



Lean Six Sigma Expert

Master's Program

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About the Course

This Lean Six Sigma Expert Master's Program is designed to help you master two important management methodologies -Lean and Six Sigma, that together can accelerate business improvement. This program will give you the management qualities coveted by businesses to help you become the go-to professional for quality management projects.

Key Features



10 simulation exams and 9 case studies to help you ace the exams



Acquire hands-on knowledge with 4 industry-specific projects



Earn an industry-recognized Master's Certificate



Become an expert in Lean Six Sigma



Annual average salary globally: US \$99K-110K



Earn 70+ PDUs



28 hours of online self-paced learning



112 hours of instructor-led training

About Fortray

Fortray is the world's #1 online bootcamp provider that enables learners through rigorous and highly specialized training. We focus on emerging technologies and processes that are transforming the digital world, at a fraction of the cost and time as traditional approaches. Over one million professionals and 2000 corporate training organizations have harnessed our award-winning programs to achieve their career and business goals.

Program Outcomes

- ✔ Become a key stakeholder in leading and implementing Lean Six Sigma projects in your organization
- ✔ Describe how to identify an improvement project in the Define phase
- ✔ Explain how to measure process and product in the Measure phase
- ✔ Apply lean concepts such as 5S, waste reduction, process mapping, value stream mapping, and mistake proofing
- ✔ Apply basic and more advanced statistical analyses to determine the relationship between key inputs and process outputs
- ✔ Process key statistical data operations using Minitab
- ✔ Export data to various MS Office applications

Who Should Enroll in this Program?

Lean Six Sigma is a framework that is not limited to a particular industry. Any professional looking to learn how to improve organizational efficiency can become a Lean Six Sigma expert. Professionals who typically take this program include:

- ✔ Quality control supervisors/ engineers/ managers
- ✔ IT analysts
- ✔ Project managers
- ✔ Enthusiasts of lean management
- ✔ Six Sigma professionals



Why be a Lean Six Sigma expert?

Forty percent of the managers in top companies are lean certified, and Lean Six Sigma Experts earn 40 percent more than their non-certified peers. Lean Six Sigma Experts generally have the following profiles:

- ✓ Quality supervisor
- ✓ Quality manager
- ✓ Quality engineer
- ✓ Quality director
- ✓ Lean Six Sigma expert

You'll learn how to apply Lean Six Sigma tools, techniques, and concepts to improve efficiency, reduce waste, increase throughput, and standardize complex business and technical processes in your organization.

Learning Path



Lean Management

Learn the concepts and principles of lean management in this training course, where you'll learn how to streamline your processes and drive the best value for your business. This Lean Management Certification course is crafted by industry experts and is ideal for quality management professionals.

Key Learning Objectives

- ✔ Understand the core concepts of lean management to help you more efficiently increase value for customers
- ✔ Identify (and remove) ineffective activities and continuously improve your processes by systematically implementing small changes
- ✔ Learn how to implement lean tools, techniques, and metrics for your business
- ✔ Develop skills on data-driven approaches and methodologies to eliminate waste

Course Curriculum

- | | |
|-------------------------------------|--|
| ✔ Lesson 01 - Introduction | ✔ Lesson 06 - Lean in Office |
| ✔ Lesson 02 - Types of Waste | ✔ Lesson 07 - Lean Metrics |
| ✔ Lesson 03 - Tools | ✔ Lesson 08 - Other Methodologies that Complement Lean |
| ✔ Lesson 04 - Lean in Manufacturing | ✔ Lesson 09 - Mean Maturity Matrix |
| ✔ Lesson 05 - Lean in Service | |

Certified Lean Six Sigma Green Belt

Learn to develop your organizational projects with this online Lean Six Sigma Green Belt certification program. Aligned with IASSC exam, this certification integrates lean management and the DMAIC methodology with case studies to provide you with the skills required to help grow an organization.



