



THE UNIVERSITY OF TEXAS AT EL PASO  
**Professional and Public Programs**  
 A UNIT OF EXTENDED UNIVERSITY

University of Texas at El Paso  
 Professional and Public Programs  
 500 W. University Kelly Hall Ste. 212 & 214 | El Paso, TX 79968  
<http://www.ppp.utep.edu/>  
 Contact: Sylvia Monsisvais | 915-747-7578 | [samonsisvais@utep.edu](mailto:samonsisvais@utep.edu)

**Education & Training Plan**  
**Lean Enterprise Professional Certificate Program with Externship**

Student Full Name: \_\_\_\_\_

Start Date: \_\_\_\_\_ End Date: \_\_\_\_\_

**Program includes National Certification & an Externship Opportunity**  
**Mentor Supported**

**Lean Enterprise Professional Certificate Program with Externship**

Course Code: UTEPBLEAN  
 Program Duration: 6 Months  
 Course Contact Hours: 375  
 Student Tuition: \$3,999

**The Lean Enterprise Professional**

A “Lean Enterprise” can be defined as one that “performs without waste.” Despite constant efforts to the contrary, many organizations waste anywhere from 70-90% of available resources and staff through improper management or ineffective use of materials, time, information, equipment and inventory. The Lean Enterprise Certification will help participants to overcome these difficulties by applying Lean Enterprise principles and practices throughout their own organization. Projects offered throughout the course will offer participants in-depth experience implementing all the necessary steps to achieve successful results across multiple functions and operations in any organization.

**The Lean Enterprise Professional Program**

Applying these principles to their own work, the Lean Enterprise Professional program offers participants the chance to see how the benefits of these techniques would improve their own company or organization. Through successful completion of these projects, participants will learn how implementing Lean Techniques can result in dramatic improvements in cash flow, customer loyalty, market share, safety and morale as well as overall cycle-time and productivity. Lean Enterprise concepts focus on removing waste and increasing speed in order to affect the bottom line. To achieve these goals, participants will learn how to remove non-value added process steps, fix the connections between steps and really put the focus back on the customer. Creating improvements across businesses from top to bottom, this course is ideal for both professionals and managers, as well as staff in key functional areas like Operations, Production, Inventory Control, Development, Manufacturing, Quality Assurance and Supply Management.

## 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:
  - **Lean Enterprise I Certification from the Society of Manufacturing Engineers (SME), the Association for Manufacturing Excellence (AME) and the Shingo Prize for Operational Excellence**
  - **Microsoft Office Specialist (MOS) Certification Exam.**

## Program Objectives

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

- Explain cultural enabler principles and processes
- Describe cultural enabler techniques and practices
- Explain the principles of continuous process improvement
- Use process improvement systems
- Describe continuous process improvement techniques and practices
- Explain the principles of a consistent Lean Enterprise culture
- Explain the processes for developing a consistent Lean Enterprise culture
- Describe consistent Lean Enterprise culture techniques and practices
- Explain the principles of business results
- Describe how measurement systems are used in a Lean Enterprise culture
- List the key Lean-related measures
- Use Microsoft Office

## National Certification

Upon successful completion of this University of Texas at El Paso program, students would be eligible to sit for the SME/AME Lean Enterprise I Certification Exam and the Microsoft Office Specialist (MOS) exam. Although there are no state approval, state registration or other state requirements for this program, students who complete this program at University of Texas at El Paso 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 SME/AME Lean Enterprise I Certification and MOS national certification exams and are qualified, eligible and prepared to do so. University of Texas at El Paso 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. University of Texas at El Paso works with national organizations and has the ability to place students in externship opportunities nationwide.

**University of Texas at El Paso contact:** If students have any questions regarding this program including national certification and externships, **they should call Sylvia Monsisvais of University of Texas at El Paso at 915-747-7578 or via email at [samonsisvais@utep.edu](mailto:samonsisvais@utep.edu)**

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



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## **About University of Texas at El Paso!**

### **Our Mission**

The Office of Professional and Public Programs (P3) is a unique learning agent within the University of Texas at El Paso. Its mission is to provide high quality continuing education. This includes non-traditional academic and lifelong learning opportunities for professional development, personal enrichment, and academic growth. It fosters and supports the larger University mission to serve as a gateway to an improved quality of life for people of the Paso del Norte Region.

### **Our Vision**

Professional and Public Programs will be the premier provider of comprehensive, quality, educational, professional and personal enrichment programs in collaboration with UTEP departments and external organizations.



### **University of Texas at El Paso and Pearson Education**

The University of Texas at El Paso'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](http://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.

## **Lean Enterprise Professional Program Detailed Student Objectives:**

### **CULTURAL ENABLER PRINCIPLES AND PROCESSES - 1**

- Describe the value of lean, its philosophy, and its goals
- Describe the value of Six Sigma and its philosophy, history, and goals
- Describe the responsibilities of executive leaders and how they affect the deployment of Lean Six Sigma by providing the resources, managing change, and communicating ideas

### **CULTURAL ENABLER PRINCIPLES AND PROCESSES - 2**

- Produce the framework for training needs within organizations
- Identify the importance of a training needs analysis
- Examine the aspects of effective presentations
- Describe how coaching involves empowerment, leadership, structure, and management
- Describe the value of teams for process improvement
- Describe the roles of team members

### **PRINCIPLES OF CONTINUOUS PROCESS IMPROVEMENT**

- Describe the value of continuous improvement, its philosophy, history, and goals.
- Describe the value of lean and the value of Six Sigma and the differences between the two methodologies
- Define process
- Explain how systems and processes are connected to one another
- Describe the elements of the grassroots campaign for Lean Six Sigma and how they can be used for successful implementation
- Describe the elements of the Lean Six Sigma model
- Identify the tools used in the current day Lean Six Sigma methodology

### **PROCESS IMPROVEMENT SYSTEMS**

- Describe the visual workplace system
- Identify the tools used in successful implementation of a visual workplace system
- Define total productive maintenance
- Identify the tools used in successful implementation of a total productive maintenance program
- Explain the purpose and benefits of 5S
- Understand the definitions and techniques of the 5S methodology

### **CONTINUOUS IMPROVEMENT TECHNIQUES**

- Define the seven quality tools
- Explain how the seven quality tools are used and how to set them up
- Define the PDCA cycle and how to use it to solve problems
- Explain the process of risk management
- Describe the use of FMEA
- Explain gap analysis
- Describe how to monitor processes with the use of statistical process control (SPC)

### **PROCESS AND SYSTEM**

- Understand the concept of processes and the impact that people have on the processes
- Identify the importance of focusing on processes and not the people
- Define strategic planning
- Identify the elements of successful strategic planning
- Explain the history and purpose of supply chain management
- Understand the activities and functions of supply chain management

## **BUSINESS SUSTAINABILITY AND QUALITY COST SYSTEMS**

- Define the four types of quality costs and the elements of an effective quality cost system
- Define the key elements for organizations to be successful and to sustain their growth through the use of Lean Six Sigma
- Describe how a quality cost system can drive improvement in a Lean Six Sigma program

## **MEASUREMENT SYSTEMS AND LEAN ENTERPRISE CULTURE**

- Describe what a process map is, how to use it, and the different types of process mapping techniques
- Identify the critical to quality measures
- Examine process metrics
- Define design of experiments
- Understand the three types of experimental validity

**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