



## RSS 18404 Six Sigma Black Belt Development Programme

Ensure understanding of Six Sigma Black Belt tools and techniques with this comprehensive and practical Royal Statistical Society (RSS) certified ISO 18404 Six Sigma Black Belt Development Programme.

This 13-day course comprises:

- our 5-day Lean Six Sigma Green Belt training course, teaching delegates the knowledge and skills to identify and quantify opportunities for improvement, identify stakeholder interests, reduce variation within processes, and evaluate risks associated with Green Belt projects
- 5 days focusing on Black Belt competencies, providing delegates with the ability to lead improvement projects, facilitate Green Belt projects using the define, measure, analyse, improve, control (DMAIC) methodology, participate in gate reviews, and analyse Big Data sets
- 2 days on the practical application of Lean Six Sigma Black Belt competencies through a case study approach
- 1 day preparation for Black Belt certification with the Royal Statistical Society under the RSS 18404 Sector Scheme. Delegates will also receive 2 hours of 1-1 coaching with a Master Black Belt.

### COURSE DURATION

13 days

### CPD

Equivalent to 93 hours

### COURSE PRICE

TBC

### IN-COMPANY TRAINING

[Check availability](#)

### CERTIFICATES

All delegates will receive a certificate on completion.

## Who should attend?

This RSS ISO 18404 Six Sigma Black Belt Development Programme is designed for delegates who wish to:

- become a certified Six Sigma Black Belt against ISO 18404 through the [RSS 18404 Sector Scheme](#)
- gain an advanced understanding of Six Sigma and acquire practical experience of applying ideas learned

The course is also recommended for those who are responsible for:

- justifying business process improvement
- identifying process issues, root causes and solutions
- leading improvement projects using the define, measure, analyse, improve, control (DMAIC) methodology
- analysing Big Data sets to identify opportunities for improvement
- delivering agreed benefits of a Six Sigma project within an organisation
- taking a leadership role with responsibility for stakeholder needs during Six Sigma implementation projects
- identifying gaps in competencies within the team or organisation
- training others to perform at a Green Belt or Black Belt level

As the course incorporates our Lean Six Sigma Green Belt training course, no prior knowledge is required.

If a potential delegate has previously completed our Six Sigma Green Belt training course or similar, please contact our team to book just the final 8 days of this course.

Please note this course includes advanced mathematical and statistical elements. Delegates require a laptop with Excel, or similar, for the duration of the course.

## Key topics

Topics covered on the course include:

- role and competency requirements for Green Belts and Black Belts
- DMAIC(T) project management
- stakeholder management
- Lean principles
- leading change, sustainment and customer focus
- statistics, data and problem solving
- training, coaching and mentoring Green Belts
- benchmarking
- advanced Lean
- Six Sigma approaches and tools
- analysing Big Data sets
- practical application of Six Sigma Black Belt competencies
- defining the project
- justifying business process improvement
- identifying benefits and project risks
- identifying process issues and root causes
- identifying and proving solutions
- documenting and presenting projects and solutions
- training others to perform at the same level
- preparation for Black Belt certification with the RSS
- review of ISO 18404 competency requirements
- building a portfolio of competencies
- progress review
- RSS mock assessment centre

## Skills gained

On successful completion of the course delegates will be able to:

- understand the RSS 18404 Sector Scheme certification process
- define a project, justify business process improvement and identify benefits and project risks
- prepare a Project Charter for a Six Sigma Black Belt process improvement project
- identify process issues and root causes
- apply appropriate Six Sigma tools and statistical techniques
- lead improvement projects and facilitate Green Belt projects using the DMAIC methodology
- participate in all gate reviews directly through prepared presentations of the work accomplished to date

Upon achieving ISO 18404 certification delegates will be eligible to join the RSS register, which is used by organisations to identify certified Lean and Six Sigma professionals

## In-company training

Receive this course exclusively for your organisation, either in-person at your chosen venue or online in our user-friendly Virtual Classroom.

Enjoy cost-effective flexibility and personalised learning with tailored messaging designed to address your unique business challenges.

[Contact us for a quote.](#)



All delegates will receive an RSS approved ISO 18404 Six Sigma Black Belt certificate upon completion.

## Course agenda

Our training courses are designed to optimise the learning experience for delegates both in face-to-face settings and in our Virtual Classroom.

