

Engineering Management, Minor

ESENMMIN

Learn the skills necessary for effective management and leadership of engineering-driven enterprises.

Description

The curriculum of the minor in engineering management supplements students' majors by adding to the breadth of engineering science and design, and equipping the student with additional management and design skills. This knowledge is augmented with an understanding of business practices, organizational behavior and management skills to enable the student to succeed in the management of a scientific or engineering enterprise.

Topics covered include project and resource management, financial engineering, risk management, configuration management, service plans, product liability, entrepreneurship and operations management, in addition to product design and process development.

At a glance

- **College/School:** [Ira A. Fulton Schools of Engineering](#)
- **Location:** [Tempe](#) or [Online](#)

Program requirements

[2024 - 2025 Minor Map](#)

[Minor Map \(Archives\)](#)

The minor in engineering management requires completion of 18 credit hours: three core courses (nine credit hours) and three elective courses (nine credit hours). All courses must be passed with a "C" or better. At least 12 credit hours must be completed in residency at ASU or through ASU Online.

Core Courses -- 9 credit hours

[IEE 300: Economic Analysis for Engineers](#) (3)

[IEE 380: Probability and Statistics for Engineering Problem Solving \(QTRS OR CS\)](#) (3)

[IEE 458: Project Management](#) or [CEE 481: Civil Engineering Project Management](#) (3)

Notes: CEE 481 may not be used for both the BSE in civil engineering and the minor in engineering management.

Electives (choose 3) -- 9 credit hours

[IEE 369: Work Analysis and Design \(L\)](#) (3)

[IEE 376: Operations Research Deterministic Techniques/Applications](#) (4)

[IEE 381: Lean Six Sigma Methodology](#) (3)

[IEE 412: Introduction to Financial Engineering](#) (3)

[IEE 431: Engineering Administration \(L\)](#) (3)

[IEE 437: Human Factors Engineering](#) (3)

[IEE 454: Risk Management](#) (3)

[IEE 456: Introduction to Systems Engineering](#) (3)

[IEE 474: Quality Control](#) (3)

Prerequisite courses may be needed in order to complete the requirements of this minor.

Enrollment requirements

GPA Requirement: None

Incompatible Majors: BSE in engineering management; BSE in industrial engineering

Other Enrollment Requirements: Prior to enrolling in the minor, students must have completed MAT 265 Calculus for Engineers I and MAT 266 Calculus for Engineers II (or an equivalent calculus sequence) with a grade of "C" or better in each.

IEE 380 is a required course. If a student is required to take IEE 380 for their degree, they will need to take another elective to replace the requirement for the minor.

Interested students should consult with a [School of Computing and Augmented Intelligence advisor](#) to verify eligibility and to review all courses required for the minor.

Current ASU undergraduate students may pursue a minor and have it recognized on their ASU transcript at graduation. Minor requirements appear on the degree audit once the minor is added. Certain major and minor combinations may be deemed inappropriate by the college or department of either the major or the minor program. Courses taken for the minor may not count toward both the major and minor.

Attend online

ASU Online

ASU offers this program in an online format with multiple enrollment sessions throughout the year. Applicants may [view the program's ASU Online page](#) for program descriptions and to request more information.

Career opportunities

Minor programs allow students to develop additional competencies that complement the marketable knowledge and skills they acquire in their majors. The minor in engineering management can help students pursuing careers in engineering and business fields gain valuable skills in management for engineering-related professions, potentially fast-tracking them into a managerial role down the line in their profession.

Career examples include production supervisor, project management team member or project management team leader.

Contact information

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