



Lean Six Sigma Green to Black Belt Upgrade

Course Code TGLSAU004

Lean and Six Sigma deliver business goals and objectives through 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 Black 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 well equipped and eligible to sit the IASSC exam for certification as a Lean Six-Sigma Black Belt (exam fee additional). Course details are as follows:

Course Duration

- 5 days classroom or 8 x 2½ hour online sessions

Entry Requirements

- **Candidates must have been trained to Green Belt level prior to attending** (this will require verification prior to attendance). Attendees who have been trained by other organisations may attend and take the exam but will not be eligible for our exam fee refund in the event of failing the exam.
- Candidates must have a knowledge of algebra and be used to analysing numerical data (i.e. Green Belt).
- 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.
- A lap-top computer loaded with Minitab software will be beneficial during the training course (but not essential).

Course Contents

Our Black Belt Upgrade training provides all that is required for Lean Six Sigma implementation and project leadership. Whilst building on the central DMAIC and Lean principles, the focus is on team and project management along with advanced statistical tools and data management.

Thornley Group Black Belt Upgrade training is targeted at Green Belts who run business improvement projects and/or have responsibility for managing improvement teams. After attending the course and passing the certification requirements, a Black Belt certificate will be issued. 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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Summary Course Contents

- Managing Change
- Leadership
- Value Stream Analysis
- Lead-Time Reduction
- Flexible Production
- Levelling Demand
- Line Balancing
- Standardised Work
- Kaizen and Kaizen Blitz
- Critical to x
- Benchmarking
- Balanced Scorecard
- Cost Benefit Analysis
- Managing Teams
- QFD
- Kano Model
- Metrology
- Advanced Statistical Concepts
- Probability Distributions
- Attribute Data Analysis
- Contingency Tables
- Advanced Hypothesis Testing
- Design of Experiments
- Risk Analysis
- Design for Six Sigma
- Design for x
- Statistical Tolerancing
- Strategic Planning
- Porter's 5 forces
- Theory of Inventive Problem Solving
- Systematic Design
- Critical Parameter Management
- Pugh Analysis

After Completion of the course it is recommended, to reinforce the learning, that candidates participate in a project that delivers significant cost savings, defect reduction or other customer impact. Thornley Group will provide email support for 6 months after completion of the course to help candidates achieve this.

See the [Thornley Group](http://www.thornleygroup.com.au) website for details of Public Lean Six Sigma Black Belt course dates and costs.