

Engineering Management Joint Program: COE and COB

Engineering Management at UAH

The University of Alabama in Huntsville Engineering Management program is offered as a joint program between the College of Engineering and the College of Business. Please visit us here for more information! (<https://www.uah.edu/admissions/learn-more-mseem/>)

The Master of Science Degree in Engineering Management is a coursework-only program of 30 semester hours comprised of ten courses:

- Five core courses foundational to Engineering Management
- Two mathematics-based (statistics/optimization) courses
- Three elective courses; elective courses can be used to provide depth in a secondary area or the flexibility to explore areas of interest. Examples shown below include aerospace, cybersecurity or business analytics which have been identified as being particularly useful for local professionals interested in Engineering Management. Other electives can be arranged with a program advisor from either COE or COB course offerings.

Engineering Management Core

EM 660 (<https://catalog.uah.edu/search/?P=EM%20660>) Engineering Management Theory

EM 760 (<https://catalog.uah.edu/search/?P=EM%20760>) Engineering Management Structures and Systems

EM 666 (<https://catalog.uah.edu/search/?P=EM%20666>) Project Management

EM 747 (<https://catalog.uah.edu/search/?search=em+747>) Strategic Engineering Management

ISE 623 (<https://catalog.uah.edu/search/?P=ISE%20623>) Engineering Economics

Statistics and Optimization Courses

The College of Engineering has a mathematics requirement that can be fulfilled with courses in statistics and optimization. The requirement can be satisfied with two courses drawn from either the College of Engineering or the College of Business.

First mathematics-based course (choose one):

ISE 690 (<https://catalog.uah.edu/search/?P=ISE%20690>) Statistical Methods for Engineers

MSC 600 (<https://catalog.uah.edu/search/?P=MSC%20600>) Quantitative Methods

MSC 615 (<https://catalog.uah.edu/search/?P=MSC%20615>) Decision Modeling

Second mathematics-based course (choose one):

ISE 526 (<https://catalog.uah.edu/search/?P=ISE%20526>) Design and Analysis of Experiments

ISE 790 (<https://catalog.uah.edu/search/?P=ISE%20790>) Advanced Statistical Applications

MSC 641 (<https://catalog.uah.edu/search/?P=MSC%20641>) Advanced Analytics

Elective Courses

A minimum of 9 elective hours are required and can be chosen from a customized selection of qualifying graduate courses in engineering, science, or business. These courses can be used to explore diverse areas of interest or clustered to provide depth in a secondary concentration such as supply chain management, aerospace systems, cybersecurity, or business analytics.

Admission to MSE

Admissions requirements:

- 1) a bachelor degree in engineering from an accredited institution with a minimum cumulative GPA of 3.0 (on a 4.0 scale)
- 2) a GPA of 3.0 in all prior graduate work
- 3) a minimum GRE cumulative score of 300 (with a minimum of 150 Verbal and 155 Quantitative scores) and analytical writing score of 4.0 or better

Promising applicants (GPA over 3.25) with a non-engineering STEM background may gain admittance to the MSE by meeting the requirements above and by completing a basic selection of courses in fundamentals of math, science, and core engineering topics. Some prerequisites may be necessary to fulfill these requirements.

Two years of work experience beyond the bachelor's degree in a technical position is strongly preferred but not be required.

The GRE can be waived for students who have practiced engineering for five years past the BS degree, whose resume shows significant career progression, and who meet the other requirements. The GRE also can be waived if the student has passed the NCEES Fundamentals of Engineering (FE) exam taken as part of the requirements to be a licensed professional engineer.