

# ASQ Certified Six Sigma Green Belt (CSSGB)

**In-House Training (6 Days)** 

**ASQ Exam Preparation** 

**ASQ Exam Simulator** 



in-company for teams



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# ASQ Green Belt At A Glance



Globally recognised certification



6-day intensive exam preparation course



Certified Six Sigma Body of Knowledge



ASQ eligibility criteria applies (see page 9)



Exam preparation and 365 days access to ASQ exam simulator



Designed for those with process improvement experience using Six Sigma



In-house programme tailored to your team's needs



Delivered by an experienced Lean Six Sigma Black Belt trainer

# About This Programme

Achieve Global Certification as a Six Sigma Green Belt

This is an exam preparation programme for those who want to achieve the prestigious ASQ Certified Six Sigma Green Belt (CSSGB).

Combining intensive classroom training with unlimited access to an online exam simulator for 365 days, this programme is designed to equip participants with an understanding of the Certified Six Sigma Body of Knowledge, confidence to apply these skills effectively, and everything they need to pass the ASQ examination.



Learn More about the Role and Responsibilities of a Green Belt



# Programme Objectives

# Upon completion of this programme, participants will:

- Be prepared to undertake the ASQ Certified Six Sigma Green Belt exam (CSSGB), based on the ASQ Body of Knowledge for Green Belts.
- Gain a firm knowledge of the ASQ Body of Knowledge for Green Belts.
- Learn the tools and techniques to support quality improvement projects at green belt projects.



# ASQ - American Society for Quality ASQ is a global organisation, championing both high standards in quality and best application of six sigma methodolgies across all sectors. ASO Certified Six Sigma Green Belt (CSSGB)

# **Delivery Style**

### How is this Course Structured?

This programme is comprised of 6 days intensive classroom training, followed by a period of self-directed study by each participant.

During this study period, participants will have access to ASQ simulated exams.

# **ASQ Exam Simulator**

- 365 days of unlimited simulator access
- 3 x full exams, with 100 questions per exam
- 2 x exam modes:
  - Simulation Mode: timed test with a score provided and review questions.
     Excellent for building confidence and for use in days leading up to the real ASQ exam.
  - **Review Mode:** focus on specific areas and explanation given for correct and incorrect answers. Ideal for use as a study tool.

# **Delivery Style**

We run this ASQ Certified Six Sigma Green Belt Course for in-company (often called "in-house" or "on-site") training.

This means that we deliver training exclusively to your team on a date you choose.

There are many benefits to choosing an in-company style of delivery.

# How In-Company Training Works

When you get in touch with us about in-company training - either by phone or by requesting a quotation using the button on this page - our expert training consultants will work with you to find the best training solution for your needs.

We will create a programme that addresses the issues and goals at the top of your list, and choose a training delivery method and dates that suits you best.



# Why In-Company?

- ▼ Tailored for Your Team While still adhering to the course syllabus, we can take your business and any challenges you are facing into account when delivering the course. We will make the training delivery relevant to your team.
- You Choose the Delivery Style We can deliver this training as an inperson, classroom style course (where we come to your location), or by live, virtual classroom training (learn more on the next page).
- ✓ Flexibility In-company training gives you the ability to schedule training at a time that works best for your schedule. It removes the inconvenience of having to take someone out of their role for training at a busy time.

**Get a Quote** 

# Delivery Style: Live Virtual Training

Virtual training enables participants to connect to live, trainer-led sessions from wherever they are located.

It's easy to connect and they will gain the benefits of a classroom style of training while enjoying the convenience of learning at home.

# **How Virtual Training Works**

In advance of training, we will send each participant the information and link they need to join the training.

To connect with our live training, participants will need a steady internet connection and a device with a web-camera, speakers, and microphone. Most home internet connections work perfectly for live virtual training. These days, almost all smartphones, computers, and tablets have built-in web cameras, speakers, and microphones.

Our training consultants will make sure everyone has guidelines on how to get connected. It's an easy, user-friendly process.



# Why Virtual?

- ✔ Learn from Home This is an ideal solution for teams that work remotely. They can connect with real-time training sessions from wherever They are currently based.
- ✓ Delivered by Experts By choosing our live virtual training, your team will learn from subject matter experts. They will also benefit from the ability to ask questions and gain advice from our trainers.
- ☑ Group Training This style of training enables participants to interact virtually with their team. Via our online platform, they will be able to take part in group discussions and exercises without leaving home.
- ✓ Focused Learning Environment One of the key advantages of an inperson classroom style training is the focused learning environment. Live, trainer-led virtual training also provides this high-impact format.

