



Foundations in Lean Six Sigma Certificate

Program Syllabus



Foundations in Lean Six Sigma Certificate

Program Syllabus

Gain a practical understanding of the Lean Six Sigma approach through our *Foundations in Lean Six Sigma Certificate*. Earn the certificate by completing the *Insights of Lean Thinking* and *Driving Forward Change*

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01

Insights in Lean Thinking

Program Syllabus

COURSE OBJECTIVES

- Gain a deep understanding of the Lean approach
- Learn to identify customer value to maximise the value creation
- Ability to deconstruct process and develop improved solutions
- Apply lean tools & techniques to deliver improvements
- Understand how Lean Start-up can help drive innovation
- Synthesize what you learn into actionable project delivery

Insights in Lean Thinking is at the heart of what LeanScape is about – the application of the lean approach to maximise customer value and eradicate waste across our processes. This 6-week course is an in-depth focus on Lean, the tools, the methodology and the overall approach that has made so many organisations successful. You'll gain practical skills and mindset that will help you solve critical business issues and drive value to customers.

[View Course](#)

Week 1	LESSON 01 <i>Customer Value</i>	Be introduced to the Lean approach, explore the power and importance of creating customer value and how to identify different types of value in what you do.
Week 2	LESSON 02 <i>Identifying Waste</i>	Practise how to identify activities that do not add value to customers and be able to design environment that support our people and our processes
Week 3	LESSON 03 <i>Learning to See</i>	Getting beyond our assumptions is a key challenge as we explore how to deconstruct processes and how to build new and more efficient ways of working
Week 4	LESSON 04 <i>Why, Why, Why</i>	Learning to identify root causes is essential to build real and lasting solutions, so we explore simple and powerful tools designed to tease out the underlying issues
Week 5	LESSON 05 <i>Team Solutions</i>	No change will ever take place without others, so we explore short and long term solutions and how to lead a team to make lasting change
Week 6	CONCLUSION <i>Choose your challenge</i>	Learn how to refine your skills by adopting the A3 Problem-Solving tool and choose your real-world project challenge



01

LESSON 01

Customer Value

In this lesson, you'll get a brief overview of the course, be introduced to LeanScape's learning approach and be introduced to the fundamentals of Lean along with its focus on creating customer value

LEARNING GOAL

Practise how to identify activities that do not add value to customers and be able to design environment that support our people and our processes

VIDEO

How This Course Works – What you'll be doing and learning

In this next video, we provide an overview of how the course is designed and a simple framework for each lesson. We will share timings for Webinars and we will give you a complete overview of what to expect.

WEBINAR

Introduction to the History of Lean and why we need it.

During this live webinar, we will be reviewing the history and background of Lean (and Six Sigma). We will expand this with a focus on how Lean is applied today across businesses and why in a VUCA, Lean is more relevant than its ever been.

VIDEO

The 5 Lean Principles and PDCA

Understanding the scientific method and how the core lean principles build from this is fundamental to driving sustainable and continuous change across organisations.

VIDEO

Understanding how to identify value

Getting beyond our assumptions is a key challenge as we explore how to deconstruct processes and how to build new and more efficient ways of working. We introduce Process thinking.

ACTIVITY

Get out of your comfort zone and start identifying good and bad processes? Where do poor processes impact you as customers?

JOIN ONLINE

Join our Slack Learning Circles which are peer-led and provide an opportunity to discuss assignments, gain further understand and dive deeper into the course contents

REFLECT & DISCUSS

Why is Lean important to the world you know and where does it challenge what you currently do?



01 /02

LESSON 02

Identifying Waste

Being able to identify waste is a core skill for any lean practitioner trying to maximise customer value. You'll discover how to identify waste and create workplace environments that maximise value creation

LEARNING GOAL

Be introduced to the Lean approach, explore the power and importance of creating customer value and how to identify different types of value in what you do.

WEBINAR

An introduction to the 8 Wastes
TIMWOODS

In this webinar, we will introduce 8 different types of wastes that exist across workplaces. We will discuss MICROWE which can be a helpful reminder within Service sectors

ACTIVITY

Waste Walk

Walking the floor, the GEMBA,, can really help us stretch our ability to identify wastes in our offices and operations. Conduct a Waste Walk.

