

# Lean Six Sigma - Green Belt

Certificate: IASSC - Lean Six Sigma Green Belt Duration: 5 days /40 hours/ (option 3 day intensive bootcamp /24 hours/) Course Delivery: Classroom Course ID: LSS1310 (Minitab) Language: English

# **Course Description:**

The Lean Six Sigma Green Belt course aims to prepare you to perform the role of a Lean Six Sigma Green Belt. The comprehensive curriculum covers everything within the Lean Six Sigma D-M-A-I-C body of knowledge and the problem solving strategy is demonstrated throughout the course. Various Statistical and Business Improvement tools help you to understand the flow and process of the methodology.

The course comprises of a comprehensive course book with all slides and slide explanations. The course also includes over 30 exercises, 20 templates and almost 40 Data Sets. The activities will facilitates interactive group learning within a class.

The course can be offered with either Minitab or SigmaXL as the statistical analysis package. These software packages work well with JMP or any other statistical analysis programs.

Candidates are prepared to take the International Association of Six Sigma Certification (IASSC) Lean Six Sigma Green Belt exam at the end of the course.

# Audience:

This course is suitable for professionals who will be involved in Six Sigma projects:

- IT Professionals
- Business Professionals
- Engineers
- Operations Managers
- Business Professionals from financial, government, healthcare, manufacturing, education, and supply chain industries
- Internal consultants
- Change agents
- Project managers
- Team Leaders and Team Members



# Learning Objectives:

Individuals certified at this level will have demonstrated their understanding of:

- Understand the concept of Six Sigma and the DMAIC approach to process improvement
- Understand the tools involved in the Define, Measure, Analyse, Improve and Control phases
- Understand the use of the tools in characterising processes, analysing process data, solving problems and controlling processes
- Use the key tools to solve practical business problems
- Lead small Six Sigma project teams or assist Black Belts to deliver tangible business results on larger projects

## **Prerequisites:**

None

## **Course Materials:**

Participants will receive the following:

- A Course Book with slide explanations.
- Relevant Exercises

Minitab or SigmaXL software packages are not provided as part of the course.

## Examination:

- Exam Format: Closed-book, Web-Based. The only thing permitted is a calculator
- Questions: 100 multiple-choice questions: approximately 20 multiple-choice questions from each major section of the ILSS BOK for Green Belts
- Passing Score: 70%
- Exam Duration: 3 hours proctored exam
- Proctoring: Live

#### **Technical Requirements:**

For eBooks:

- Internet for downloading the eBook
- Laptop, tablet, Smart Phone, eReader (no Kindle)
- Adobe DRM supported software (e.g. Digital Editions, Bluefire Reader)

#### **Course Outline:**

#### Define Phase

- Understanding Six Sigma
- Six Sigma Fundamentals
- Selecting Projects
- Elements of Waste
- Wrap Up and Action Items



#### **Measure Phase**

- Welcome to Measure
- Process Discovery
- Six Sigma Statistics
- Measurement System Analysis
- Process Capability
- Wrap Up and Action Items

#### **Analyze Phase**

- Welcome to Analyze
- "X" Sifting
- Inferential Statistics
- Introduction to Hypothesis Testing
- Hypothesis Testing Normal Data Part One and Part Two
- Hypothesis Testing Non-Normal Data Part One and Part Two
- Wrap Up and Action Items

#### **Improve Phase**

- Welcome to Improve
- Process Modeling Regression
- Advanced Process Modeling
- Designing Experiments
- Wrap Up and Action Items

#### **Control Phase**

- Welcome to Control
- Advanced Experiments
- Capability Analysis
- Lean Controls
- Defect Controls
- Statistical Process Control (SPC)
- Six Sigma Control Plans
- Wrap Up and Action Items

#### **Examination:**

http://www.iassc.org/six-sigma-certification/green-belt-certification/





#### **Certification Testing**

The IASSC Certified Lean Six Sigma Green Belt (ICGB) Exam is a 3 hour 100 question, closed book, proctored exam based on the IASSC <u>Universally Accepted Lean Six Sigma Body of Knowledge for Green</u> <u>Belts</u>. The Exam contains approximately 20 multiple-choice questions from each major section of the ILSSBOK for Green Belts and is administered in more than 8,000 Testing Centers located within 165 countries throughout the world.

#### Requirements

In order to achieve the professional designation of IASSC Certified Green Belt (ICGB) from the International Association for Six Sigma Certification candidates must sit for the IASSC Certified Lean Six Sigma Green Belt Exam and achieve a minimum score of 385 points out of a total 500 points. There are no prerequisites required in order to sit for the IASSC Certified Lean Six Sigma Green Belt Exam. For more about this see FAQ's and the IASSC position on knowledge and application.

Cost of Green Belt Exam is 300 Euro, VAT excluded