LEAD THE WAY TO INNOVATION

ONLINE GRADUATE PROGRAMS IN ENGINEERING MANAGEMENT
SINCE THE FOUNDING OF THE UNIVERSITY OF ARIZONA IN 1885, OUR ENGINEERING PROGRAM HAS BEEN FOCUSED ON PROVIDING PRACTICAL, CAREER-DRIVEN PROGRAMS THAT CAN LEAD OUR STUDENTS TO REAL-WORLD SUCCESS. OUR ONLINE PROGRAMS IN ENGINEERING MANAGEMENT ARE DRIVEN BY THE SAME GOAL, PROVIDING THE ADVANCED EDUCATION YOU NEED TO HELP TECHNOLOGICAL VENTURES DISCOVER NEW HORIZONS. EACH COURSE IS LED BY A DEDICATED UA FACULTY MEMBER WITH WELL-ESTABLISHED, NATIONALLY RECOGNIZED EXPERTISE IN THEIR SUBJECT.

As a student in engineering management, you’ll have the opportunity to complete relevant, technical courses in several practical disciplines. You’ll develop a clear understanding of the ways in which advanced mathematics, project management, and business fundamentals weave together in high-level engineering leadership. Using these skills, you’ll be prepared, upon graduation, to confidently lead engineering and technological projects that are both innovative and cost-effective.

REAL-WORLD SKILLS FOR TOMORROW’S BOLD LEADERS

Master of Science in Engineering Management

In the online MEM program, you’ll gain a greater understanding of the decision-making and technical elements that go into technology-based ventures, learning to shape and manage advanced projects of varying sizes and scales. Through a blend of engineering, mathematics, and business electives, you can build a customized, flexible plan of study that suits your career goals and desired outcomes. Regardless of your chosen course of study, you can expect a nuanced, state-of-the-art, expert perspective on strategies for maintaining operational efficiency in an engineering environment.

Graduate Certificate in Engineering Management

For those who may not be interested in pursuing a full master’s degree but still have an interest in moving toward a leadership role within a technology-based organization, the online Graduate Certificate in Engineering Management is a perfect fit. As a student of the program, you’ll examine the inner workings of financial modeling and project management as they apply to industries driven by engineering. You’ll also gain experience working with the latest software and technical tools used by companies around the globe to lead advanced, real-world projects.
Master of Science in Engineering Management

The online Master of Science in Engineering Management offers the opportunity to complete and defend a practical thesis or project in addition to core requirements, allowing you to earn your degree in the way that suits you best. You can also choose to complete your requirements purely through detailed coursework, with courses chosen from a range of diverse, practical electives. By the completion of 12 units, you will be required to submit your full academic plan for consideration, mapping out your desired courses and completion structure. This process will be done with the help of a graduate advisor, who will review your plan and help prepare it for approval.

Required Core Courses (15 units):
- SIE 514 Law for Engineers & Scientists (3 units)
- SIE 515 Technical Sales & Marketing (3 units)
- SIE 522 Decision Making Under Uncertainty (3 units)
- SIE 557 Project Management (3 units)
- SIE 567 Financial Modeling for Innovation (3 units)

And select from one of the following 3 options:

OPTION 1: PROJECT

A 3 unit Project may be selected with approval of the faculty advisor. The project option requires a written report and an oral presentation. The report is prepared under the guidance of the major professor and is reviewed by members of the examining committee prior to the oral presentation. The 3-member examining committee consists of the major professor and at least two other members of the faculty selected based on the student’s coursework and field of interest. Students will either defend their master’s report on campus, or will have to arrange for a teleconference defense. The remaining elective credits for a total of 30 credit hours will be selected with the approval of an advisor and the Graduate Study Committee.

OPTION 2: THESIS

This option requires 24 units of regular course work, followed by 6 units of thesis research (SIE 910). This option is perfect if you’re looking to work directly with a faculty member to create an original thesis. Thesis work is an excellent complement to course work and constitutes a valuable opportunity to develop an appreciation for and understanding of advanced engineering research. You will only be permitted to select the thesis option with an outstanding academic record.

Your thesis will be prepared under the guidance of the major professor and reviewed by members of the examining committee prior to the oral presentation, which will take place on-campus or via teleconference. The examining committee will consist of the major professor and at least two other members of the faculty selected based on your chosen area of interest. Other members of the department may also choose to examine the thesis.

