

Lean 6σ

UCM Master Certified ©

Program Description

This online certificate program is designed for industrial professionals seeking insight to techniques of Lean Six Sigma systems while preparing for the Lean Certification by the Society of Manufacturing Engineers (SME), Six Sigma Green Belt Certification and/or the Manager of Quality/Organizational Excellence Certification from the American Society for Quality (ASQ). The five required courses will integrate with the Industrial Management and Technology Masters Degree programs as an area of specialization. The program will be delivered via the Internet using web-based tools for effective learning. In order to be awarded the certificate, student will complete all five required courses with a "B" or better. These courses must be completed within six calendar years, beginning with the date the student first registers as a graduate level certificate student.

Program Objectives

Program consists of fifteen semester hours intended for industrial and service managers, supervisors and others who desire to bridge their companies' productivity to "Lean-Six Sigma" methods. Students will gain the most recent skills and knowledge in Lean systems, Six Sigma, quality tools, and quality management principles while preparing for certification examinations. Specific Objectives:

- Apply lean concepts in various industrial situations to eliminate waste and maximize quality.
- Use seven statistical tools and quality techniques to problem solve a given industrial scenario.
- Develop a continuous improvement plan using quality standards criteria established by the International Standards Organization series and Malcolm Baldrige Awards program.
- Prepare for Lean certification by the Society of Manufacturing Engineers (SME) and/or the Manager of Quality/Organizational Excellence Certification from the American Society for Quality (ASQ).

This online graduate certificate program utilizes the same format to present all five courses included in the program of study. Course deliverables and materials will have a complete set of course components, including learning outcomes, instructional modules, handouts, assignments, and assessment. Interactive discussions with peers and course facilitators in a virtual class meeting, video conference, discussion board, and telephone conferences are encouraged.



SCHOOL OF TECHNOLOGY
GRADUATE PROGRAMS

ucmo.edu/technology

Program Coordinator - Dr. Suhansa Rodchua
rodchua@ucmo.edu 660-543-4438



LEARNING TO A GREATER DEGREE

Program Coordinator
 Dr. Suhansa Rodchua
 rodchua@ucmo.edu
 660-543-4438

Admission to the Program

To be admitted applicants must have completed a baccalaureate degree from an accredited college or university with a GPA of 2.5 overall. Applicants must also demonstrate proficiency in English communication and an ability to work in a technology management-driven environment.

1. Contact the Graduate and International Student Services at 660 543-4092.
 Apply online at:
www.ucmo.edu/future-students/admissions/graduate-admissions/
2. Provide undergraduate transcripts and pay application fee.
3. GRE scores are not required for certificate study.

This program is a non-degree graduate program. However, courses completed as part of the certificate curriculum can be included in a program of study leading to a Master of Science degree. The School of Technology graduate coordinator and advisor will advise students and confirm completion of certificate requirements.

Requirements for the Graduate Certificate

1. Be accepted for admission to the certificate program by the Graduate and International Student Services.
2. Complete the 15 credit hours, maintain a minimum 3.0 GPA.
3. Complete the program within six years, and meet any additional standards and requirements of the Graduate and International Student Services.

Courses Offered:

Course number	Course Title	Credit hours	Semester Offer
INDM 5212	Production and Operation Management	3	Fall (On-line) Spring (Live)
INDM 5222	Principles and Practices of Lean Systems	3	Fall (On-line)
INDM 5232	Seminar in Lean Six Sigma Implementation	3	Spring (On-line)
*ENGT 5580 (OR) *INDM 5130	Quality Systems Engineering Lean and Quality Management	3	Sp-Sum-Fa (On-line) Spring (On-line)
INDM 6580	Advanced Strategic Quality and Standards	3	Summer (On-line)

* INDM 5130 or ENGT 5580 is a pre-requisite course for INDM 5222, 5232, and 6580.