DISCUSSION

On Slack, share your notes on what you identified during your Waste Walk. Include photographs, videos and other diagrams which explain what was found.

WEBINAR

Workplace organisation (5S)

5S is a core concept to drive workplace organisation, setup and also helps make waste visible. We will review the core principles and how to apply them.

ACTIVITY

Identify one location where 5S could benefit the business and conduct the first 3S's. Remember to take before and after photographs

DISCUSSION

Share your notes on your 5S activity on Slack and share your photographs and videos

PEER FEEDBACK

Provide feedback on the work of at least two of your peers' assignments



01 /03

LESSON 03

Learning To see

Learning to move beyond your assumptions and deconstruct processes. In this lesson, you'll learn how to deconstruct processes using different tools and identify the different types of waste and value adding activities.

LEARNING GOAL

Getting beyond our assumptions is a key challenge as we explore how to deconstruct processes and how to build new and more efficient ways of working

VIDEO

Understanding Process & Standardisation

In this video, you 'll learn the basic ideas behind processes, the need for standardisation and the various types of process map techniques

VIDEO & ACTIVITY

SIPOC

Next we will begin with a short video which introduces the process mapping tool known as the SIPOC (Supplier, Input, Process, Output, Customer) before producing a SIPOC either in groups or individually – you will have the choice.

VIDEO

Value Stream Mapping

The next video introduces one of the most powerful tools in the Lean Toolbox – Value Stream Mapping. You will be given the opportunity to practise the tool and to share.

VIDEO

Activity Process Mapping

The final video looks at Activity Process Mapping and how by deep-diving processes we can discover huge opportunities for improvements and often uncover hidden madness

ACTIVITY

Document a process map for the "Coffee Video" which will be shared and share your map on the Learning Circle for group discussion and feedback.

DISCUSSION

What type of assumptions or judgements did you have about a process that turned out to be false? What do you find most challenging about listening with your eyes?

EXPLORE MORE

Learning to See and bring good at process understanding and mapping takes practice. Check out these additional resources if you want some more tips, tricks and perspective.



01 /04

LESSON 04

Why, Why Why

Too many times we fix the first thing we find only to find that the problem does not disappear. Learning to identify the root cause is critical to create long term sustainable change

LEARNING GOAL

Learning to identify root causes is essential to build real and lasting solutions, so we explore simple and powerful tools designed to tease out the underlying issues

WEBINAR

Root Cause Analysis

In this webinar, we will cover the core concepts of Root Cause Analysis with a high level introduction to 5 Whys, Pareto 80/20 and Fishbone diagrams.

ACTIVITY

Why, Why, Why, Why, Why

Practising the 5 Why's is important as often what seems simple at first glance hides complexity. Conduct and share a 5Why analysis on an issue of your choosing

ACTIVITY

Pareto 80/20

Take one of the data sets and using the Pareto, build a Pareto to identify which Categories of issues you will explore further

PEER FEEDBACK

Provide feedback on the 5Why and/or Pareto submission of at least 2 of your peers' assignments. Was the right root cause identified?

VIDEO

Problem Solving format

In this video, we review A3 Problem Solving and 8D Problem solving approaches to identify, correct and eliminate recurring problems.

REFLECT & DISCUSS

Examine your past experience where you think you knew what was going on, only to find that something turned about to be different. What ways can you help your team to overcome their assumptions about what is happening?

EXPLORE MORE

Learning to See and bring good at process understanding and mapping takes practice. Check out these additional resources if you want some more tips, tricks and perspective.



01 /05

LESSON 05

Team Solutions

Identifying solutions is one thing, but learning how to lead teams and manage teams is often more important to the success of your projects. We explore how to identify the right solutions and how to understand your teams development

LEARNING GOAL

No change will ever take place without others, so we explore short and long term solutions and how to lead a team to make lasting change

VIDEO

The stages of team performance

We begin by having by introducing the stages of team formation and how to manage teams in each stage to achieve for Performing stage.

DISCUSSION

What best describes the teams in your work environment? What can you do to get the team in the performing stage?

