

**ZENITHLEANTRAINING**

## **Lean Six Sigma Certified Green Belt**

2014 Brochure

This Brochure details the Lean Six Sigma certified Green Belt course for online, in public and 'in house' training formats. The full curriculum is available on request

Zenith Lean Ltd  
29/08/2014  
[www.zenithleantraining.com](http://www.zenithleantraining.com)  
0800 9788569



# Green Belt Lean Six Sigma Training Course

The Zenith Lean Six Sigma Green Belt course initially follows the first stage Six Sigma Yellow Belt and Lean Foundation courses, culminating in the Green Belt certification. Certificates are issued as you progress.

This course is unique to Zenith, since it is a specially designed course to give potential Lean Six Sigma practitioners an understanding of both methodologies and how they can be used together.

This awareness can then generate the drive to move forward in the field of Lean Six Sigma to seamlessly achieve Black Belt or a Lean Practitioner certification.

## WHY CHOOSE US?

- We use the full, undiluted Lean and Six Sigma curriculum
- Our exams are secured to the ISO 13053 pt 1 & 2 Standard
- If you are not satisfied with our SCORM accredited online training, we will give you your money back plus 10% extra - guaranteed!

## COURSE DELIVERY

ONLINE

IN PUBLIC

IN-HOUSE

ALL FORMATS FOLLOW THE SAME SYLLABUS

## ONLINE TRAINING

The online course using our learning management system (SCORM accredited) has the advantage to the individual of working at their own speed and time with maximum licence duration of six months. (However, should there be a need to extend the licence due to unforeseen circumstances, we can renew the licence). If you are new to Lean or Six Sigma, you will have all the tools necessary to make a huge impression on your new or current employers. No other training provider can give you this head start with the tool kit we provide at no extra cost.

**Typical online duration**  
**25 hours - Exercises: 30 hours – case study Time: 10 hours approx**



0800 978 8569  
[www.zenithleantraining.com](http://www.zenithleantraining.com)  
[mail@zenithleantraining.com](mailto:mail@zenithleantraining.com)

# PUBLIC AND IN-HOUSE TRAINING

**FREE** access to Zenport - our interactive online learning portal

The open access course (public or company in-house) is run over five days. This is to minimise the time individuals are out of the business, and to enable them to work on their projects. Zeniths Lean Six Sigma Green Belt training course encompasses contemporary training methods, our Lean Six Sigma tutors deliver the training using lectures, presentations, Brief - Monitor -Debrief sessions, advanced accelerated learning techniques using metaphors, anchoring, analogies and stories that appeal to the seven learning styles, group exercises, simulations as well as teach backs, case studies, video clips, games and discussions.

## SUPPORT

**Interaction with tutors can really add significant value to your learning experience!**

At Zenith you have access to an amazing pool of knowledge and experience! Our subject specialists have had long careers in the Lean Six Sigma profession, and have also been training managers and all work as consultants for a range of businesses. They are here to share their knowledge and experience with you, help you develop your understanding and guide you through the learning process. All specialists are available 24/7.

At Zenith we will also give you "Life Time" support on completion of your course through email/Skype or telecon at no extra cost to you.

Taking full advantage of our service and benefiting from working as part of a team can positively impact on your motivation and lead to great success. We are here to help and motivate you achieve your goal in a time and cost effective manner.



0800 978 8569  
[www.zenithleantraining.com](http://www.zenithleantraining.com)  
[mail@zenithleantraining.com](mailto:mail@zenithleantraining.com)

## WHO IS IT FOR?

This option is ideal for those who are on Continuous Improvement teams or anyone else that is, or will be doing work placed Lean Six Sigma interventions - including consultants. It is ideal for those seeking a return to work, promotion and for those seeking a competitive edge when applying for new roles. Zenith provides all the support necessary to make you effective in your role to ensure you drive substantial cost benefits to your organisation by working with you on your achievable case study. If you require help with a business case for Line manager's approval, please contact us for a business case template.

