



## Statistical Process Control (SPC) Training

Gain a basic understanding of the principles of statistical process control (SPC) and the methodologies for performing capability studies on our Statistical Process Control training course.

This highly practical 1-day course includes a variety of interactive activities and workshops based on real-life examples, designed to encourage open discussions without the need for detailed understanding of statistical theory.

Delegates take part in activities based on subjects such as normal distribution, interpretation of charts, and process capability. Workshops cover the topics of data location and spread, sampling strategies, preparation of control charts, control chart interpretation, choosing a control chart, and calculation of capability indices.

With a knowledge of SPC delegates can help to maximise profit through improved product quality, greater productivity, streamlined processes, reduced wastage and reduced variation.

### COURSE DURATION

1 day

### CPD

Equivalent to 7 hours

### COURSE PRICE

From £625 + VAT

### DATES & VENUES

[View dates & venues](#)

### CERTIFICATES

All delegates will receive a certificate on completion.

## Who should attend?

This course is designed for anyone required to perform capability studies and develop and interpret control charts. It is suitable for:

- individuals involved in manufacturing, quality, inspection, design/process engineering
- those who are required to develop and interpret control charts

Participants are encouraged to bring their laptop computer or a calculator with basic statistical function for use in the practical workshops.

Additional Core Tools courses include [Introduction to APQP and PPAP](#), [Measurement Systems Analysis \(MSA\)](#), and [Failure Mode and Effects Analysis \(FMEA\)](#).

Claim a discount of £100 if you book any 2 of our Core Tools courses together.

If you would like to receive training in all 5 Core Tools – APQP & PPAP, FMEA, SPC and MSA – take a look at our [Core Tools Package](#), offering significant savings over booking the 4 courses separately.

## Key topics

Topics covered on the course include:

- the existence and measurement of variation
  - concepts
  - variation
  - data tables, histograms and run charts
  - normal distribution
  - accuracy and precision
  - measures of variation (mean, mode, median, range, standard deviation and variance)

- understanding and managing variation
  - common and special causes
  - taking appropriate action on common and special causes
  - process improvement methodology
  - reacting to special causes
  - statistical control: what it is and the advantages of processes being in control vs tampering with the process
- role of control charts
  - role, uses and definition of control charts
  - types of control charts
- X-range charts
  - use of charts
  - preparation and use of control charts
  - examples
  - measures of variation (mean, mode, median, range, standard deviation and variance)
- attributes charts
  - c, p, np and u charts (overview)
  - examples
- capability analysis
  - process capability
  - performing a process capability study

## 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
- Module 1 Processes and Measurement Variation
- Workshop 1 The Normal Distribution
- Module 2 Ways of Describing Data
- Module 3 Steps for construction of Control Charts, Variable and Attribute Charts
- Workshop 2 Control Chart Construction
- Workshop 3 Control Charts
- Module 4 Analysis and Interpretation of Charts
- Module 5 Attribute Charts
- Workshop 4 Selecting an Appropriate Control Chart
- Workshop 5 Attribute Control Charts
- Module 6 Process Capability
- Workshop 6 Calculation of Capability Indices
- Workshop 7 Control Chart Interpretation
- Review & Close

## In-company training

Ideal for groups, you can receive this course exclusively for your organisation at your premises 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.](#)

## Skills gained

By the end of this Lean Six Sigma Yellow Belt training course, delegates will:

- generate, utilise and interpret a variety of control charts (Xbar/R, S and attribute)
- perform a capability study and determine process capability indices (Cp, Cpk, Pp and Ppk)
- interpret the results in the context of the process variation and product acceptance criteria



Delegates will also receive a certificate of completion, which recognises their new knowledge of statistical process control.

The tutor was very knowledgeable and all his years of experience in industry and training really shows in his teaching. His teaching style is very good and explains everything clearly and with patience.

**Technipmc Umbilicals Ltd**

Tutor managed to make the topic very interesting and used real world examples to explain complicated scenarios.

**PPC Broadband Fiber Ltd**

The tutor communicated in an engaging and effective way, and was able to understand and respond to the needs of individuals and group as a whole.

**Saint Gobain Gyproc**

[Read our Core Tools 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.



**VIEW DATES & VENUES**

## 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)

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