**Ask a Question** 

**Get a Quote** 

# Eligibility Requirements

# **Eligibility Requirements**

A Lean Six Sigma Green Belt is someone who works on process improvement projects, often under the guidance of a Black Belt practitioner.

- This programme is designed for process improvement personnel who have experience using lean and six sigma continuous improvement tools.
- ✓ Participants require an aptitude for data analysis and statistics.
- A minimum of 3 years working in a process improvement environment. This must encompass utilising at least 1 of the areas in the Six Sigma Green Belt Body of Knowledge (Define, Measure, Analyze, Improve, Control).
- This must be paid working experience. Internship, coursework, or any other kind of unpaid work experience will not meet the ASQ eligibility requirements.



# Unsure if your team meet the eligibility requirements?

No problem! We offer a range of Lean Six Sigma certification options.

Get in touch with us by Freephone 1800 910 810, or click below to Ask A Question.

We'll be happy to advise the right solution for your team's Lean Six Sigma training.

**Ask A Question** 

# What Are The Benefits?

### Flexibility and Convenience

This is an in-company programme, meaning that we deliver training exclusively to your team at a venue chosen by you, and on a date that works with your schedule. This minimises any disruption to your team's productivity levels.

### Customisation

Although we adhere to a syllabus that covers the ASQ Certified Six Sigma Body of Knowledge, we can tailor the focus of the programme to be most relevant to the processes and challenges of your organisation.

# Strengthen and Develop Skills

The content covered during this programme will develop each participant's skill as a process improvement specialist. Taking their skills to the next level will increase the positive impact they can have on the profitability and quality levels of your organisation.

# Consistency Across Your Process Improvement Teams

By attending the same training, everyone who works on process improvement initiatives within your organisation will gain a consistent level of skill, and a common terminology for six sigma tools and processes. This increases efficiency and improves clarity in communications.

# Comprehensive ASQ Green Belt Exam Preparation

This course is designed to equip your team with everything they need to pass their ASQ Certified Six Sigma Green Belt exam first time. During training, we cover sample questions and answers. Once training is complete, each participant gains 365 days of access to an online ASQ exam simulator.

# International Certification

The ASQ Certified Six Sigma Green Belt qualification is known and respected at a global level. By certifying your team at this level, you are raising the bar for the standard of improvements and process quality in your business.

# Programme Content, Module 1: Overview

1 Overview: Six Sigma & the Organisation (13% of exam: 13 questions)

### Six Sigma & Organisational Goals

- Value of Six Sigma
- Organisational goals and six sigma projects
- Organisational drivers and metrics

# Lean Principles in the Organisation

- Lean concepts
- Value-stream mapping

# Design for Six Sigma (DFSS) Methodologies

- Road maps for DFSS
- » DMADV (define, measure, analyse, design, verify)
- » IDOV (identify, design, optimise, verify)
- » alignment with DMAIC
- Basic failure modes and effects analysis (FMEA)
- Design FMEA and process FMEA



# Programme Content, Module 2: Define Phase



### **Define Phase**

(23% of exam: 23 questions)

### **Project Identification**

- Project selection
- Process elements
- Benchmarking
- Process inputs and outputs
- » SIPOC model
- Owners and stakeholders

### Voice of the Customer

- Customer identification
- Customer data
- Customer requirements
- » quality function deployment (QFD)

# **Project Management Basics**

- Project charter
- Project scope
- Project metrics
- » primary metrics
- » consequential metrics
- Project planning tools
- » Gantt charts
- » critical path method (CPM)
- » program evaluation and review technique (PERT)
- Project documentation
- Project risk analysis
- Project closure

# **Management and Planning Tools**

- Affinity diagrams
- Interrelationship diagraphs
- Tree diagrams
- Prioritisation matrices
- Matrix diagrams
- Process decision program charts (PDPC)
- Activity network diagrams



# Programme Content, Module 3: Measure Phase

Measure Phase

(23% of exam: 23 questions)

# Process analysis & documentation

# **Probability & statistics**

- Basic probability concepts
- » independent events
- » mutually exclusive events
- » multiplication rules
- » permutations
- » combinations
- · Central limit theorem
- » confidence intervals
- » hypothesis testing
- » control charts

### Statistical distributions

- Normal
- Binomial
- Poisson
- Chi square
- Student's T
- F

### Collecting & summarising data

- Types of data and measuring scales
- Sampling and data collection methods
- Descriptive statistics
- Graphical methods
- » scatter diagrams
- » normality probability plots
- » histograms
- » stem-and-leaf plots
- » box-and-whisker plots

Module 3 continued on next page...

