

# LEAN SIX SIGMA (ISO13053) GREEN BELT PROGRAMME

## Green Belt

A Green Belt (GB) project leader is capable of leading a cross-functional team through a series of formal project steps in order to enhance process performance significantly. GB projects are short-duration (12 – 24 weeks) quick-return initiatives that result in customer satisfaction and cost savings. This programme contains a blend of both lean and six sigma process improvement techniques.

## Agenda

The programme starts with a preparation day with sponsors and GB candidates. The objective is to have committed sponsors engaged, and GB projects clearly scoped before formal GB workshops begin a few weeks later. The course is facilitated in 7 highly interactive workshops. To facilitate learning-by-doing on projects, the workshops are blocked as three separate sessions of 3-2-2 days, approximately 4 weeks apart.

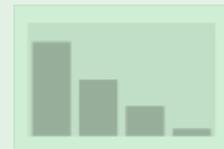
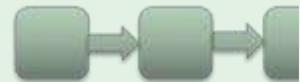
<p><b>Preparation day with Sponsors &amp; GBs</b></p> <p>GB course objective, curriculum, the role of the sponsor &amp; effective sponsorship, team problems, communication, A3 planning, project selection and scope, financial evaluation of benefits, certification process, gemba visits, preparation work for course.</p>
<p><b>GB Workshop 1</b></p> <p><b>Lean:</b> Intro to lean, the 7 wastes, Toast Kaizen video, the Lean Game rounds 1, 2 and 3, buffer inventories, kanban and pull systems, voice of the customer (VOC), financial benefit of lean.</p>
<p><b>GB Workshop 2</b></p> <p><b>Define:</b> Intro to six sigma, customer critical to quality (CTQ), scoping the project, team leader role, team member role, sponsor role, problem definition, goal setting, Gantt chart, project costing, SIPOC DMAIC A3 development for each candidate</p>
<p><b>GB Workshop 3</b></p> <p>Process mapping, spaghetti mapping,  <b>Measure:</b> data collection, run &amp; Pareto chart, introduction to statistics, histogram &amp; box plots, A3 update</p>
<p><b>GB Workshop 4</b></p> <p><b>Measure:</b> Measurement systems analysis (gauge R&amp;R) variable data, data distributions, measures of centering and spread, correlation &amp; regression, A3 update</p>
<p><b>GB Workshop 5</b></p> <p><b>Analyse:</b> Cause and effect, 5 whys, FMEA risk analysis &amp; mitigation, process capability analysis, A3 update</p>
<p><b>GB Workshop 6</b></p> <p><b>Improve- lean tools:</b> 5S numbers game, RFT and error proofing in transactional systems, quick changeover (SMED), A3 update</p>
<p><b>GB Workshop 7</b></p> <p><b>Control:</b> Common &amp; special cause variation, control charts, certification process, mock exam, review &amp; close</p>

### Lean

Lean enables all personnel to work in collaborative teams, to error proof and standardize process steps. Customer satisfaction grows & costs fall.

### Six Sigma

Six Sigma is a team-based approach to continuous improvement that reduces variation in an organisation's processes.



**Format:** Video, group interactive exercises, case studies PowerPoint & A3 exercise. Projects are reviewed in class during the programme.

In addition to the above 7 workshops, and examination and project certification day is required. This is scheduled within 6 months of completion of the workshops.

Optional days are suggested as follows:

- 2 mentoring days, and
- an examination preparation day.

## Learning objectives

At the end of this programme participants will understand a range of lean and sigma approaches to team-based problem-solving, and process improvement. They will be enabled to:

- Use a formal project management method and problem solving tools to improve or eliminate process problems;
- Lead a cross-functional team through successful project completion;
- Quantify business and financial benefits for the organisation and the customer.

Participants who complete a live project, that meets predetermined criteria, will be eligible to apply for green belt certification.

Participants will be required to select a project on which to work during training. The company and the course facilitator will approve the project in advance.

## Deliverables

A completed project with quantified financial benefits for the organisation. The course more than pays for itself.

Certification by a Lean Ireland black belt and site manager

## Who should attend?

The course is suitable for managers, supervisors, senior administrators, specialists and change agents who will be taking an active part in business process improvement. Knowledge of statistics is not required before attending the programme. The most successful participants are likely to be those who have supervisory experience, or who are well regarded as change agents within their workplace.

## Certification Standard

Our green belt six sigma courses are designed and executed in compliance with international standard [ISO 13053](#). Candidates take a written examination and the certifying project is formally evaluated by an internal review board and a Lean Ireland six sigma black belt. The green belt certificate is awarded by the organization, and signed by a senior site manager and the Lean Ireland black belt.



## Contact

Bernie Rushe, Managing Director, Lean Ireland,  
Galway Technology Centre, Wellpark Road, Galway, Ireland.  
Tel. +353-91-870708, Mob. +353-87-2837810, email. [Bernie@LeanIreland.ie](mailto:Bernie@LeanIreland.ie)

© Lean Ireland 2018