

# UNIVERSITY OF STRATHCLYDE LEAN SIX SIGMA COURSES



1/12/2016

Yellow and Green Belt Training Programmes

the place of useful learning

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## What is a Six Sigma Yellow Belt?

A Yellow Belt is an employee who has received introductory training in the basic fundamentals of Six Sigma. A Yellow Belt is expected to demonstrate a greater understanding of processes by using the simple tools and techniques of Six Sigma. Their role is to gather data, participate in problem solving exercises and add their personal experiences to the exploration process of Six Sigma projects. They have the skills necessary to identify, monitor and control profit-eating practices in their own processes and are prepared to feed that information back to Black Belts and Green Belts working on larger system projects.

### Who is the course designed for?

This two-day course is designed for personnel from a manufacturing, service or transactional background who are being considered for involvement in the Six Sigma approach to improvement. For example:

- quality engineers
- · process engineers
- customer service officers
- customer service advisors
- process improvement personnel

### Skills gained on completion of the course:

- Understand what Six Sigma is
- Understand what Lean Thinking is
- Understand the importance of Six Sigma DMAIC Methodology for problem solving
- Appreciate the role of the tools and techniques of Lean Six Sigma within problem solving scenarios
- Understand the roles and responsibilities of Yellow Belts and other team members
- Understand the critical success factors for implementing Lean Six Sigma
- Understand how projects are selected in a Lean Six Sigma programme

Course participants will be expected to carry out a continuous improvement project demonstrating a minimum of £2.5K in savings. On completion of the course and the successful submission of a project report delegates will be awarded a Certificate of Performance in Lean Six Sigma Yellow Belt training from University of Strathclyde.

### **CURRICULUM**

The course consists of two days classroom-based training which will cover:

- Lean and Six Sigma Overview
- Introduction to Lean and Six Sigma
- Key Concepts of Lean and Six Sigma
- Why Lean Six Sigma?
- Lean Six Sigma Infrastructure
- Lean Vs. Six Sigma

### **Basic Tools of Lean**

- Lean Thinking
- Introduction to Basic Tools of Lean
- Exercises

## **Lean Six Sigma Implementation Strategy**

- Lean Six Sigma Readiness
- Critical Success Factors and Barriers to
- Lean Six Sigma Deployment
- Project Selection

#### **Performance Measurement Metrics**

- Cost of Poor Quality
- Yield (First Pass and Throughput Yield)
- Defect per million opportunities (DPMO) & Sigma Quality Level (SQL)
- Cycle time and OEE

## Six Sigma Roadmap: A basic introduction to the DMAIC Methodology

- Defining the Customer's Problem
- Measuring Current Performance
- Analysing the data
- Six Sigma Process Improvement
- Sustain the Six Sigma Gains

### Cost:

- £700.00pp (Industry Rate)
- £600.00pp (early bird please check our website)

For general enquiries contact <a href="mailto:cpd@strath.ac.uk">cpd@strath.ac.uk</a>, for technical enquiries including information on the certificate of performance contact DMEM's CPD Coordinator Mr Jose Hernandez at:

jose.hernandez@strath.ac.uk

## What is a Six Sigma Green Belt?

Six Sigma Green Belts fulfil the roles of Process Improvement or Quality Improvement team members on full time Black Belt projects. A Green Belt team member can come from any level within an organisation and provide subject matter expertise for a project. They may be considered as leaders on certain projects that don't require the Black Belt level of analytical rigour. Six Sigma Green Belts are groomed in the Six Sigma DMAIC methodology which helps them to cascade Six Sigma tools and techniques throughout an Green Belt competence prepares organisation. individuals within an organisation to use simple Six Sigma tools and techniques to define, measure, analyse, improve and control processes.

## Who is the course designed for?

This five-day course is designed to provide personnel from a manufacturing, service or transactional back-ground with an understanding of the Lean Six Sigma Green Belt areas of knowledge and will help develop the critical skills required for successful project management. It is targeted towards:

- Process Engineers / Managers
- Quality Engineers / Managers
- Production Engineers / Managers
- Customer Service Managers
- Maintenance Managers
- Operations Managers

## Skills gained on completion of the course:

- Structured problem-solving methodology for addressing business improvement projects
- Basic (and some advanced) quality / process improvement tools and techniques
- How to generate bottom-line financial results
- Understand the "Dos" and "Don'ts" of Lean Six Sigma
- Recognise the key attributes of a successful Lean Six Sigma programme
- Understand the role of a Green Belt in Lean Six Sigma implementation
- Appreciate the project selection process, prioritisation of projects etc.

### **CURRICULUM**

The course consists of five days classroom-based training which will cover:

- Six Sigma overview
- Six Sigma vs. TQM
- Six Sigma Metrics
- Six Sigma Methodology (DMAIC)
- Introduction to Lean Management
- Lean vs. Six Sigma
- Basic Tools of Lean
- Development of Project Team Charters
- Define and Map Process to be improved
- Introduction to basic statistics for Process improvement
- Project selection, prioritisation and review
- Understand Variation in Processes
- Statistical Thinking for all
- Seven tools of Quality Improvement
- Measurement System Analysis
- Hypothesis tests
- Cost of Poor Quality
- Control Charts
- Design of Experiments
- Process Capability Analysis
- Development of Control Plans and implement Monitoring System
- Critical success factors of Six Sigma
- Case studies and examples
- Exercises
- Discussion of Six Sigma Projects and guidance on execution of projects

Course participants will be expected to carry out a continuous improvement project demonstrating a minimum of £25K in savings. On completion of the course and the successful submission of a project report delegates will be awarded a Certificate of Performance in Lean Six Sigma Green Belt training from University of Strathclyde.

### Cost:

- £2250.00 pp (Industry Rate)
- £2150.00 pp (early bird please check our website)

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