# PURDUE UNIVERSITY

## **Online Lean Six Sigma Black Belt**

#### Earn Your Black Belt Entirely Online

In the Lean Six Sigma Black Belt you will further hone your skills in Lean Six Sigma as you learn to manage Black Belt-level projects and oversee the projects of the Lean Six Sigma Green Belts in your organization. The prerequisites for this course are the first two courses in the Lean Six Sigma Series – Lean Principles and Lean Six Sigma Green Belt. Both courses are offered online through Purdue University through the Partnership for Competitive Advantage in Engineering Professional Education.

#### What Will I Learn in This Course?

Our approach integrates the Lean and Six Sigma methodologies, tools and techniques. Objectives rolled into successful completion of the course include an understanding of the Lean Six Sigma methodologies, tools and techniques at a level required for successfully conducting Black Belt-level improvement projects. Depending on the project you select to conduct during the course, you will focus on either the DMAIC (Define, Measure, Analyze, Improve, Control) or DMADV (Define, Measure, Analyze, Design, Verify) process, and will have ample opportunity to become very familiar with the tools associated with the process. When you successfully complete the course, you will be a certified Lean Six Sigma Black Belt with a certificate of achievement from Purdue University. You also have the option of earning 9.0 CEUs (continuing education units) from Purdue, which come with a CEU transcript. The CEUs are available at no additional cost to those who have successfully completed the course requirements.

#### **Certification Overview**

The certificate course spans 22–24 weeks. This includes 16 weekly learning modules along with breaks and pre-work. The breaks are included so that you have time to catch up, if needed, on your data gathering, review, assignment preparation, and for making the presentations to your management team within your organization. (There is a gate review presentation to management at the completion of each phase of DMAIC or DMADV.) Other learning activities include reading the text and supplemental materials; watching pre-recorded lecture videos via the Internet (available via streaming video, 24/7 throughout the course); participating in asynchronous online discussions around the project deliverables; taking online quizzes and conducting a management-approved project within your organization which incorporates the use of many of the Lean Six Sigma tools and theories. You will have the opportunity for real-time coaching through the discussion forum, email, phone or online chat with your instructor.

The time involved to successfully complete the Black Belt course is approximately 95 hours over the 16 weeks of learning modules, but varies from one leaner to the next. The course syllabus provides the schedule for reading assignments, project deliverables and quizzes. The course is instructor-led with weekly deadlines, however, all activities are asynchronous so you can fit them in and around your weekly schedule. It is recommended that you plan on about six to ten hours per week for your learning activities.

## **PURDUE** UNIVERSITY

- Lean Six Sigma Black Belt Certificate
- Entirely Online
- 18 Weeks + 4 Weeks Pre-Work
- Purdue University Partnership for Competitive Advantage
- Earn CEUs



### Lean Six Sigma Black Belt

#### Who Should Enroll in the Lean Six Sigma Black Belt?

- Anyone aspiring to lead the quality and lean efforts in an organization with Lean Six Sigma including: staff, line, supervisors, managers, and directors.
- Anyone seeking to drastically improve an organization's financial performance.



- Process improvement team members with LSS Green Belt and Lean certification who are interested in increasing skills.
- Anyone interested in becoming certified as a Lean Six Sigma Black Belt (the Purdue online Lean Principles and LSS Green Belt courses are prerequisites).
- People in a wide array of industries including but not limited to: manufacturing, healthcare, finance, operations, IT, engineering, customer service, electronics, communications, logistics, sales, quality and purchasing.
- Purdue University recommends a minumum of 2 years of work experience.

#### **Technical Requirements and Textbook**

To access the online course environment, you will need an Internet connection with a speed suitable for viewing streaming video. Test your computer's ability to play the lecture videos and open the Flash Paper and PDF files at this link: https://engineering.purdue.edu/ProEd/LeanSixSigma/SampleVideoLSS\_html

Use of the statistical software package QI Macros is required in the Lean Six Sigma Black Belt (http://www.qimacros.com/store/ student). This tool supports Lean Six Sigma analysis which is woven throughout the exercises and project work in this course. More information regarding a student rate for this software can be obtained from your Program Advisor at The College Network.

The textbook used in the course is, *The Six Sigma Handbook (Third Edition): The Complete Guide for Green Belts, Black Belts, and Managers at All Levels,* by Thomas Pyzdek and Paul Keller.

#### **Innovator in Distance Education**

#### **Purdue University**

From the long-ago days of sending instructors out on the train to engage learners in distant locations, to satellite delivery of courses, to online learning, Purdue University pioneers instructional delivery techniques that meet the needs of its 69,000+ learners. Founded in 1869, Purdue is a global leader in disciplines from engineering to agriculture to business. The Lean Six Sigma online program is yet one more way Purdue has responded to the needs of lifelong learners. Purdue takes a strategic approach to lifelong learning with offerings that range from summer programs and events for elementary school-age children and teens, to its highly-ranked undergraduate and graduate programs, to its many pathways that meet the needs of adult learners. The Lean Six Sigma online program is sponsored by the Partnership for Competitive Advantage – an affiliates program at Purdue focused on providing targeted educational solutions that can be quickly evolved to align with specific needs expressed by lifelong learners in business settings.

#### **Educational Services Provider**

#### The College Network®

Since 1992, The College Network has provided educational solutions that help individuals advance their education and training with college degrees and professional certificates from highly acclaimed universities. As one of the nation's leading eLearning companies and a partner with some of the nation's foremost institutions of higher learning, The College Network has helped hundreds of thousands of adults continue their education.

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The program information in this publication is current at the time of printing. The most up-to-date information is available at www.collegenetwork.com, or you can speak with a Program Advisor at 1-877-256-5327.