

Engineering and Technology Management

Online Master's Degree and Graduate Certificate Program

Undergraduate

Six Sigma Quality Management Certificate

Designed for Engineering and Technology Managers

Certificate Overview

Six Sigma is one of the most respected and widely accepted methodologies in quality management and improvement worldwide. It consists of a philosophical foundation for quality improvement, plus a very robust set of tools and techniques that have proven successful in identifying and solving quality problems.

Foundational concepts have much in common with Total Quality Management, and ISO 9000, including cross-functional product design, process management, supplier quality management, customer involvement, information and feedback, committed leadership, strategic planning, cross-functional training, and employee involvement. The course work required for this certificate covers the history of quality management and the key contributions and pioneers in the area. The toolset extends from fundamental descriptive statistics and basic problem solving to sophisticated statistical design of experiments and evolutionary operations.



Engineering managers have one of the top 20 best paying jobs in America today. Bureau of Labor Statistics, 2014

Career Benefits and Advancement

This certificate provides supervisors and managers with the knowledge and skills needed to be more effective in the workplace, or for those who wish to pursue those roles and advance their careers. When completed, you will be able to:

- Successfully identify and solve quality problems.
- Design products and services that are robust, reliable, cost effective, and customer-driven.
- Design sophisticated statistical experiments that determine the maximum amount of critical information from the smallest number of experiments to determine optimal design features and operating parameters.
- Participate in and lead major problem solving and quality improvement efforts.

Courses

- EM 403 Managing Variability and Uncertainty
- EM 470 Six Sigma Quality Management (prerequisite: EM 403)
- EM 480 Quality Control and Reliability
- EM 490 Design for Product and Service Realization
OR
EM 438 Lean Agility



Certificate Requirements

Academic Requirements

To be eligible to enroll in the ETM program and receive an undergraduate certificate, students must have an associate degree or equivalent (college algebra competency required).

Course Requirements

An ETM Undergraduate Certificate requires four courses (12-credit hours) in specialized areas. A certificate is awarded upon completion of these courses. A student may earn more than one certificate.

Convenient and Flexible Program

All courses are offered online and use an innovative blend of traditional classroom instruction and the latest in video streaming and web conferencing technologies that allow courses to be delivered live to students anywhere in the world. Innovative program software allows faculty and students to interact with each other online. The convenience and flexibility of the program is ideal for the working professional. Mobile capabilities are also available. Classes are archived and available to review at any time.

About the ETM Program—since 1982

Washington State University's online Engineering and Technology Management (ETM) program offers a master's degree in engineering and technology management, a specialization in construction management, graduate certificates in eight specialized areas, and five undergraduate certificates. Courses are designed to provide working engineers with the skills to manage projects, people, and technology. The program is tailored for professionals who want to advance their careers while still working fulltime. For more information, visit etm.wsu.edu or call 509-335-0125.

Advance your career
with just four courses

—all online!



How to Apply

WSU Admissions

If you are interested in seeking an ETM undergraduate certificate, you may enroll in WSU as a non-degree seeking undergrad student. Official transcripts are not required in this case. Go to: [WSU non-degree Admissions](#)

Other Documents

(send directly to ETM Program)

- Transcripts
(Unofficial for non-degree seeking students. Indicate associate degree or equivalent)
- Resume
- Personal Statement

Need Help?

509-335-0125
etm@wsu.edu
etm.wsu.edu