Under the guidance of our expert tutors, attendees will follow an agenda which is briefly outlined below:

- Welcome and Introductions
- ISO 18404:2015 & Certification Requirements
- Introduction to Lean, Six Sigma & Lean Six Sigma Roles
- Lean Six Sigma & the Relationship to Quality, Efficiency and Productivity
- Process Thinking and the (Lean) Six Sigma Toolkit
- Exercise: Claims Authorisation Process
- DMAIC(T) Project Management & Decision Making
- Exercise: Formulate a Project Charter & Stakeholder Analysis for a LSS Project
- Interpersonal & Team Leadership Skills Stakeholder Management
- Exercise: Major Activities – Inputs and Outputs
- Creativity Tools & Defining the Project Mission
- Exercise: Enlightenment Process
- Exercise: Applying the Problem Definition Sheet and 5W2H Method
- Exercise: 5 Why's
- Principle & Practice of Lean Value Stream Analysis
- Exercise: Value Added
- Exercise: Construct a Value Stream Map
- Change Management
- Exercise: Syndicate Exercise: Successfully Managing Change for Lean Six Sigma
- Leadership and Motivation
- Exercise: Development and Independence Level Analysis form
- Exercise: Belbin questionnaire & Conflict Questionnaire
- Customer Focus
- Exercise: House of Quality
- Risk Management
- Exercise: Identify & Evaluate Risks Associated with a Green Belt Project Proposal
- Sustainability & Control
- Presentation & Reporting Skills
- Numeracy
- Data Acquisition for Analysis
- Exercise: Appropriate Data
- Statistical Concepts
- Exercise: Tutor Led Exercises on Microsoft Excel
- Practical Problem Solving
- Six Sigma Tools
- Statistical Software Use
- Role & Competency Requirements for Black Belts
- Comparison Black Belt to Green Belt Requirements
- Managing the Competencies Requirements
- Requirement to Train, Coach & Mentor Green Belts
- Gap Analysis & Action Plans
- Exercise: Review Your Competencies
- Exercise: Your Action Plan
- Benchmarking
- Exercise: Identify Appropriate Topics to Benchmark

- Poka Yoke Mistake Proofing
- Exercise: Sources of Defects
- Exercise: Red Flag Conditions
- Exercise: Defect Identification
- Theory of Constraints
- Exercise: High/Low Inventory
- Integrity of Data
- Exercise: Distribution of Time
- Multiple Regression and Correlation
- Exercise: Investigate the Correlation
- Introduction to Design of Experiments
- Full Factorial Designs
- Fractional Factorial Designs
- Analysing Big Data Sets
- Exercise: IT Help Desk
- Process Design / Specification
- Survey Design and Analysis
- Taguchi Methodology
- Box-Behnken Designs
- Practical Application of LSS Black Belt Competencies – Transactional / Manufacturing
- Exercise: Call Centre (Transactional) Case Study / Extrusion (Manufacturing) Case Study
- Defining the Project, Justifying Business Process Improvement & Identifying Benefits & Project Risks
- Exercise: Identify Potential Benefits
- Identifying Process Issues & Root Causes
- Exercise: Prepare for Analysis Gate Review
- Identifying & Proving Solutions
- Exercise: Improve the Call Centre Process / Improve the Extrusion Process
- Documenting and Presenting Project & Solution
- Exercise: Prepare Project Documentation
- Training Others to Perform at Same Level
- Exercise: Motivate, Launch & Improve Performance
- Individuals & Teams to Describe Own Strengths and Plans for Self-Development
- Exercise: Self-Review
- Review of ISO 18404:2015 Competency Requirements
- Building Your Portfolio of Competencies
- Progress Review
- Exercise: Review Your Competencies
- Exercise: Draft Your Action Plan
- Mock Assessment Centre
- Exercise: Mock Presentation, Mock Interview, Mock Test
- Review & Close

The tutors' knowledge of industry, varying disciplines and application on the six sigma methods within each was useful.

**Excelitas Uk Ltd**

Our tutor had a vast knowledge of the subject matter and was happy to change the pace dependent on delegates and complexity of literature. They had useful real-life examples to strengthen the course material.

**Bevan Motor Bodies**

Good pace set throughout the course and materials were well explained, both tutors did an exceptional job.

**UK-NSI Ltd**

[Read our Lean and Six Sigma training course reviews](#)

## Why train with Bywater?

Bywater is the leading independent provider of professional management systems training in the UK.

Our expert training offers practical understanding of how to realise the benefits and assess the success of implementing and operating successful management systems.

Bywater delegates know they can rely on proven training delivered by experts at times and locations to suit their needs.

**40 years** established

**100+** course titles

**15** UK locations

**1000+** courses annually



Global Virtual Classroom

CQI & IRCA, ISEP, RSS and IOSH approved training provider.



CHECK AVAILABILITY

## Booking is easy

Simply select a course date and venue and fill in the online form. View our full range of courses at [www.bywater.co.uk](http://www.bywater.co.uk)

If you have any questions please call us on 0333 123 9001, use our online chat or email [contact@bywater.co.uk](mailto:contact@bywater.co.uk)

# Bywater