Programme Structure

The Define Phase

- Team Selection
- Project Management
- Building the Case for Change
- DMAIC Phase Reviews

The Measure Phase

- Data Normality vs Non-Normality
- Samples and Populations
- Affinity Diagrams
- Failure Modes and Effects Analysis (FMEA)
- Data Collection Recording Methods
- Statistical Process Control (SPC)
- Process Capability
- Process Capability Discrete Data
- Measuring Yield

The Analyse Phase

- Focused Problem Statement
- Multi-Vari Studies
- Hypothesis Testing
- Normal Data Common Hypothesis Tests
- Non-Parametric Hypothesis Tests
- Common Hypothesis Tests for Proportion Data
- Regression Analysis
- Design of Experiments (DOE)

The Improve Phase

- Benchmarking
- Selecting the Solution
- Promoting the Solution
- Piloting the Solution
- Implementing the Solution

The Control Phase

- Control Chart Selection
- Control Charts for Normal Data
- Control Charts for Non-Normal Data
- Discrete Attribute and Count Charts
- Other Control Charts
- Sustaining the Improvement
- New Process Sigma
- Sharing the Knowledge
- DMAIC Project Review

Lean Thinking

- Takt Time & Cycle Time
- Bottlenecks

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- Setup/Changeover Time Improvement
- Total Productive Maintenance (TPM)
- Do only what is Needed, When Requested.
- Visual Management
- Strive for Perfection (PDCA or DMAIC).
- Kaizen Blitz/Process Workout
- Barriers to Implementing Lean
- Sustainability of Improvements