

Lean Six Sigma Green Belt Certification Training

University of Kansas Edwards Campus
Overland Park, KS 66213

Organizations, both public and private, need to work faster, reduce costs, and maintain high standards of consistency and quality. They can achieve these goals through improvement programs like Lean and Six Sigma. The Lean process emphasizes waste reduction and improving process speed, and Six Sigma stresses an analytical approach to the elimination of defects and reduction of variation. When combined, they can solve organizational problems and improve performance, leading to a competitive edge. This training prepares new Green Belts to lead projects and contribute to improving services and manufacturing by using the DMAIC (Define, Measure, Analyze, Improve, and Control) model.

Who should attend?

Employees of any organization (including manufacturing, healthcare, finance, engineering, customer service, and sales) where Lean & Six Sigma methodologies are being used or considered.

Lean & Six Sigma practitioners interested in learning about new concepts and tools for making their improvement projects more successful.

Those interested in taking the first step toward a Lean Six Sigma Black Belt Certification.

Return on Investment

For the participant

1. Gain the ability to lead a real-world process improvement project at your organization
2. Contribute to your organization's performance by improving a strategic process
3. Add a valuable credential to your résumé

For your organization

1. Streamlined processes and reduced waste through process improvement
2. Improved profitability and customer satisfaction
3. Problem solving across functional areas

Instructor

Heather McCain is currently a Professor of the Practice for Project Management at the University of Kansas. She has more than 25 years of experience in quality engineering and management. She works with companies to implement continuous improvement methodologies and provides training on quality, project management, and process improvement. Recently she was the quality manager for consumer product at Garmin International. Prior to joining Garmin, Heather was with Hallmark Cards and AlliedSignal (now Honeywell) Aerospace and Automotive. Heather is a senior member of American Society for Quality (ASQ) and is extremely active in her local ASQ section. She is also involved with the Joint Engineering Council of Kansas City as the past president. Heather is a Certified Quality Engineer

and Certified Manager of Quality/Organizational Excellence. She has a bachelor's degree in electrical engineering from Kansas State University and a master's degree in engineering management from the University of Kansas. She is pursuing her doctorate in technology management from Indiana State University.

Class Overview and Delivery

Included are both statistical and non-statistical techniques used for continuous process improvement such as process definition, process flow diagrams, data collection techniques, measurement techniques, cause and effect diagrams, control charts and process capability analysis. Attendees will spend daily time in the computer lab learning to use the Minitab software to focus the Measure, Analyze and Improve phases on achieving positive business results.

For those who cannot attend the live, face-to-face class, the class will be made available both live online and on-demand online. The online attendees can download the 30-day free trial of the Minitab software and participate in the lab exercises using their own computers.

On the last day of training, a 100 item, multiple choice exam will be given. You must receive a mark of at least 70% to pass. Online attendees will be able to complete the exam remotely. The same 3-hour time limit for completion will be given for the exam regardless of whether the exam is take live or online.

DEFINE – learn the tools to identify and/or validate your improvement project, illustrate the business processes, define customer requirements and prepare to lead project teams.

- Identify, Prioritize and Select the Improvement Opportunity
- Develop and Build a Project Team Charter and an Effective Team
- Identify Customers and Customer Requirement
- Define and Map Process to be Improved

MEASURE – learn and practice using the tools needed to determine the critical measures and develop a measurement plan to document process performance.

- Determine What to Measure and How to Manage That Measurement
- Evaluate Variation and the Measurement System
- Determine Process Performance
- Introduction to Minitab

ANALYZE – learn how to analyze the data to identify root causes and identify opportunities for improvement, learn how to determine the causes of variation and customer dissatisfaction

- Identify Potential Root Causes
- Apply Failure Modes and Effects Analysis (FMEA)
- Conduct Sources of Variation Studies and Correlation Analyses
- Minitab Analyze Phase Applications

IMPROVE – learn how to apply a variety of solution identification methods and how to gain approval for the solution

- Apply Lean Tools
- Generate Solutions
- Rank and Select Solutions
- Minitab Improve Phase Applications

CONTROL – learn how to develop and employ a control plan to ensure the targeted results, learn to identify standardization methodologies and encourage continuous process improvement.

- Develop a Control Plan
- Implement Statistical Process Control

Choose Your Way to Learn

1. Face-to-Face on the KU Edwards Campus:

Join us in the Kansas City area for five days of dedicated training time. You will have the opportunity to interact directly with the instructor and other participants, and you will get out of the office for focused training time.

2. Live-Online Participation:

You will be given a login so that you can join the training live from anywhere in the world. Our classroom is equipped with cameras and microphones so that you will be able to see and hear the instructor in action. You will also be able to hear any questions or comments from other students. In addition, if you have a microphone, the rest of the attendees will be able to hear your questions and comments. You can download the 30-day free trial of the Minitab software and participate in the lab exercises using your own computer. You will also be able to take the exam online.

3. Recorded Online Participation:

Recordings of the sessions will be posted at the end of each day. You can watch them in your free time. You will be able to email the instructor with any questions that you may have. You can download the 30-day free trial of the Minitab software and participate in the lab exercises using your own computer, and you will be able to take the exam online. You will have one week after the final class session meets to finish watching all of the recordings and to complete the exam.

Registration Information

The registration fee is the same regardless of how you wish to attend: live at on our campus in Overland Park, KS; live online; or using the recordings. Please choose your mode of attendance when registering so that we can plan. If you choose an online option, your materials will be sent to the address you use for registration.