



Clemson University - Center for Corporate Learning
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Education & Training Plan
Six Sigma Green Belt (CSSGB) Certificate Program with Externship

Student Full Name: _____

Start Date: _____ End Date: _____

Program includes National Certification & an Externship Opportunity
Mentor Supported

Six Sigma Green Belt (CSSGB) Certificate Program with Externship

Course Code: CLEM-B-CSSGB
Program Duration: 6 Months
Course Contact Hours: 375
Student Tuition: \$3,999

The Six Sigma Green Belt (CSSGB) Specialist

Six Sigma Specialists are tasked with supporting the project lead, most likely a Six Sigma Black Belt and provides a stepping stone to this advanced classification as well. Successful participants in this class will be poised to work on small, defined Six Sigma projects within an organization, requiring less oversight by the assigned manager (presumably a Six Sigma Black Belt). This ability to free up supervisory time reduces costs and increases productivity for entire projects, which presents significant value to both current and prospective employers. Whether in healthcare, finance, government, manufacturing or any other industry, Six Sigma Green Belt training is ideal for current professionals looking toward advancement in their current position as well as individuals looking to gain employment with any firm that utilizes these concepts and techniques.

The Six Sigma Green Belt (CSSGB) Program

The Six Sigma Specialist program helps professionals to strengthen organizations by employing the core concepts of Six Sigma geared toward enhanced problem-solving skills with an emphasis on the DMAIC (Define, Measure, Analyze, Improve, and Control) model. The Six Sigma Specialist program presents an overview of the key concepts for the Six Sigma Green Belt Certification exam. Students will explore processes and team management, operational metrics, and key tools and techniques to achieve process excellence. This program is designed to prepare students to sit for the Six Sigma Green Belt Certification exam offered by the American Association for Quality.

Education and National Certifications

- Students should have or be pursuing a high school diploma or GED.
- There are no state approval and/or state requirements associated with this program.

- There are several National Certification exams that are available to students who successfully complete this program:
 - **American Society for Quality (ASQ) Certified Six Sigma Green Belt (CSSGB) Exam**
 - The Six Sigma Green Belt certification requires 3 years of work experience in one or more areas of the Six Sigma Green Belt Body of Knowledge.
 - Work experience must be in a full time, paid role. Paid intern, co-op or any other course work cannot be applied
 - **Microsoft Office Specialist (MOS) Certification Exam.**

Program Objectives

At the conclusion of this program, students will be able to:

- Justify the value of Six Sigma metrics
- Analyze customer information within a potential Six Sigma project
- Apply the design for Six Sigma (DFSS) process
- Apply theories of team dynamics to improve Six Sigma process
- Apply the Define-Measure-Analyze-Improve-Control (DMAIC) process
- Generate process management documentation
- Analyze the effects of statistical process control (SPC) on performance Analyze process capability in the context of performance
- Apply design of experiments (DOE) to a potential project
- Use Microsoft Office

National Certification

Upon successful completion of this Clemson University program, students would be eligible to sit for the American Society for Quality (ASQ) Certified Six Sigma Green Belt (CSSGB) and the Microsoft Office Specialist (MOS) exams. Although there are no state approval, state registration or other state requirements for this program, students who complete this program at Clemson University will be prepared and are eligible to sit for this national certification exam. Students who complete this program are encouraged to complete the externship option with their program. Students who complete this program can and do sit for the MOS national certification exams and are qualified, eligible and prepared to do so. Clemson University works with each student to complete the exam application and register the student to take their national certification exam.

Externship / Hands on Training / Practicum

Although not a requirement, once students complete the program, they have the ability to participate in an externship and/or hands on practicum so as to practice the skills necessary to perform the job requirements of a professional in this field. Students will be assisted with completing a resume and/or other requirements necessary to work in this field. All students who complete this program are eligible to participate in an externship and will be placed with a participating organization near their location. Clemson University works with national organizations and has the ability to place students in externship opportunities nationwide.

Clemson University contact: If students have any questions regarding this program including national certification and externships, **they should call Juanita Durham of Clemson University at 864.656.3984 or via email at jdrhm@clemson.edu.**

Note: No refunds can be issued after the start date published in your Financial Award document.



About Clemson University!

Clemson Online, a unit reporting directly to the Provost, works closely with leadership teams across the University to develop, market, and deliver top-quality courses and programs in blended and online formats. The office provides vision, leadership, coordination, and expertise in support of faculty design, delivery, and evaluation of technology-enhanced, blended, and fully online courses and instructional materials. Dynamic, transformative, and unique eLearning opportunities characterize Clemson's approach to online teaching and learning.

Our Mission: Clemson Online provides strategic leadership for online education, emphasizing innovative teaching and superior learning outcomes to maximize student success in 21st-century academic and professional contexts.

Our Vision: Clemson Online will define the public web-grant university through measurable achievements in online education, research, and service.

The office is committed to pursuing strategic opportunities, providing supportive resources, promoting superior educational quality, and ensuring faculty involvement and responsibility in shaping Clemson's online future.



