

# Six Sigma Certificate and Certification Programs

## Module 3: Six Sigma Green Belt Certification Program (Certified Green Belt)

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## Outline

- Six Sigma Green Belt Training Certificate                      Module 1
- Six Sigma Black Belt Training Certificate                      Module 2
- Six Sigma Green Belt Certification Program                      Module 3  
(Certified Green Belt)
- Six Sigma Black Belt Certification Program                      Module 4  
(Certified Black Belt)



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## Green Belt Certification Requirements\*

1. Register for and successfully complete the 7-course Six Sigma Green Belt curriculum, including the online tests for Courses 1-7.
2. Successfully complete the final Six Sigma Green Belt Knowledge Assessment:
  - a 70% passing grade is required (can be taken twice)
3. Successfully complete a Six Sigma GB project:
  - the Define, Measure, Analyze, Improve, & Control (DMAIC) methodology must be properly and successfully applied

\*Note: Completion of (1) and (2) above will result in a Six Sigma Green Belt Training Certificate



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## Green Belt Certification Requirements\* (cont.)

4. Complete a well-written and properly documented final project report:
  - must meet AAA project criteria
  - must include financial impact statement and validation
5. Complete a final oral briefing of the project to the student's organizational leadership:
  - must be validated by signatures of project briefing recipients



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## Curriculum Program Required for Six Sigma Green Belt Certificate/Certification

Courses	Course Titles
Course 1	The Basics of Six Sigma
Course 2	The Soft Side of Insuring Six Sigma Success
Course 3	Making Sense Out of Data Using Graphical and Numerical Tools (Descriptive Statistics)
Course 4	Measurement System Analysis
Course 5	Analyzing the Process and Prioritizing the Focus
Course 6	Detecting Significant Differences from Sample Data (Inferential Statistics)
Course 7	Process Control and Process Capability



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Date \_\_\_\_\_

## Certification Checklist

- \_\_\_\_\_ Completed Six Sigma Green Belt Training.
  - \_\_\_\_\_ Passed Green Belt Knowledge Assessment with a grade of 70% or higher.
  - \_\_\_\_\_ Project Complete. Documentation must follow report guidelines.
  - \_\_\_\_\_ Oral Briefing Complete. Verified by signatures of Finance Executive and Champion (or Executive VP).
- Package prepared and sent to AAA:
- \_\_\_\_\_ This completed checklist
  - \_\_\_\_\_ Written project report
  - \_\_\_\_\_ Copy of training certificate
  - \_\_\_\_\_ Corporate certification of savings and oral briefing.

Note: The above package may be submitted electronically with the exception of the corporate certification of savings and oral briefing which must be submitted in hard copy.



## Corporate Certification Statement


Company:  
 Green Belt Candidate:  
 Project Name:  
 Project Description:  
 Estimated Savings (annualized \$):  
 Other Business Benefits:

This is to certify that the above Green Belt candidate has completed the required project through the control phase with savings and benefits as stated above. A satisfactory oral briefing was completed on \_\_\_\_\_ (date).

Champion (or Executive VP) \_\_\_\_\_ Finance Executive \_\_\_\_\_

Attendees (with title):


1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_



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## Project Grading Criteria

- Each project will be evaluated according to the following criteria:
  - Is the project documented with team members, green belt candidate, and champion?
  - Is the problem statement clear?
  - Is a baseline (pre-improvement) metric given?
  - Was the DMAIC methodology used?
  - Was the Project Report Outline followed?




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## Project Grading Criteria (cont.)

- Each project will be evaluated according to the following criteria (cont.):
  - Are the following tools present:
    - IPO diagram
    - PF/CE/CNX/SOP
    - FMEA
    - MSA
    - Proof of Improvement (at least one from each group):
      - Capability Analysis (Sigma level, yield, FPY, COPQ, dpm, Cp or Cpk).
      - Graphical Analysis ( Paretos, Histograms, Run Charts, Control Charts, Box Plots, Scatter Diagrams, etc. as appropriate).
      - Statistical Analysis -- Shifts in Average and Standard Deviation (t-tests, F-tests, Rules of Thumb, Confidence Intervals, Hypothesis Tests, etc., as appropriate).
    - Control Plan
  - Are the savings documented?

