

A Distance Education Program for Engineering and Business Professionals

Washington State University's

Engineering and Technology Management Program

is designed for working professionals who want to develop skills to effectively manage projects, people, and technology in the workplace.

Established in 1982, the Engineering and Technology Management (ETM) Program prepares engineering and business professionals to make strategic and operational decisions and become leaders in the management of technology. The program provides technology team managers with the knowledge, tools, and skills to become proficient managers of projects, operations, organizations, and people. **The program is specifically tailored for professionals who want to advance their careers while still working fulltime.**

THE PROGRAM

An integrated education in technical decision making and leadership.

- Learn problem-solving tools, leadership skills, and corporate strategy.
- Learn Theory of Constraint methods to achieve quick improvements.
- Improve skills in managing variability, controlling uncertainty, overcoming obstacles, and meeting objectives.
- Become a better systems thinker, project manager, and decision maker.
- Understand finance, organization, and people/project management.
- Apply optimization, statistics, and strategy to improve results.
- Learn valuable management tools, such as performance management, Lean and Six Sigma methodologies, and supply chain principles.
- Learn how to implement effective and lasting changes that will benefit the bottom line.

PROGRAM DELIVERY

Convenient and Flexible

Students have easy access to courses in the Engineering and Technology Management Program. All courses are offered using an innovative blend of traditional classroom instruction and the latest in videostreaming and video-conferencing technologies. All lectures are archived and are available at anytime over the Internet. Additionally, whether you are an engineer or business professional, you can tailor the curriculum to meet your specialized needs, as well as take classes in a sequence that benefits you the most.

The program's unique learning environment connects faculty and students from across the state and nation. Professors routinely make personal visits to shared learning sites, fostering personal interactions and teamwork. In addition, students can easily access their professors and program coordinator by phone or e-mail.



Learn from faculty who have both academic and real-world business knowledge and experience.

Engineering and Technology Management Program

Master's Degree

To receive a master's degree in the ETM program, students must complete a minimum of 10 courses (30 credits) plus a comprehensive examination or project (2-4 credits of E M 702).

Core requirements include at least one course from each of the following six areas and E M 702.

- 1. Managing Organizations and People**
 - E M 501 Management of Organizations
 - E M 522 Supervision and Leadership for Engineering and Technology Managers
- 2. Managing Financial Resources**
 - E M 505 Finance for Technical Systems
 - E M 545 Technical Decision Analysis
 - E M 590 Design for Product and Service Realization
- 3. Managing with Analytical Methods**
 - E M 540 Operations Research for Managers
 - E M 560 Integrated Supply Chain Management
- 4. Managing Projects**
 - E M 564 Project Management
 - E M 520 Construction Project Management
- 5. Managing Variability**
 - Stat 430 Statistical Methods in Engineering
 - E M 580 Quality Control and Reliability
 - E M 585 Quality Improvement Using Design of Experiments
- 6. Managing Strategy**
 - E M 526 Constraints Management
 - E M 575 Performance Management in Technical Organizations
 - E M 591 Strategic Management of Technology and Innovation

E M 702 Master's Special Problems,
Directed Study, Exam 2-4 Credits

Students will complete the program of study with additional courses from core requirements or the following electives:

- E M 508 Legal Concepts for Engineering and Technology Managers
- E M 517 Simulation Modeling of Technical Systems
- E M 530 Applications of Constraints Management
- E M 534 Contemporary Topics in Constraints Management
- E M 538 Lean Agility
- E M 555 Enterprise Resource Management
- E M 565 Introduction to Systems Engineering
- E M 566 System Engineering Analysis and Practice
- E M 570 Six Sigma Quality Management

Up to 12 semester credits may be transferred from other graduate programs in engineering or management. Credits used to earn a previous degree, however, do not apply.

Certificate Program

The ETM Certificate Program allows students to complete shorter professional blocks of coursework relevant to their specific needs. Rather than completing all the course requirements for an ETM master's degree, students may take four courses in a specialized area. A certificate is awarded upon completion of these courses.

Specialized Areas

- General Engineering and Technology Management
- Project Management
- Six Sigma Quality Management
- Manufacturing Leadership
- Constraints Management
- Supply Chain Management
- Construction Project Management
- Systems Management

Course credits earned for the certificate may apply to a master's degree in the Engineering and Technology Management Program or other graduate degree programs.

A student may earn more than one certificate and may work on the certificate and master's program concurrently.

Students must be admitted to the WSU Graduate School and have the background necessary to take graduate-level coursework in the technical area of specialization.

ADVANCE YOUR CAREER

Through WSU's Engineering and Technology Management Program, you will

- develop a systematic and analytic framework to support decision making and make effective changes.
- gain skills to manage changing technology.
- cultivate business and human resources management skills.
- learn technical and leadership skills designed to meet today's—and tomorrow's—industry needs.
- stay at the leading edge and become a leader in the management of technology.

Serving a diverse professional community

Alcoa	Dept. of Energy	Kaiser	Snohomish County
Avista	Douglas County	Micron	Tacoma Power
Bechtel	Fluor	PNNL	U.S. Air Force
Boeing	Hitachi	SEH America	WA State DOT
City of Tacoma	Intel	Smiths-Aerospace	and more

ADMISSION REQUIREMENTS

Admission to the Engineering and Technology Management Program and the WSU Graduate School requires a bachelor's degree from an accredited program. For the ETM Program, exposure to disciplines in engineering or technology through study or employment is also required.

Complete application procedures are located on the following Web sites:

Engineering and Technology Management Program
www.engrmgt.wsu.edu

WSU Graduate School
www.gradschool.wsu.edu

MORE INFORMATION

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A program in technical decision making and leadership for engineering and business professionals.

College of
Engineering and Architecture

Engineering and Technology Management

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"Engineers seeking to move up the career ladder are getting master's degrees in engineering management."

—Prism Magazine, March 2005
American Society of Engineering Education

Admission to Washington State University is granted without regard to race/ethnicity, color, creed, religion, national origin, gender, sexual orientation, age, marital status, disabled veteran or Vietnam-era veteran status, disability, or use of a service animal.

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World Class. Face to Face.