Clemson University and Pearson Education

The Clemson University's Office of Professional and Continuing Education eLearning programs were developed in partnership with Pearson Education to produce the highest quality, best-in-class content and delivery necessary to enhance the overall student learning experience, boost understanding and ensure retention. Pearson Education is the premier content and learning company in North America offering solutions to the higher education and career training divisions of colleges and universities across the country aimed at driving quality education programs to ensure student success. Please visit us at www.pearson.com.

About Pearson Education

Welcome to Pearson. We have a simple mission: to help people make more of their lives through learning. We are the world's leading learning company, with 40,000 employees in more than 80 countries helping people of all ages to make measurable progress in their lives. We provide a range of education products and services to institutions, governments and direct to individual learners, that help people everywhere aim higher and fulfil their true potential. Our commitment to them requires a holistic approach to education. It begins by using research to understand what sort of learning works best, it continues by bringing together people and organizations to develop ideas, and it comes back round by measuring the outcomes of our products.

Six Sigma Specialist Program Detailed Student Objectives:

SIX SIGMA METRICS

- Describe the four key business drivers of Six Sigma
- Discuss the value of Six Sigma to a company
- Use Six Sigma metrics and scorecards to evaluate projects

SIX SIGMA CUSTOMERS

- Describe the goals of Six Sigma
- Describe methods to collect customer data
- Utilize customer data to provide customer feedback
- Apply quality function deployment (QFD) to a project

DESIGN FOR SIX SIGMA

- Describe how organizations design for Six Sigma (DFSS)
- Explain the differences between design and process failure mode and effects analysis (DFMEA and PFMEA)
- Describe failure mode and effects analysis (FMEA)
- Explain how quality function deployment (QFD) relates to Six Sigma (DFSS) process

SIX SIGMA QUALITY MASTERS

- Identify key individuals in the quality field
- Explain how the teachings of key individuals in the quality field affected the Six Sigma methodology

SIX SIGMA PROBLEM-SOLVING

- Explain the Define-Measure-Analyze-Improve-Control (DMAIC) problem-solving process
- Use Define-Measure-Analyze-Improve-Control (DMAIC) to solve problems in business

SIX SIGMA PROCESS MANAGEMENT

- Identify the relationships between process input and output variables
- Use a process map to define the scope of a project

SIX SIGMA CONTROL CHARTS

- Describe the goals and benefits of statistical process control (SPC)
- Describe rational subgrouping
- Complete a control chart

SIX SIGMA PROCESS CAPABILITY

- Describe the process of designing and conducting process capability studies
- Differentiate between process performance and specifications
- Compute process capability and process performance indices

SIX SIGMA LEAN TOOLS

- Describe Six Sigma lean tools
- Explain how lean tools relate to lean manufacturing

Note: This program can be completed in 6 months. However, students will have online access to this program for a 24-month period.

MICROSOFT OFFICE Module

- Use an integrated software package, specifically the applications included in the Microsoft Office suite
- Demonstrate marketable skills for enhanced employment opportunities
- Describe proper computer techniques for designing and producing various types of documents
- Demonstrate the common commands & techniques used in Windows desktop
- List the meaning of basic PC acronyms like MHz, MB, KB, HD and RAM
- Use WordPad and MSWord to create various types of documents
- Create headings and titles with Word Art
- Create and format spreadsheets, including the use of mathematical formulas
- Demonstrate a working knowledge of computer database functions, including putting, processing, querying and outputting data
- Define computer terminology in definition matching quizzes
- Use the Windows Paint program to alter graphics
- Use a presentation application to create a presentation with both text and graphics
- Copy data from one MS Office application to another application in the suite
- Use e-mail and the Internet to send Word and Excel file attachments
- Demonstrate how to use the Windows Taskbar and Windows Tooltips
- Explain how copyright laws pertain to data and graphics posted on the Internet
- Take the college computer competency test after course completion
- Follow oral and written directions and complete assignments when working under time limitations

Note: Although the Microsoft Office Module is not required to successfully complete this program, students interested in pursuing free Microsoft MOS certification may want to consider completing this Microsoft Office Module at no additional cost.

System Requirements:

Windows Users:

- Windows 8, 7, XP or Vista
- 56K modem or higher
- Soundcard & Speakers
- Firefox, Chrome or Microsoft Internet Explorer

Mac OS User:

- Mac OS X or higher (in classic mode)
- 56K modem or higher
- Soundcard & Speakers
- Apple Safari

iPad Users:

- Due to Flash limitations, eLearning programs are NOT compatible with iPads

Screen Resolution:

- We recommend setting your screen resolution to 1024 x 768 pixels.

Browser Requirements:

- System will support the two latest releases of each browser. When using older versions of a browser, users risk running into problems with the course software.
- Windows Users: Mozilla Firefox, Google Chrome, Microsoft Internet Explorer
- Mac OS Users: Safari, Google Chrome, Mozilla Firefox

Suggested Plug-ins:

- Flash Player
- Real Player
- Adobe Reader
- Java