WEBINAR

Identifying Solutions

During this webinar we look at the difference between standard problem solving and the Lean Startup Approach and how they differ

VIDEO

Prioritising Solutions

This video looks at long and short term solutions and how we must prioritise solutions based on business requirements

VIDEO

Just in Time

In the last video, we introduce the concept of Just In Time as we review the difference between Batch, Flow, Takt and Pull processes

DISCUSSION

Where can you identify Just In Time being used in your work environment or elsewhere? Share you examples on the Learning Circle

EXPLORE MORE

Looking to learn more about designing new products? Check out the range of resources, ideas and concepts that link Design Thinking, Lean Startup and Agile Development



01 /06

LESSON 06

Choose your Challenge

Take what you've learned and turn it into a real life project challenge that delivers change. This is the crucial step that turns learning and insights into the fuel for tomorrow. Make change real.

LEARNING GOAL

Learn how to refine your skills by adopting the A3 Problem-Solving tool and choose your real-world project challenge

VIDEO

Identifying the right problems to solve

In this video, we will look at what makes a good problem to solve and why some types of issues are better than others. Connecting your idea to the business is critical for management buy-in and support

WEBINAR

The Story of A3 Problem Solving

In this webinar, we deep-dive the A3 Problem solving tool and look at how this story telling tool empowers change through a structured approach

VIDEO

Creating the right team & understanding stakeholders

In this next video, we explore how to engage and manage stakeholders as well as motivating teams.

VIDEO

Gate-Reviews & Success

The final video looks at project stages and how to ensure that as you move forward, you cover off the key elements at each phase. We explore what success looks like and how to leverage key factors in driving success

ACTIVITY

Identify a project that you feel able to improve and begin by documenting the problem statement and background to the project. Share your project challenge on Slack

PEER DISCUSSION

Review the project challenges identified by your peers and provide constructive feedback on 2 of the projects sharing why you like/dislike the project and any challenges you have.

PROJECT CHALLENGE

8 to 12 week project timescale

Before the course is considered complete, your challenge is not to use your knowledge and new insights to deliver a real world improvement project using A3. Share your question and project progress on Slack and benefit from both peer and expert feedback as you progress. Making change real.

02

Driving Forward Change

Program Syllabus

COURSE OBJECTIVES

- Gain a deep understanding of the Lean Six Sigma approach
- Learn the DMAIC approach and how Lean & Six Sigma link together
- Explore various tools that use data based decision
- Get comfortable testing your projects hypothesis
- Explore change management, stakeholder engagement and business delivery
- Be comfortable leading change projects to make a difference

Driving Forward Change is a deep dive into the DMAIC problem-solving approach. This 6-week course will teach you how to Define, Measure, Analyse, Improve and Control your projects and bring others in on your vision of the future. With your final real-world project challenge you will receive the Foundations in Lean Six Sigma Certificate (Green Belt).

[View Course](#)

Week 1	LESSON 01 <i>Lean & Six Sigma</i>	An introduction to how Lean & Six Sigma can be used as a joint tool kit for driving successful change across businesses
Week 2	LESSON 02 <i>DMAIC Intro</i>	Following an introduction to DMAIC, get comfortable defining and measuring process improvements along with developing project charters and teams
Week 3	LESSON 03 <i>Analyse to Improve</i>	Learn how to use data analysis and stats to identify your root cause along with ways to brainstorm improvement ideas and prioritise them
Week 4	LESSON 04 <i>Control & Sustain</i>	We wrap up the DMAIC approach learning more about how to control improvements over the long term and how to sustain the gains achieved
Week 5	LESSON 05 <i>Operation Excellence</i>	Learn how to build constant feedback and learning cycles that provide the foundation for long term continuous improvement, both at team level and across entire businesses
Week 6	CONCLUSION <i>Choose your challenge</i>	A final project that follows the DMAIC problem-solving approach and highlighting your plans for the future



02 /01

LESSON 01

Lean & Six Sigma

In this lesson, you'll get a brief overview of the course, be introduced to LeanScape's learning approach and be introduced to the fundamentals of Lean along with its focus on creating customer value

LEARNING GOAL

An introduction to how Lean & Six Sigma can be used as a joint tool kit for driving successful change across businesses

VIDEO

How This Course Works – What you'll be doing and learning

In this next video, we provide an overview of how the course is designed and a simple framework for each lesson. We will share timings for Webinars and we will give you a complete overview of what to expect.

