# LEAN SIX SIGMA BLACK BELT

# The Ultimate Six Sigma Qualification

### Good for you, Good for your organisation

PMI's Lean Six Sigma Black Belt takes the toolset further, giving deployment much higher profile, ensuring that efforts are applied to critical problems and strategic issues and developing a programme management and support structure. Financial justifications are more rigorous and close tracking by finance departments has reported gains running into many millions.

# PMI's Lean Six Sigma Black Belt training ensures you will:

- Become knowledgeable about the advanced Lean and Six Sigma concepts and how to apply them
- Work with stakeholders, sponsors and Green Belts to more effectively manage change
- Lead robust improvement to achieve results in an ever shorter time frame
- Present your project status to executives in a concise but complete manner.

# Take your capabilities even further

### Prerequisite: Green Belt Certified

Our Lean Six Sigma Black Belt programme is for Green Belts who want to generate more benefits for their organisation by building on their qualifications and experience in variability reduction.

We offer a pre-Black Belt assessment process for the Black Belt course for delegates who have taken a Green Belt either with another provider or internally.

The assessment is a simple and straightforward process to gain entry to our Black Belt course and ensures delegates can maximise their learning.

# What's Included?

- Pre-course webcast
- 10 days of classroom training
- 12 month access to the Online Yellow Belt
- 12 month access to the Essential Tools for Improvement Series
- Full Reference Manuals
- A copy of The Process Manager Plus
- Online e-Exam
- Project assessment.

#### WAYS TO EXPERIENCE THIS COURSE:







**Public** 

: In-house

Custom

### How long does it take?

2 modules of 5 days split by about a month.

### What are the benefits?

- Understand in depth Lean and Six Sigma philosophy, methods, and process improvement
- Facilitate Lean and Six Sigma and business improvement approaches to key projects
- Drive complex problem resolution and solution development
- Increase their competence in variability reduction and advanced statistical process control.

### Who should attend?

Highly motivated individuals working in improvement that are confident working with complex numbers.

### How can I do it?

Either as an in-house programme in your company or organisation OR as part of our public training programme.

Visit our website for the latest locations and dates.

# Discover more, visit www.pmi.co.uk or call +44 (0) 1676 522 766







### LEAN SIX SIGMA BLACK BELT









### **LEAN SIX SIGMA GREEN BELT**

### INTRODUCTION **WEBCAST**

# WEEK 1 **CLASSROOM (5 DAYS)**

## WEEK 2 **CLASSROOM (5 DAYS)**

### **PROJECT ASSESSMENT**

#### BEFORE COMPLETING THIS COURSE

To become a Full Lean Six Sigma Black Belt you need to complete a Full Lean Six Sigma Green Belt first.

#### AFTER COMPLETING THE WEBCAST

Set-up improvement project

#### **AFTER COMPLETING WEEK 1**

Lead Own Project

#### AFTER THE COURSE

e-Exam consisting of:

- Open book exam
- Case study

### WEEK 1

#### INTRODUCTION TO **BLACK BELT ROLE**

- Review of Green Belt
- Roles in Improvement
- Role as a coach
- Introduction to Minitab

#### INTRODUCTION TO SOFT **SKILLS & REGRESSION**

- Building on control charts
- Effective relationships
- Linear regression
- Short run SPC
- Case Study

#### **DATA ANALYSIS &** INTRODUCTION TO COACHING

- Case study
- Hypothesis testing
- Own project reviews
- Coaching Green Belt teams

# HANDLING SUBJECTIVE

- Improvement as a system
- Affinity Diagram
- Consulting and influencing skills

#### **SUBJECTIVE DATA &** COACHING SKILLS

- Interrelationship diagraph
- Case study
- Peer review
- Project sponsorship
- Review of week

## Selecting a Project

Improvement projects are the engines of Six Sigma programmes and a vital component of PMI's Black Belt programme.

Projects should be selected by the steering team as a result of analysis of the whole system, in the context of the strategic goals and current vital issues.

The successful implementation of the project is a critical part of achieving the strategic goals.

### WEEK 2

#### **FURTHER REGRESSION &** CASE STUDY

- Review of week 1
- Advanced regression
- Case Study

#### EXPERIMENTAL DESIGN & TESTING

- Measurement systems
- Introduction to design of experiments (DOE)
- Case Study
- Barriers to communication

# **CREATIVE THINKING &**

- Solution selection
- Measurement scales
- Non-Para hypothesis
- Own project reviews
- Communication skills

#### **FURTHER DATA ANALYSIS**

- Attributes agreement analysis
- Sampling data
- Own project reviews
- Own data analysis

### **IMPLEMENTATION**

- Risk management (FMEA)
- Sample size and power
- Implementation planning
- Review of programme

### Taking your performance to the next level

"It has helped us to see processes as a way of understanding how problems cascade through operations"

PMI delegate





