# Course Brochure

# Six Sigma – Green Belt (GB) training workshop

# Total Number of Modules: 2

Total Number of Days of training and Certification: 7

Total Duration: 3 months (Feb – April 2015)

***Brochure Contents***

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## Unique Features of the Six Sigma GB module

1. No fancy Jargons and Statistics . Process Improvement tools will be taught in a very simple and effective manner for real application
2. All the tools are taught with respect to Gemba (Shop floor) application
3. A compilation of the case studies is given as part of the course material for easy understanding of the tools
4. Each participant should Complete “One” Process Improvement Projects using the tools taught. The project completed should be presented during the second module .
5. The Participants will be provided support through e-mail in their Projects
6. There will be a very exhaustive Objective type written test that will be done during the second module

Origin of Six Sigma Philosophy

The birth of Six sigma Philosophy took place in Motorola when their CEO Mr. Bob Galvin took upon the initiative of Process improvement and waste elimination. Mr. Bill Smith was instrumental in driving the Six Sigma philosophy and usage of Process Improvement tools in Motorola. Because of this initiative, Motorola was able to reduce their defect levels to below 100 ppm and this helped Motorola get the ‘Malcolm Baldridge’ Award. The tools that are taught in this module are the tools that were used by Motorala in their Six Sigma initiative.

How this module will benefit the Industry

1. The certified Green Belts will acquire the skills of Problem solving and making Process improvements in a very systematic and scientific manner. They will be of great resource to the Organization and will support the Black Belts in their Process/Design trouble shooting

Who Should Attend:

1. The participants should be Senior engineers or engineers and should be from Shop floor
2. The participants should be working in any of the following functions:
   1. Process planning and design
   2. Production
   3. Quality
   4. Product Design
3. The participants should be able to spend considerable amount of time every day (approx 1-2 hours) during their daily work in trouble shooting the problems identified for solving

|  |  |
| --- | --- |
| **Function** | **Positions** |
| Production | Production in-charge  Factory head |
| Quality | Quality Engineer  Quality Manager |
| Manufacturing Engineering | Manufacturing Process Engineers  Manufacturing Process Managers |
| Corporate/Support Functions | Continuous Improvement engineers/managers  Quality system implementers |

**Six sigma Green Belt Certification – Workshop**

**PROGRAM DETAILS**

|  |  |  |  |
| --- | --- | --- | --- |
| Module | Topics discussed | Days | Total Days |
| Module – 1  Feb 19,20,21 | How to Identify Problems for Solving using Shainin methodology  Splitting Generic Problems into Specific Problems  Classification of problems into 4 categories  Phase -1 – Defining the problem   * Understanding the problem * Past data analysis to identify the Possible cause(s) for the problem | 1 | 3 |
| Phase -2 – Measure and Analyze (Pinpointing the actual cause(s) leading to the problem using Shainin techniques)  Techniques that will be discussed are  Tool # 1 – Paired Comparison  Tool # 2 – Product/Process search  Tool # 3 – Component search  Tool # 4 – Modified Component search | 2 |
| Month-2  Module-2  March 17,18 | Project facilitation and review  Tool # 5 – B vs C for root cause validation | 2 | 2 |
| Module – 2  April 22,23 | Project presentation and review | 1 | 2 |
| Tool # 6 – Variable Search  Objective written test and certification | 1 |

Summary of Process Improvement tools that will be taught and applied in the projects

|  |  |  |
| --- | --- | --- |
| S.no | ***Module*** | ***Tools*** |
| ***1*** | Module – 1 | Problem selection  Trend analysis  Phenomenon analysis  Data stratification  Paired Comparison  Product/Process search  Component search  Modified component search |
| ***2*** | Module – 2 | B vs C  Variable Search |

**Green Belt Certification Criteria**

* 1. Each Participant should solve the Chronic manufacturing problem taken up and should be able to communicate clearly the project and the work done.
  2. The participant has to score a minimum mark of 60% in the final assessment
  3. Should have attended all the 7 days

**Program Schedule**

|  |  |  |  |
| --- | --- | --- | --- |
| Programme | Feb 2015 | March | April |
| Training session | Module – 1  19,20,21 (Thu-Sat) |  | Module – 2  22,23 (Wed,Thu) |
| Project review and facilitation |  | Module -2  17,18 (Tue,Wed) |  |
| Total days | 3 | 2 | 2 |