## Project Report Outline

- Part 1: COVER PAGE

### Include:

–Individual's name, company name, title of project, contact information, time frame of project, and date of submittal

## Project Report Outline (cont.)

- Part 2: EXECUTIVE SUMMARY

*This is a 1-page summary that gives a broad understanding of the project and can be read as a standalone document*

Include:

- Problem statement and business case
- Performance level at start of the project and gap
- Root cause(s) of problem
- Improvement options & what option was selected
- Control Plan put in place
- Conclusions, Recommendations, and Business Results



## Project Report Outline (cont.)

- Part 3: DEFINE PHASE

*This is a discussion and introduction to the project, the problem(s) addressed, and accomplishments during the “Define” phase of the project.*

Include:

- Problem Statement with Goals (Business Case)
- Project Scope
- Key business indicators (measures) that will be affected
- Identification of Process Owner, Champion, Green Belt candidate, team, and any other key stakeholders
- Identification of Customer(s) and customer requirements (CTCs)



## Project Report Outline (cont.)

- Part 4: MEASURE

*This is a discussion of the current state analysis and target levels of performance, along with accomplishments during the “Measure” phase of the project.*

Include:

- Process Flow (PF)
- IPO with performance measures identified
- Process capability analysis
- Refined Problem Statement
- Measurement System Analysis
- Tools used



## Project Report Outline (cont.)

- Part 5: ANALYZE

*This is a discussion of the analysis related to the performance gaps. Problems and bottlenecks should be identified, along with their root causes, as well as other accomplishments during the “Analyze” phase of the project.*

Include:

- Key Input variables (CE/CNX/SOP)
- Verification of root cause(s) with data
- Relationships of inputs to outputs
- Tools used (e.g., scatter diagram, hypothesis tests, etc)



## Project Report Outline (cont.)

- Part 6: IMPROVE

*This is a discussion of the alternate solutions that were considered to improve performance, along with other accomplishments during the “Improve” phase of the project.*

Include:

- Potential solutions identified and tested
- Solution(s) implemented
- Post-improvement capability
- Cost-benefit analysis
- Tools used (ex. IPO Matrix, hypothesis tests, etc.)



## Project Report Outline (cont.)

- Part 7: CONTROL

*This is a discussion of the suggested methods for holding the gains from the project, along with other accomplishments during the “Control” phase of the project.*

Include:

- Enhanced (updated) process flow and SOPs
- Identification of key performance measures being monitored
- Control plan (ex. FMEA, control charts, accountability, frequency, defect detection capability, etc.)
- Verification of business impact (results)



## Project Report Outline (cont.)

- Part 8: SUMMARY

*This is a restatement of the problem(s) addressed, key learnings, chosen solution, and project results.*

Include:

- Actual project results (or projected results)
- Summary of recommendations and solutions
- Lessons learned
- Future plans or recommendations



## Project Report Outline (cont.)

- Part 9: APPENDIX (Optional)

–Include additional data, charts, figures, tables, etc. not included in other parts of the report



# Report Guidelines

- Here are some guidelines and helpful hints when writing your project report:
  - The report should be eight to fifteen single-spaced pages (including your tables and charts).
  - The report must provide clear evidence of the DMAIC process and appropriate use and interpretation of the tools and methodology.

# Report Guidelines (cont.)

- Here are some guidelines and helpful hints when writing your project report (cont.):
  - Use graphics (ex. Pareto diagrams), tables, and figures in the body of the report wherever possible in support of written discussion. Make sure all graphs and charts are labeled clearly.
  - Include any long, bulky data sets you wish to use in the appendix rather than in the body of the report.
  - Define any acronyms or abbreviations used.
  - Translate the gains of the project into financial results whenever possible.

## Six Sigma Green Belt Certification Resource Package

The following is included in the registration resource package for Green Belt Certification:

1. Knowledge Based Management (text)
2. Basic Statistics: Tools for Continuous Improvement (text)
3. Lean Six Sigma Tools Guide (handbook)
4. SPC XL (software)
5. Knowledge Notebook (for project documentation)
6. 2 hours of Consulting/Project Report Review time with AAA

Certification Resource Package items 1-5 will be mailed to the enrollee upon enrollment.



## Certificate and Certification Options in Six Sigma

- Six Sigma Green Belt Training Certificate
- Six Sigma Black Belt Training Certificate
- Six Sigma Green Belt Certification  
(Certified Green Belt)
- Six Sigma Black Belt Certification  
(Certified Black Belt)

