

Engineering and Technology Management

Online Master's Degree and Graduate Certificate Program

Undergraduate

Manufacturing Leadership Certificate

Designed for Engineering and Technology Managers

Certificate Overview

Manufacturing and technical managers in today's manufacturing environments must demonstrate multifaceted leadership and a high level of technical expertise in order to compete in a world-class manufacturing arena. The four courses in this certificate program provide a unique, but essential foundation for understanding and optimizing a manufacturing organization. While many courses in manufacturing focus on the mechanical operations and processes, this certificate focuses on maximizing the performance of the entire system. Achieving the highest levels of performance starts with design of products and systems, integrating the contributions of a complex network of suppliers and coordinating production according to key constraints throughout the supply chain. Finally, the most effective route to achieving continuous improvement in this environment is the integrated application of Lean, Six Sigma, and Theory of Constraints principles.



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 manufacturing 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 understand and be able to implement the principles of:

- Lean Build to Order and Mass Customization
- Lean Six Sigma Quality
- Lean Theory of Constraints (TOC)
- Operations Management
- Design for Manufacturability

Courses (no prerequisites required)

- EM 426 Constraints Management
- EM 438 Lean Agility
- EM 460 Integrated Supply Chain Management
- EM 490 Design for Product and Service Realization



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** (non-degree seeking students may submit unofficial transcripts. Indicate associate degree or equivalent)
- **Resume**
- **Personal Statement**

Need Help?

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