Accredited by **IASSC**

Key Learning Objectives

- ✔ Perform data analysis and hypothesis testing in the Analyze phase
- ✔ Identify possible improvement actions for the performance of variations in the Improve phase
- ✔ Define efficient operating levels for inputs and outputs in the Control phase
- ✔ Use DFSS tools such as Quality Function Deployment (QFD), Failure Mode and Effects Analysis (FMEA), and Risk Priority Number (RPN)

Course Curriculum

- | | |
|--|-----------------------------|
| ✔ Lesson 00 - Course Introduction | ✔ Lesson 03 - Measure Phase |
| ✔ Lesson 01 - Six Sigma and Organizational Goals | ✔ Lesson 04 - Analyze Phase |
| ✔ Lesson 02 - Define Phase | ✔ Lesson 05 - Improve Phase |
| | ✔ Lesson 06 - Control Phase |

Minitab

This course ensures that you learn the practical applications of the latest version of the Minitab® 17 statistical tool and excel at the tools used by both Lean Six Sigma Green Belt and Black Belt professionals. This course covers nine case studies in the fields of Healthcare, IT and IT Services, and Manufacturing, each describing a problem and its solution using Minitab 17.

Key Learning Objectives

- ✓ Process key statistical data operations using Minitab
- ✓ Export data to various MS Office applications
- ✓ Understand and apply various statistical tools in multiple quality projects
- ✓ Understand and remove common pitfalls in data analysis
- ✓ Master all statistical tools/topics needed for Green and Black Belt projects

Course Curriculum

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|--|---|
| ✓ Lesson 01 - Introduction to Minitab | ✓ Lesson 05 - Gage R and R Analysis and Attribute |
| ✓ Lesson 02 - Interoperability in Minitab | ✓ Lesson 06 - Case Study on Lean SS Black Belt |
| ✓ Lesson 03 - Lean Six Sigma Green Belt Case Study | ✓ Lesson 07 - Regression Analysis in Minitab |
| ✓ Lesson 04 - Case Study on Lean SS Green Belt | |

- ✔ Lesson 08 - Hypothesis Test for Non-Normally Distributed Data
- ✔ Lesson 09 - Analysis of Variance
- ✔ Lesson 10 - Chi Square Test for Association
- ✔ Lesson 11 - Design of Experiments
- ✔ Lesson 12 - Common Pitfalls while Analyzing Data



STEP

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Certified Lean Six Sigma Black Belt Master's Certificate

Learn the concepts and principles of lean management in this training course, where you'll learn how to streamline your processes and drive the best value for your business. This Lean Six Sigma Management Certification course is crafted by industry experts and is ideal for quality management professionals.

Key Learning Objectives

- ✓ Effectively manage team dynamics and understand how to work with multiple levels of leadership to remove barriers and achieve project success
- ✓ Close projects and hand over control to process owners
- ✓ Present projects to instructors, peers, and managers

Course Curriculum

- ✓ Section 00 - Six Sigma Black Belt
 - Lesson 04 - Overview of Continuous Improvement
- ✓ Section 01 - Overview
 - Lesson 01 - About LSSBB
 - Lesson 02 - Organizational Roadblocks
 - Lesson 03 - Role of Communication and Selection Criteria in Black Belt
 - Lesson 05 - Lean: An Overview
 - Lesson 06 - Lean Concepts Explained
 - Lesson 07 - Lean Tools Explained

✔ Session 02 - DFSS, Pre-define and Define (DMAIC)

- Lesson 01 - Pre Define Activities
- Lesson 02 - Define
- Lesson 03 - Summary

✔ Session 03 - Measure

✔ Session 04 - Overview

- Lesson 01 - Pre Analyze Considerations
- Lesson 02 - Value Stream Analysis
- Lesson 03 - Sources of Variation
- Lesson 04 - Regression
- Lesson 05 - Confidence Intervals
- Lesson 06 - Parametric Hypothesis Testing
- Lesson 07 - Nonparametric Hypothesis Testing
- Lesson 08 - Analyze Additional Categorical Data and Current Reality Tree