## COURSE OBJECTIVES

On successful completion of the Lean Six Sigma Green Belt Training Course you will be able to:

- Improve your processes within the business by using Lean (waste removal) and Six Sigma (variation removal) as part of the DMAIC method
- Explain the tools and techniques of Lean Six Sigma principles concepts to others
- Lead improvement teams to solve multi functional problems within the business
- Understand the need for change and driving a change transformation programme within the business
- Understand the need for correct data collection and how to analyse it in solving problems
- Using Lean and Six Sigma methodologies to solve problems and issues saving staff time and business costs
- Redesign existing products, processes or services to achieve Six Sigma performance over their life cycle
- Relate to the customers concerns using the Voice of the Customer methodology across the business
- Having a professional academic and vocational qualification in Business Improvement that is recognised in all industries throughout the world of business

## COURSE COMPLETION

Delivery of the achievable Green Belt Project (case study provided by Zenith) by the Student via 12 slide PowerPoint submission and reviewed by our Master Black Belt, Self assessed 100 Multiple Choice Questions, Subject matter questions and answers reviewed through our bespoke one to one tutoring, overall tutor Assessment.



0800 978 8569  
[www.zenithleantraining.com](http://www.zenithleantraining.com)  
[mail@zenithleantraining.com](mailto:mail@zenithleantraining.com)

## FEATURES

- Completely free - £thousands worth of templates to produce your own Lean Business System formats include:
- Podcasts
- Word Templates
- Excel templates and Examples
- PDF Info Sheets
- Tools and Techniques recipe card
- Team Roles Assessment - discover your role, your ideal team and how you contribute to the team - simple and easy to use but highly useful in designing your team
- Videos
- Personal Tutor Support- offering 24/7 feedback
- On-line quizzes and practice assessment questions giving instant feedback
- Our online e-learning lessons: our subject specialists teach complex topics and invite you to interact to test your understanding
- Our students' favourite: our study buddy, a paper based guided learning resource created especially for distance learners, packed with essential step by step guidance, activities and learning tips from expert tutors delivered on completion of the online training as a referral tool (optional)



## FREE SOFTWARE!

- ZenStat© Tools and methods dashboard - our complete suite of automated templates and statistical applications! Making the data analysis easier
- 5S and 6S Auditing software! A must for small and big businesses
- ZENMap© Automated mapping software for real Lean professionals - you put the data in it tells you the rest



0800 978 8569  
[www.zenithleantraining.com](http://www.zenithleantraining.com)  
[mail@zenithleantraining.com](mailto:mail@zenithleantraining.com)

## **COURSE COMPLETION**

Delivery of the achievable Green Belt case study (case study provided by Zenith) by the Student via 12 slide PowerPoint submission and reviewed by our Master Black Belt, Self assessed 100 Multiple Choice Questions, Subject matter questions and answers reviewed through our bespoke one to one tutoring, overall Tutor Assessment.

## **COURSE CONTENT**

Our Green Belt course delivers through the Yellow Belt and Lean Foundation Learning objectives first as enablers, so that the student, who may have had no real time involvement in the discipline, can feel confident about taking on the course. Our unique one to one tutoring adds to our potential student's confidence in completing the course.

In the Green Belt course the two disciplines (Lean & Six Sigma) are combined at each of the various DMAIC stages.

### **Overview**

Zeniths Green Belt course has been further developed as a more in-depth approach to the Lean Six Sigma methodology.

Introduction to Lean Six Sigma history, terminology and explanations, exercises on 8 Wastes and Calculating the Sigma Level, looking at the roles involved in Lean Six Sigma followed by the overview of the stages of Lean Six Sigma - Looking at the DMAIC certification and the project set up, understanding the Gate Review Process and the Design for Six Sigma (DFSS) overview.

Throughout all the chapters in the Green Belt course there are various exercises to show understanding of the subject matter using various downloadable templates or your own produced documents which will be assessed by your tutor, including the complete Lean Six Sigma Toolkit in excel.

### **Define Phase**

Overview of the Define phase, understanding the use of the Project Charter and Lean Quad of Aims, looking at Sigma problem statements, identifying their faults, followed by a problem statement exercise, understanding how to construct an In / Out of Scope document and where and when it is used, followed by your own problem statement exercise, the purpose and function of the SMART objectives and how to construct the goals, the importance and purpose of the SIPOC (Suppliers, Inputs, Process, Outputs, Customers); where it is used and when, understanding



0800 978 8569  
[www.zenithleantraining.com](http://www.zenithleantraining.com)  
[mail@zenithleantraining.com](mailto:mail@zenithleantraining.com)

why the need for Team Creation, how its importance is paramount to the project, looking at RACI (Responsible Accountable Communicate Involved) methodology, its function and when it should be used and looking at the need for precise communications planning, the use of the Voice of the Customer / CTQ's, Understanding the need to involve the stakeholders associated with the project and how to influence them in a positive way; using the Stakeholder Analysis methodology, looking at Project Planning, Risk Assessment and Failure Modes Effect Analysis (FMEA), understanding the principles behind the project launch and using the project folder.

