

# Six Sigma - Black Belt

The Six Sigma Black Belt course is designed to provide learners with the skills to manage and deliver process improvement projects.

During the programme, delegates will lead a Six Sigma project following DMAIC framework including data collection, advanced statistics, root cause analysis, and the quantification and selection of appropriate solutions.

## Entry Requirements

Delegates must be employed in a position where they will have the opportunity to lead an improvement project team.

## Career Prospects

Successful delegates will gain increased opportunities to progress into senior Continuous Improvement or Six Sigma positions. Delegates also gain the opportunity to achieve the Six Sigma Master Black Belt certificate.

## Course Modules

This course covers the five stages of Six Sigma with additional focus on managing and delivering process improvement projects. This course covers:

### Define

- Be able to describe the characteristics of effective teams
- Understand how to maintain effective working relationships
- Understanding the roles within effective teams
- Complete a Team Role Analysis Questionnaire
- Describe the importance of communication
- Complete a Team Effectiveness Study

### Measure

- Sample sizes & types of data
- Stratification, disaggregation & experimentation
- Common measurement problems
- Gauge R&R Study

Coleg Afan  
Coleg Bannau Brycheiniog  
Academi Chwaraeon Llandarcy  
Canolfan Ragoriaeth Adeiladwaith Maesteg  
Coleg Castell-nedd  
Coleg Y Drenewydd  
Coleg Pontardawe  
Canolfan Adeiladwaith Abertawe

Afan College  
Brecon Beacons College  
Llandarcy Academy of Sport  
Maesteg Construction Centre of Excellence  
Neath College  
Newtown College  
Pontardawe College  
Swansea Construction Centre





- Process Capability & Statistical process control continued
- Cp & Cpk Interpretation

#### Analyse

- Regression & Correlation analysis
- Design of Experiments
- Hypothesis Testing

#### Improve

- Leading Change
- Change Response Types
- Influencing & Conflict Resolution
- Project Monitoring & Review

#### Control

- Effective project handover
- Standardised Work Combination Table, Standard Work Chart
- Benefits realisation
- Ongoing project Monitoring
- Final review

## Assessment

This course is assessed via:

- Project Presentation
- Portfolio Assessment

## STUDY MODE

PT

## LOCATION

## COURSE LENGTH

2W

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