WEBINAR

Lean & Six Sigma and the two different camps

During this live webinar, we will discuss how Lean & Six Sigma have developed separately and cross paths. We look at the benefits and challenges of the catch all phrase Lean Six Sigma and what it really means.

VIDEO

The hidden cost of poor quality

In this video, we will review the hidden cost of poor quality (COPQ) and how what good quality needs to look like based on your industry sector and competition

VIDEO

Roles & Responsibilities

As an improvement culture grows, it's important to identify the right roles & responsibilities within the Lean Six Sigma community as well as wider afield

ACTIVITY

Review and share your thoughts on a project that you have been involved with that was either successful or unsuccessful and what were the contributing factors.

WEBINAR

The last video in this lesson focuses on how the output of any process is dependant on the inputs at various stages. A fundamental concept in Lean Six Sigma.

EXPLORE MORE

If you are seeking more information about Lean Six Sigma, we share a wide range of resources, articles and books so you can deep dive into the subject further.



02 /02

LESSON 02

DMAIC Define & Measure

Beginning's are often more important than endings, so we focus on the importance of defining problems and learning to baseline them. Without a baseline, there is nothing you can compare back to in the future.

LEARNING GOAL

Following an introduction to DMAIC, get comfortable defining and measuring process improvements along with developing project charters and teams

WEBINAR

What is DMAIC?

In this webinar, we introduce you to the DMAIC problem solving structure and cover the key phases of Define, Measure, Analyse, Improve and Control

ACTIVITY

Consider DMAIC, A3, PDCA and 8D problem solving tools. What do you feel makes them similar and/or different from each other. Do you feel there is any difference in when or how they should be applied?

VIDEO

Learn to define your project and what it will do.

Our first video in this lesson focuses on the Define stage as we look at how to define our issues with the customer in mind, learn what is how to separate the critical from the noise and how to understand the current status.

VIDEO

What get's measured get done!

Following the Define phase, we move onto the Measure phase to learn what the data is telling us and how to baseline what is actually happening. We will cover different types of data and how to collect and interpret the current performance

ACTIVITY

Use the simulated measure data provided to answer the online assignment.

WEBINAR

Activity feedback and updates

To help bring this lesson to an end, we will go through the online assignment and share the answers while answering any questions along the way.

EXPLORE MORE

Looking to practise the define/measure phases a little more? Test your knowledge with a few more simulated examples designed to test your knowledge a little further.



02 / 03

LESSON 03

DMAIC Analyse & Improve

Analyse aims to identify what is good in a product & service and what is bad using a toolbox of tools & techniques. By identifying the bad, we focus to improve and eliminate the problem areas driving great customer satisfaction.

LEARNING GOAL

Learn how to use data analysis and stats to identify your root cause along with ways to brainstorm improvement ideas and prioritise them

VIDEO

The foundations of analysis

In this video, we will introduce what is meant by the Analysis phase and the tools and techniques we can use to analyse the process, test our hypothesis, understand our risks and identify our root causes with confidence

WEBINAR

What does the process knowledge say

Often our best insights come from our existing teams that can help us pinpoint key theories and ideas for potential root causes.

VIDEO

Testing our hypothesis

This video is dedicated to running and testing our hypothesis. We will introduce the concepts & goals of hypothesis testing and how to test the data to identify root causes

VIDEO

What influences what?

With a focus on the data, we take a look at how to identify what influences what and how we can use regression and correlation analysis to understand cause & effect.

WEBINAR

Lean Start-up - Known and Unknown solutions

The final Webinar in this section looks at the improve phase and not only on how to identify improvement actions but how, where necessary to apply Lean Startup thinking

DISCUSSION

What type of assumptions or judgements did you have about a process that turned out to be false? What do you find most challenging about listening with your eyes?

EXPLORE MORE

Learning to See and bring good at process understanding and mapping takes practice. Check out these additional resources if you want some more tips, tricks and perspective.