## Measure Phase

Looking at the different types of data, understanding Probability, what are measures and how they are used, looking at the purpose of Central Tendency Variation and understanding Deviation Mean and Variation, Looking at Tampering, Graphical displays - Histograms, Dot Plots, Box Plots, Introduction to Minitab overview, looking at the fundamentals of Process Mapping and developing process maps with all relevant data using Zeniths unique process mapping tool, ZenMap©, the use of Takt (takt means 'meter' in German or 'pulse') time, and where it fits into the Lean Intervention work, understanding the purpose of Lean Value Stream mapping with the importance on the 3 types of value, data collection planning and why it is essential whilst mapping the current state of a process, measurement systems analysis and Gauge R&R Sampling, the use of Process Capability, interpretation of Control Charts, Moments of Truth and the Theory of Constraints. Holistic tools such as Runners, Repeaters and Strangers and the psychology of Lean and Visual techniques such as mapping, team charters, banner headlines and Kaizen.

## Analyse Phase

Analyse phase overview, understanding the Six Steps to Analysis phase, the use of team Brainstorming to identify problems and issues, using the Cause and Effect diagrams (Root Cause Analysis) better known as the Fishbone Diagram, looking at types of data analysis - Pareto Charts with the relationship to Runners, Repeaters and Strangers, (this is particularly useful for schedulers and planners!) Run charts, types of sampling and their effects, the use of Frequency charts along with Confidence intervals, Hypothesis testing and Central Limit Theorem. Looking at T tests and F tests, ANOVA and Chi Squared, Design of Experiments, Regression and Correlation, followed by the Summary of Analyse Phase, Lean Beauty contest (a scientific approach to identifying various proposition to an improvement in the least wasteful way) Lean 2P (Process Planning - the method used to develop the Toyota Prius in record time). Introduction to Minitab statistical analysis.



## Improve Phase

*Note: this is where Six Sigma utilises Lean methodology in abundance. Without a good foundation in Lean principles and its focus on process waste (the 8 wastes), then the Green Belt as a competence is very limited. We are the only training provider to give the complete package.*

Improve phase overview, generating solutions and creativity, 5S, 5C and 6S involving Visual and Display Management controls, looking at Little's law, the purpose of the use of Takt Time to drive efficient production and schedules (for services), Kanban, and Flow (Push v Pull). Lean Cells, principles of Lean and adherence, The Lean Morale curve, TPM & OEE, Single Minute Exchange of Die (SMED) its origin and the purpose and how it is utilised in changeover of resources, components and re- role of equipment, how to identify the use of where Poka Yoka is used and its purpose, why practitioners need to understand the principles of Kaizen, Reducing Complexity, looking at the need for Standardization along with evaluating and selection solutions that involves Decision Matrix, pilot testing, identifying solutions, Level Scheduling (heijunka), development of plans and programs for the implementation of the improvements, operational health checks, Standard work (which means adhering to a quality standard - not standardization), Lean Thinking, One Piece Flow, Inventory management (buffer stock), why economies of scale are wasteful, Systems Thinking (strategic Lean), Lean finance and why it is different to western accountancy practices (the focus is on cost not price). Ideal State Mapping (team based out of the box thinking and techniques to influence positive change), Future State Mapping (advanced methodology using proposed ideas to develop action plans and commitment from all levels of the organisation) and much, much more!

## Control Phase

Control Phase overview, DMAIC step by step summary, define and validate Process Management, Developing Standard Work and Procedures, Implementation of Statistical Process Controls (SPC and Control Charts), Determining Process Capability, the use of Benefits Tracking and understanding the need for cost avoidance, progression of meetings and Lean reviews involving project close out / handovers, visual management techniques, visual display techniques (they are quite different!), Policy Deployment (Hoshin Kanri), the transformation ruler, Quality x-matrix for Lean, Key Performance Indicators and congruence, The birth of the Balanced Scorecard and its comparison to Lean Policy Deployment.



## Lean Framework

The Lean Framework gives you a unique insight into understanding the importance of a 6S/5S Audit Programme, how to develop the audit templates and their usages, how to carry out an audit, exercise in auditing, an in-depth look at the SMED principles and when it is used, completing a SMED exercise looking at how to set-up Kanbans, including the rules of Kanban, the need for triggers, establishment of Pull systems, looking at Flow, its importance in a process and how to successfully map Flow, understanding the use of Poke Yoka (error proofing), its developer (Shingo) approach and the three types of error proofing.