✔ Session 05 - Improve

- Lesson 01 - Introduction to Improve
- Lesson 02 - Design of Experiments Theory
- Lesson 03 - Design of Experiments Practice
- Lesson 04 - Brainstorming Solutions Prioritization and Cost Benefit Analysis
- Lesson 05 - Piloting Validating and FMEA

✔ Session 06 - Control

- Lesson 01 - Pre Control Considerations
- Lesson 02 - Variables and Attributes Control Charts
- Lesson 03 - Measurement System Analysis Control Plan and Project Closure
- Lesson 04 - Introduction to Total Productive Maintenance

STEP

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Harvard Business Publishing Case Studies for Lean Six Sigma

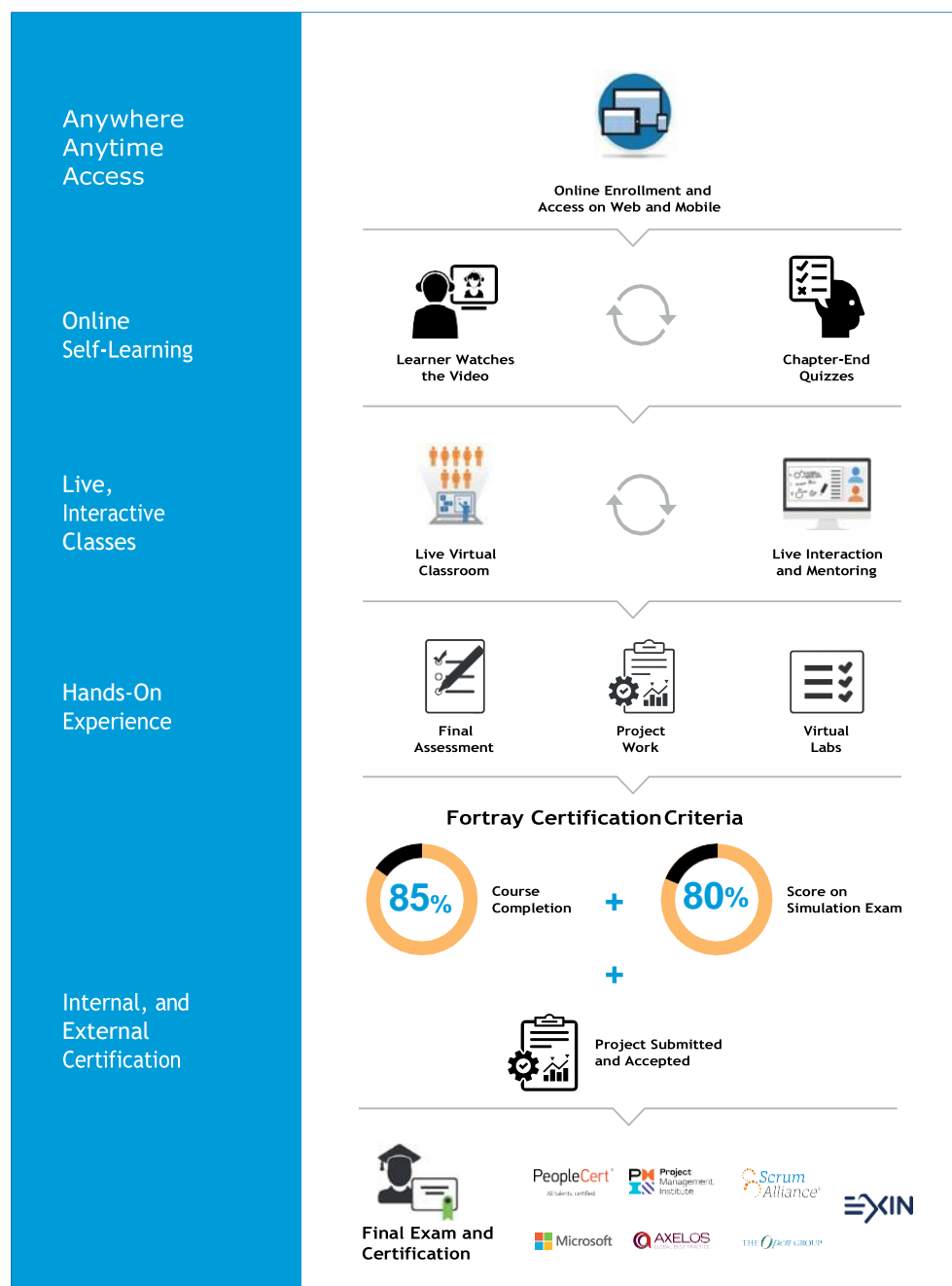
Learn Lean Six Sigma concepts with help of real-world case studies authored by HBS professors and other top business school educators. These case studies will help you analyze business situations and different aspects of managerial decision-making to help you solve business problems.