02 /04

LESSON 04

DMAIC Control & Sustain

Without some control, gains are not sustained and efforts are lost. How can we overcome the risks and ensure processes are sustained long term for the benefits of all

LEARNING GOAL

We wrap up the DMAIC approach learning more about how to control improvements over the long term and how to sustain the gains achieved

VIDEO

Manage by seeing

In this video, we look at how visual management influences so many areas of our lives but it's rarely applied well in businesses.

ACTIVITY & SHARE

Visual management exercise

Take an everyday example and document the visual management tools, techniques involved and share with group

WEBINAR

Control Charts

In this webinar, we review the role of Control Charts and how they can provide a foundation for long term sustainable process management

ACTIVITY

Practising Control Charts

Using the real life example data sets, practise creating control charts and identify the key insights and learnings

VIDEO

Sustaining results for the long term

Long term sustainment happens by using the right tools and approach. We look at how to make the new and exciting sustainable in the everyday

DISCUSSION

Consider the impacts of poor control and sustainment on businesses. What would be the potential impact and what could be done to overcome. Share with the Learning Circle

EXPLORE MORE

More readings, articles and insights into the importance of Control & Sustain



02 /05

LESSON 05

Brilliant Basics To Operational Excellence

Organisations are complex environments and learning some of the key frameworks to work towards Operational Excellence can remove many of the challenges.

LEARNING GOAL

Learn how to build constant feedback and learning cycles that provide the foundation for long term continuous improvement, both at team level and across entire businesses

WEBINAR

A vision for the future of improvement

During this webinar, we are take a look at how companies can build towards long term sustainable improvement including strategy, balanced scorecard and day to day operations

VIDEO

Building the foundation

In this video, we discuss the basic step by step approach to building the culture of improvement across the organisation.

VIDEO

Operating Rhythms and designing for success

This video looks at how to design the daily, weekly, monthly and yearly operating rhythm that provide the foundation for long term success

VIDEO

Operational Excellence

In this final video, we look at how Operational Excellence programs can be designed to help long term growth along with how to audit current capability and growth

ACTIVITY

Baseline your operations

Using our Operational Excellence tool, baseline your business area and identify opportunities to drive growth

DISCUSSION

How does operational excellence impact employees? What would you expect the reactions to be and some of the challenges

EXPLORE MORE

Building from Brilliant Basics to Operational Excellence takes time. Check out these additional resources if you want some more tips, tricks and perspective.



02 /06

LESSON 06

Choose your Challenge

Take what you've learned and turn it into a real life project challenge that delivers change. This is the crucial step that turns learning and insights into the fuel for tomorrow. Make change real.

LEARNING GOAL

Learn how to refine your skills by adopting the DMAIC tool and choose your real-world project challenge

VIDEO

Identifying the right problems to solve

In this video, we will look at what makes a good problem to solve and why some types of issues are better than others. Connecting your idea to the business is critical for management buy-in and support

WEBINAR

The DMAIC pack

In this webinar, we deep-dive the DMAIC mindset and look at how to use this approach to make large scale business change

VIDEO

Stakeholder Management

In this next video, we take a deep dive into Stakeholder Management and learn how to engage and manage stakeholders.

VIDEO

Translating activity into financial ROI

The final video looks at how to translate project improvements into justifiable return on investment calculations. This skill is critical to gain financial sign off and to finalise the savings delivered.

ACTIVITY

Identify a project that you feel able to improve and begin by documenting the problem statement and background to the project. Share your project challenge on Slack

PEER DISCUSSION

Review the project challenges identified by your peers and provide constructive feedback on 2 of the projects sharing why you like/dislike the project and any challenges you have.

PROJECT CHALLENGE

12 to 20 week project timescale

Before the course is considered complete, your challenge is not to use your knowledge and new insights to deliver a real world improvement project using DMAIC. Share your question and project progress on Slack and benefit from both peer and expert feedback as you progress. Making change real.



“Lean Six Sigma isn’t just a method – it fundamentally challenges the way you run your organization and tests us all to improve what we do ... every day”

Reagan Pannell

Founder of LeanScape & MBB

[Learn more about the LeanScape Foundations in Lean Six Sigma Certificate.](#)

For any other questions, reach out to us at masterclass@leanscape.io