

Lean Six Sigma Black Belt (ISO18404)



In a nutshell

A Personal Learning Account is a new initiative from the Welsh Government. It is a free and flexible way to learn. The initiative will offer people the chance to access free, part-time courses that offer flexible and convenient learning around their existing lifestyle.

A certified Lean Six Sigma Green Belt is a professional who is trained in Lean Six Sigma methodologies and tools and can implement and sustain high-impact projects.

The Lean Six Sigma Black Belt course was developed for individuals looking to be trained to an advance level in Lean Six Sigma methodologies. This course will equip you with the skills and knowledge needed to successfully lead complex improvement projects in all areas of a business.

This course is for...

... anyone aged 19+, living in Wales, in employment, looking to take the next step to a great career



COURSE INFORMATION LEAFLET

... those who are currently working in more senior job positions such as Team Leader, Project Manager or Quality Assurance, Process Improvement, Supply Chain, Production, Business Analysis or Lean roles

Course content

The course includes:

Lean Fundamentals
Six Sigma Fundamentals
Voice of the Customer (VoC)
SIPOC
Introduction to Value and Value Stream Mapping
Identifying Waste
Introduction to Flow and Pull
Root Cause Analysis
Exam Practice Quiz

DMAIC methodology
Introduction to Six Sigma Statistics
Measurement System Analysis
Introduction to Statistical Process Control (SPC)
Exam Practice Quiz

Introduction to Minitab
Pareto Charts and 80/20 rule
Kano Analysis
Pugh and other X-Y Matrices
Six Sigma Statistics
Measurement System Analysis

Process Capability
Inferential Statistics
Correlation and Regression Analysis
Intro to Hypothesis Testing
Design of Experiments
Mock exam practice

Review of mock exam and exam preparation

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The Role of a Black Belt
Advanced use of DMAIC
Risk Analysis for Black Belts
Change Management
Hypothesis Testing Non-Normal Data
Advanced Regression Analysis

Advanced Design of Experiments
Fractional Factorial Experiments
Response Surface Methods and Method of Steepest Ascent / Descent
Prep Black Belt exam #2 (equivalent to Green Belt)

Review of mock exam
Final exam preparation

Entry Requirements

This Lean Six Sigma course is for those who have completed the Yellow and Green Belts and are looking to upgrade to the Black Belt qualification.

Additional information

This course is delivered by virtual classroom. Virtual classrooms are equivalent to face-to-face classroom courses, but delivered in an online environment.

You will need to put aside 5 days to attend this course.

The course includes exams which are invigilated online and you need to have access to an internet enabled device with a microphone and a webcam.

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