# Programme Content, Module 3: Measure Phase

(3)

Measure Phase (continued)

(23% of exam: 23 questions)

# Measurement System Analysis (MSA)

- Gauge repeatability and reproducibility
- Measurement correlation
- Bias
- Linearity
- Pere

# **Process & performance capability**

- Process performance v process specifications
- Process capability studies
- Process capability  $(C_{p'}, C_{pk})$  and process performance  $(P_{p'}, P_{pk})$  indices
- Short-term v long term capability & sigma shift



# Programme Content, Module 4: Analyze Phase



**Analyze Phase** 

(15% of exam: 15 questions)

### **Exploratory data analysis**

- Multi-vari studies
- Correlation & linear regression

### **Hypothesis testing**

- Basics
- » statistical and practical significance
- » sample sizes
- » tests for significance level
- » power
- » type I and type II errors

- Tests for means, variances, and proportions
- » hypothesis tests
- » paired-comparison t-test
- » F-test
- » ANOVA
- » chi-square



# Programme Content, Module 5: Improve Phase

**Improve Phase** 

(15% of exam: 15 questions)

# Design of Experiments (DOE)

- Basic terms
- DOE graphs and plots
- Root cause analysis
- » cause and effect diagrams
- » relational matrices
- » problem-solving tools

### **Lean Tools**

- Waste elimination
- » pull systems
- » kanban
- » 5S
- » standard work
- » poka yoke
- Cycle-time reduction
- Kaizen and kaizen blitz



# Programme Content, Module 6: Control Phase



**Control Phase** 

(11% of exam: 11 questions)

# **Statistical Process Control (SPC)**

- SPC basics
- Rational subgrouping
- Control charts
- » X-R
- » X-s
- » individual and moving range (ImR or XmR)
- » median
- » p, np, c, and u

# **Control plan**

### Lean tools for process control

- Total productive maintenance (TPM)
- Visual factory



**Exam Questions & Answers** 

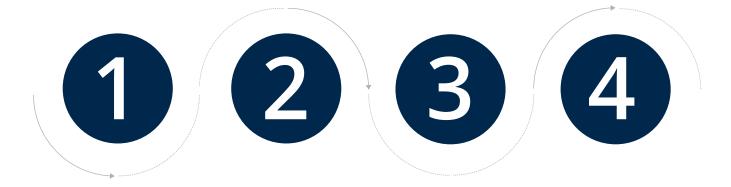


Ready to Go?

**Get a Quote** 

**Ask A Quick Question** 

# Path to ASQ Certification



1. Schedule our intensive, 6-day, classroom-based course for your team.

2. Study period and access to exam simulator

3. Schedule online exam

4. Achieve and maintain your certification.



# 3 Ways to Get Started



### Talk to Us

You can reach us by phone on Freephone 1800 910 810, or 01 861 0700 (mon - thurs, 9.00am - 5.30pm, fri, 9.00am - 5.00pm).

We will be happy to answer any questions you have and advise on the best option for your team's ASQ Certified Six Sigma Green Belt training.

Freephone 1800 910 810



# **Get a Tailored Quotation**

To request a tailored quotation for in-company ASQ Certified Six Sigma Green Belt training, click the button below.

We will be in touch with a detailed quotation fitting your team's requirements.

**Get a Quote** 



# **Ask A Question Online**

If you'd prefer to contact us online, request a phonecall, or to get in touch outside of office hours, using the "Ask A Quick Question" button below is the best option.

We'll respond with the information you need.

**Ask A Quick Question** 

# **About Us**

# Professional Development - 34 Years of Innovation and Excellence

We believe that the key to a thriving and rewarding career is continuous professional development.

For over 34 years, Professional Development has led the way in providing practical, innovative courses leading to relevant and respected certifications.

We specialise in delivering training for core business skills including project management, agile, scrum, lean six sigma, management, communications, sales, it service management, and training design and delivery skills.

Our courses are designed to expand your skills, & enhance your career potential

# **Stay Connected**

















### **Our Courses**

Our courses are a balanced blend of both theoretical learning and practical application. This focused learning environment optimises the impact of training.



### **Our Clients**

We provide training for Ireland's leading brands, working with companies of all sizes in every industry. We also provide training for non-corporate organisations.



### **Our Team**

Our trainers are chosen for their engaging manner and expertise in a chosen field. They bring a wealth of experience to each programme they deliver.



### **Our Certifications**

In many sectors, international certification is now essential. We provide many options for globally recognised certification in each subject area.

# Contact Us

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