The remaining elective units for a total of 30 units will be selected with the approval of an advisor and the Graduate Study Committee.

Note: This option is generally for students looking to continue their education towards a PhD.

OPTION 3: COURSEWORK

A total of 33 units are required for this option. At least 1 3-unit course must be completed at the 600 level with a grade of "B" or above. The remaining elective credits will be selected with the approval of an advisor and the Graduate Study Committee.

Graduate Certificate in Engineering Management

The curriculum for the online Graduate Certificate in Engineering Management requires only 12 units of credit to complete, making it a convenient, accelerated path to enhanced skills in engineering leadership. The program’s curriculum is designed to provide advanced education in the fundamentals of project management and decision making as they specifically apply to engineering projects.

In order to complete the Graduate Certificate in Engineering Management, students must complete the following course requirements:

Required Courses (9 units)
- SIE 567 Financial Modeling for Innovation (3 units)
- SIE 522 Engineering Decision Making Under Uncertainty (3 units)
- SIE 557 Project Management (3 units)

Elective Courses (3 units; choose one of the following)
- SIE 506 Quality Engineering (3 units)
- SIE 515 Technical Sales & Marketing (3 units)
- SIE 531 Simulation Modeling and Analysis (3 units)
- SIE 540 Survey of Optimization Methods (3 units)
- SIE 564 Cost Estimation (3 units)
Ideal candidates for the online graduate programs in engineering offered by the University of Arizona will meet the following admissions standards:

- Minimum 3.0 GPA in previous academic coursework
- Graduated from an accredited engineering bachelor’s program or have earned a degree in a related discipline
- Some courses may also require that students have completed specific prerequisites

**GPA Exceptions – Non-degree-seeking Status**

If you do not meet the minimum 3.0 GPA requirement with your undergraduate coursework, you may be admitted to the Graduate College as a Non-degree student. After completing 12 semester units of non-degree graded 500-level or higher coursework with a minimum grade-point average of 3.0, you will be eligible to apply to a degree program.

To apply for any of the University of Arizona’s online programs in engineering, please follow the process below:

1. Complete the online application*, which can be found at: https://apply.grad.arizona.edu/users/login
2. Upload other required materials through the online application process:
   - Unofficial transcripts from all universities/colleges attended
   - An updated resume or CV
   - A brief statement of intent
   - 3 letters of recommendation
   - International students must also meet English proficiency requirements. This can be done by submitting TOEFL, IELTS, or Pearson PTE Academic results
3. If admitted, send official academic transcripts to:

   **Graduate College**
   The University of Arizona
   Administration 322
   PO Box 210066
   Tucson, AZ 85721-0066

   Express mail (for FedEx, DHL, etc):
   **Graduate College**
   The University of Arizona
   1401 E University Blvd, #322
   Tucson, AZ 85721
   Phone: 520-621-3471
   Fax: 520-621-4101

   Please note that GRE scores are not required.

* The process requires the payment of a $95.00 application fee for international applications, $85.00 for domestic applications, and $45.00 for domestic, non-degree seeking applicants.
Master of Science in Engineering Management

We're proud to offer these programs at a competitive tuition cost to professionals around the world. For more information about fees and tuition costs, please visit online.engineering.arizona.edu/ tuition.

We encourage all students to explore the many funding options available, whether through federal or private loans. Grants and scholarships may also be available. Please visit financialaid.arizona.edu for more information.

Graduate Certificate in Engineering Management

Please visit: http://online.engineering.arizona.edu/tuition/

A History of Excellence and Innovation

Since its founding in 1885, the University of Arizona has stood as a national leader in practical education that helps students achieve incredible things. Our mission is to graduate students who are sought after by employers and prepared to embark on engaging, fulfilling careers.

Equipped with skills, knowledge, experience, and the entrepreneurial spirit they gain at the UA, our students become highly skilled members of society who lead with determination, innovate without limits and benefit our state, our nation, and the world in boundless ways.

The learning materials provided through our online platform are diverse, dynamic, and engaging. Every piece of learning content is shaped by expert faculty and based on our proven on-campus programs. In fact, as an online student, you'll have access to lectures and presentations that were recorded live during a relevant on-campus class session, allowing you to attend class without ever stepping foot in a classroom.

If you have any further questions or would like to begin the application process, please contact an Admissions Counselor:

Phone: (888) 658-2042
Email: onlineengineering@email.arizona.edu
Or visit: online.engineering.arizona.edu