## Policy Deployment (PD)

Understanding how traditional management operated, looking at the modern approach to managing in business organisations, understanding the need to have a business vision, looking at the Japanese Hoshin Kanri, the Western approach to Policy Deployment (PD), how the Hoshin Kanri approach works, understand the need for annual reviews, an in-depth look at the six stages of PD using our Zenmat™ matrix, how to carry out policy deployment using the deployment flow chart, the need for staff and management "buy-in" using the "catch-ball" methodology.

Completion of your case study/project and sent to your personal tutor.

## FEATURES

- Completely free - £thousands worth of templates to produce your own Lean Business System. Formats include:
- Podcasts
- Word Templates
- Excel templates and Examples
- PDF Info Sheets
- Tools and Techniques recipe card
- Team Roles Assessment - discover your role, your ideal team and how you contribute to the team - simple and easy to use but highly useful in designing your team
- Videos
- Personal tutor support- offering 24/7 feedback
- On-line quizzes and practice assessment questions: giving instant feedback



0800 978 8569  
[www.zenithleantraining.com](http://www.zenithleantraining.com)  
[mail@zenithleantraining.com](mailto:mail@zenithleantraining.com)

- Our online e-learning lessons: our subject specialists teach complex topics and invite you to interact to test your understanding
- Our students' favourite: our study buddy, a paper based guided learning resource created especially for distance learners, packed with essential step by step guidance, activities and learning tips from expert tutors delivered on completion of the online training as a referral tool (optional)

## BENEFITS TO YOU

Our training is designed for all positions within any business environment whether it is manufacturing, retail or service, public or private sectors: - general and departmental managers, change managers, project managers, supervisors, team leaders, business facilitators and individuals who will be leading improvement and change transformation programme or just problem solving a process either in a full time capacity or part time.

Even if you are not employed, the use of the tools and techniques can be applied using our flexible learning management system which gives you various choices or challenges to assist you in Learning about Lean Six Sigma to enable you to compete effectively for new roles or positions.

As a Lean Six Sigma consultant or practitioner you can offer your knowledge and expertise to businesses or organisations in the Lean Six Sigma methodology, and assist organisations to develop any improvement or transformational programme/change programme in their respective businesses.

Many organisations undertake Lean and Six Sigma transformations. This qualification will set you apart from the competition when competing for new or existing roles.

Many organisations require *mandatory* Lean Six Sigma certification to apply for specific roles whilst other organisations just *prefer* Lean Six Sigma certification when applying for jobs. This will be enough to set you apart.

You will have the ability to use and understand some of the tools and techniques in your current or future organisation.

You will have the best training money can buy because Zenith has designed its course to suit all learning styles. Our courses are also very robust.

Zenith can provide references for your job applications because we have excellent working relationships with our students.



0800 978 8569  
[www.zenithleantraining.com](http://www.zenithleantraining.com)  
[mail@zenithleantraining.com](mailto:mail@zenithleantraining.com)

It will develop your awareness to become more proactive in solving problems within your current or future organisation.

It will give you a sound foundation to proceed further to achieve higher awards of Black Belt and Master Black belt as well as the ability to develop your techniques as a Lean Practitioner.

**Testimonial:**

***This course has really opened my eyes to how things should be done, I had so many light bulb moments and revelations as I worked through it. I cannot wait to put it all in to practice.***

***Rob, my tutor was fantastic! His knowledge and ability to coach me using his experiences is what truly made my learning of the tools simple and straightforward. If you are remotely interested in process improvement, regardless of industry, I would say get yourself signed up with Zenith Lean training and become a certified practitioner.***



**James Briers**



0800 978 8569  
[www.zenithleantraining.com](http://www.zenithleantraining.com)  
[mail@zenithleantraining.com](mailto:mail@zenithleantraining.com)

## CERTIFICATION

On successful completion of the Yellow Belt and Lean Foundation phases, you will receive through the post those certificates awarded for those qualifications. The Green Belt certificate will be awarded on a successful completion of the overall course that includes the case study.

**In total you will receive 3 beautifully hand crafted certificates which are embossed by hand with legal foils showing your certification.**



## PRICELIST

**E-learning £800 + Vat (£960 Inc Vat), 6 month licence**

**Public Training £1300+ Vat (£1560 Inc Vat), 5 Days**

**In – House Training (£1400 + Vat), First 3 delegates pay full Price additional delegates apply 30% discount per person**

**Instalment options available for E-learning  
(5 monthly payments = £192 Inc Vat)**



0800 978 8569  
www.zenithleantraining.com  
mail@zenithleantraining.com