Certificates



Upon completion of this Master's Program, you will also receive an industry-recognized Master's Certificate from Fortray.

Classroom-Level Immersion: Delivered Digitally



Customer Reviews

Preeti Lokare

Operations Manager at Amazon

I was able to accomplish my desired career goals after taking up the Lean six sigma expert program. The course content is well-designed and the customer support team is quick when it comes to resolving any queries promptly. I would say that Fortray is one of the best institutions to enhance your career-oriented skill sets.



Krishnakumar Kuppusamy

Director at Prabodita Consulting (OPC) Private Limited

It was a truly a great experience learning at Fortray. The faculty is highly experienced. I have gained enough knowledge and confidence from the course. When you think of certifications think of Fortray.



Archana Ramakrishna

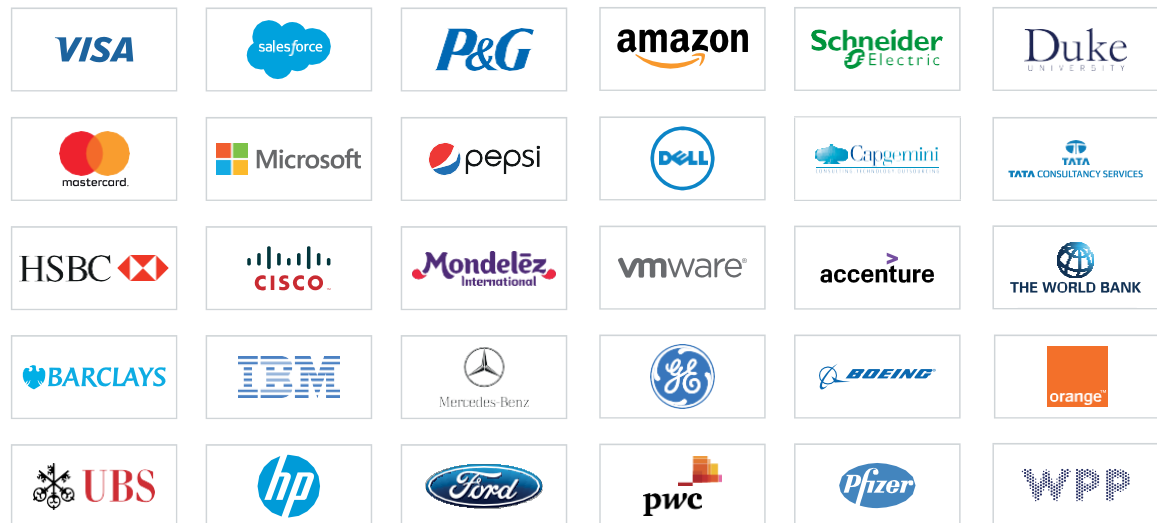
Senior Process Lead at GalaxE.Solutions

I have enrolled in Lean Six Sigma course with Fortray. Their live classes were very good and well coordinated. The course material and toolkit provided with the course are very helpful. I would highly recommend Fortray to my friends.



Corporate Training

Top clients we work with:



Features of Corporate Training:



Tailored learning solutions



Flexible pricing options



Enterprise-grade learning management system (LMS)



Enterprise dashboards for individuals and teams



24X7 learner assistance and support



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