

COURSE OUTLINE

Lean Six Sigma Green Belt



DESCRIPTION OF THE COURSE

A Lean Six Sigma Green Belt can eliminate waste and improve the performance of any business process. This course has been designed to provide participants with a thorough knowledge of the Lean & Six Sigma (LSS) methodologies, tools and principles. Through a combination of pre-reading, classroom training, practical exercises, hands on application of the LSS toolkit on a mock operational process, direct interaction with their facilitator and other attendees, participants will gain the skills to...

- Analyse their organisation's processes to firstly identify the <u>priority</u> issues leading to waste & inefficiency
- o Deeply investigate and understand the systemic root causes for these issues
- Understand what process improvement tools are available and how to best apply them to eliminate the source of the problem and drive customer value.

Effective Green Belts are capable of implementing significant change within their organisation. As such participants will also learn how to manage people through change, how to lead an improvement project team, and how to engage with enterprise leadership.

The Continuous Improvement Maturity Model will be introduced which charts the necessary changes organisations need to make, to move towards World Class Operational performance (Structured > Managed > Predictable > Capable > World Class)

INTENDED AUDIENCE

Mid to senior level professionals who are working in a role that involves the review and improvement of a process and its performance.

Those looking to lead business improvement projects, drive productivity initiatives or other measurable business outcomes

Lean Six Sigma is commonly used within world class organisations as a foundational skillset for all senior management candidates

SUMMARY OF COURSE CONTENT

Unit 1. World Class Performance E1. Competitive Strategies:

E2. History of Continuous Improvement:

E3. Philosophy and Principles:

E4. Organizational Process

Management:

E5. Project Selection Process:

Unit 2. Process Improvement Deployment E1. Management of Change:

E2. Leadership:

E3. Team Development

Unit 3. Project Management E1. Team Formation:

E2. Process Improvement Roadmaps:

E3. Voice of the Customer (VOC):

E4. Project Charter:

E5. Project Management Techniques:

Unit 4. CIMM Level I – Creating a Solid

Foundation

E1. Organized Work Environment:

E2. Standardized Work:

E3. Quality Management:

Unit 5. CIMM Level II – Creating a CI Culture E1.

E1. Kaizen:

E2. Basic Quality Tools:

E3. Basic Management Tools:

Unit 6. CIMM Level III – Creating Stable &

Efficient Processes

E1. Process Mapping:

E2. Lean Performance Metrics:

E3. Value Stream Analysis:

E4. Reducing Muda (Waste):

E5. Reducing Muri (Overburden):

E6. Reducing Mura (Unevenness):

E7. Value Stream Improvement:

E8. First Time Right:

SUMMARY OF COURSE CONTENT (continued)

Unit 7. CIMM Level IV – Creating Capable Processes

- E1. Critical to Quality (CTQ):
- E2. Six Sigma Performance Metrics:
- E3. Statistics:
- E4. Distributions:
- E5. Measurement Systems:
- E6. Hypothesis Testing & Confidence Intervals:
- E7. Correlation and Regression:
- E8. Process Capability & Performance:
- E9. Design of Experiments (DOE):
- E10. Statistical Process Control (SPC):

Unit 8. CIMM Level V – Creating World Class Products and Services

- E1. Product Lifecycle Management (PLM):
- E2. Innovation Management:

COURSE FORMAT

- Pre workshop study and confirmation of basic Lean Six Sigma concepts prior to workshop attendance
- All Participants will receive a hard copy of the course text book

"Climbing the Mountain: Mindset, skill set and toolset for Lean Six Sigma Green Belts"

Theisens, H.C.; LSSA 2015, ISBN: 978-94-92240-06-4

Course text book will be provided a minimum 10 business days prior to the workshop start and the cost is included in the tuition fee.

- Capability Development Plan to confirm trainees learning objectives and how they plan to apply the skills they will learn
- 3 Day Classroom based Training Workshop
 - Introduction / re-cap of theory
 - o Practical exercises to understand tools and theory
 - Team based & "Hands on" Process Improvement of Simulated Manufacturing Process

CERTIFICATION OPTIONS

- Theory Certification Option: 3-hour Certification Exam
 - Conducted in person in a classroom setting, invigilated by OE Partners
 - Open book, maximum of 2 subject texts can be used
 - o 60 Questions, paper based
 - Pass Rate is 63.3 % (38 marks out of 60)
 - o Formal Exam Assessment and Certificate Issued by APMG International
- Project Certification Option: Submission of two Lean Six Sigma projects
 - Project Coaching and Review is provided by an OE Partners Lean Six Sigma Black Belt Facilitator
 - Formal Project Assessment & Certification by APMG International
 - Each project must be at CIMM Level III or higher
 - Each project must demonstrate an achievement of saving / cost avoidance of at least \$30,000 per year

PREREQISITES

It is recommended that participants have a minimum of 3 years working experience in a professional role and firm grasp of applied mathematics and basic statistics.

REQUIREMENTS FOR PRE-COURSE WORK (e.g. pre-reading)

In order to maximise the practical learning elements of the face to face workshop participants are required to undertake a certain amount of pre-course work.

Pre course requirements are sent out minimum 10 business days prior to the workshop start. This should take between 4-6 hours of the participants time.