Master of Science in Engineering Requirements
Distance Education

Thank you for your interest in the Master of Science in Engineering (MSE) program! The MSE program has been ranked 25th among online graduate engineering programs at public, doctoral granting institutions by *U.S. News & World Report*, and 33rd among all institutions! They also ranked the program 25th Best Online Graduate Engineering Programs for Veterans. Best Master’s Programs, an online guide to master’s degree programs, listed the Master of Science in Engineering program as No. 4 in a list of the 50 best online master’s programs in engineering. After reviewing the information below, please feel free to contact me to clarify or answer any other questions.

The MSE program is a general, interdisciplinary, engineering M.S. program delivered through distance education. Students take online classes from core areas such as management, math, and computing, as well as nine hours of classes from a chosen engineering emphasis, such as sustainability, thermal or power systems. You can customize your curriculum to meet your educational and professional goals. We also offer a Master of Science in Electrical Engineering (MSEE) with an emphasis in power systems engineering for those students with a BSEE. If you do not have an engineering degree, we offer the Master of Science in Operations Management (MSOM) program. All three programs follow the same schedule and delivery format. Below is information specific to the MSE; I can send additional information for the MSEE or MSOM if you would like – just let me know.

MSE admission requirements are:
1. Applicants must have a bachelor of science in engineering from an engineering program accredited by the Engineering Accreditation Commission of ABET (or equivalent accreditation), and
2. A grade point average (GPA) of 3.0 or better (A=4.0) on all coursework taken prior to receipt of the engineering bachelor degree, or
3. A GPA of 3.0 or better on the last 60 hours of coursework taken prior to receipt of the engineering bachelor degree.

Unfortunately, a Bachelor of Science in engineering technology will not meet admission requirements. To determine if a degree earned at a foreign university is ABET equivalent, we will use the Washington Accord ([http://washingtonaccord.org/](http://washingtonaccord.org/)). An entrance exam, such as the GRE, is not required for the MSE.

Applicants with a GPA between 2.50 and 2.99, and who have been practicing engineers for a minimum of three years, may apply under conditional admit status. Passing the Fundamentals of Engineering exam or obtaining a PE is also beneficial. Admission is not guaranteed and is determined on a case-by-case basis.
Students interested in the MSE program may apply online. In addition to the application, an official transcript from each institution attended, and an application fee of $40 ($50 for international applicants) are required. You can apply at any time; there are five sessions per academic year, detailed below. If, for some reason, the system does not allow you to apply online for the second 8-week session in a semester, apply for the following semester and let me know, and Graduate Admissions will correct it in the system.

A total of 30 semester credit hours are required to complete degree requirements for the MSE. A student has two basic options to meet the 30 hour requirement: a project option or a course work option.
- Project option: a minimum of 24 credit hours (eight 3-hour courses) of approved graduate coursework as specified below AND a maximum of 6 credit hours (two 3-hour courses) of GNEG 590V Special Topics, for a minimum of 30 hours. Project requirements will require both a Project Proposal Report and Final Project Report.
- Coursework option: a minimum of 30 semester credit hours (ten 3-hour courses) of approved graduate coursework as specified below.

Required coursework for either option includes:
- One 3-hour course from each of the following four areas for a total of 12 hours: Mathematics, Computer Applications, Technical Communications, and Engineering Management, and
- Three 3-hour engineering courses that form a cohesive topic or area of emphasis with the approval of the advisory committee, and
- Nine additional graduate-level hours from any area approved by the advisory committee.
- A minimum of 60% of the course work must be engineering, non-operations management (OMGT), classes; a minimum of six 3-hour courses must be engineering courses.
- A maximum of four 4000-level graduate level courses may be taken; the remainder must be 5000-level or higher.

The emphasis area is comprised of three engineering (non-OMGT) classes that form a cohesive topic area, such as sustainability, power systems, thermal systems, energy management, engineering risk analysis, etc. It really depends on your educational and professional goals. You just have to be able to make an argument that the three classes are related. The area of emphasis will not appear on your transcript or diploma, but you can always use it when applying for a job by sharing your degree checklist. Some students have very specific titles that are related to their work, such as:
- Decision Modeling in Cost Estimation, Risk, and Optimization
- Engineering Economics - Power Transmission Expansion
- How to Account for Corrosion and Dynamic Forces in Spacecraft Design
- Control Systems for Localized Power Generation and Distribution
- Aerospace Structural Effects
- Thermodynamics and Heat Transfer
- Risk Analysis of Cost Effective Biofuel Transportation

A thesis is not required; however, towards the end of the program students will be required to complete a comprehensive oral exam. Students must also maintain a $>=3.0$ GPA, with no more than two “C” grades; no credit will be received for courses with “D” or “F” grades, though they will be calculated into the GPA. A student has six years to complete all degree requirements.

Courses will be delivered via the Internet using Blackboard, an educational delivery platform. Since classes are delivered via the Internet, students are not required to be physically present on campus. All residency requirements will be met via the online classes. It is, however, preferable for a student to
come to campus for the comprehensive oral exam; if it is not feasible, arrangements will be made to complete the exam through some telecommuting means.

Courses are offered in accelerated eight-week sessions, two sessions per fall and spring University semester, and one in the summer semester:
- Fall 8 Week 1: August - October
- Fall 8 Week 2: October - December
- Spring 8 Week 1: January - March
- Spring 8 Week 2: March - May
- Summer 8 Week: May – July

A student may take up to two courses each session, or four per full university semester (fall or spring). Under this intense schedule a student may satisfy requirements for the degree in five sessions, or approximately one year. However, it is very demanding and is more feasible to take one class per session (which is two classes per fall or spring semester, one in the summer) and complete the program in two years; this schedule allows working students to be able to successfully complete the classes and still maintain a quality of life outside of work and school, meeting family and social obligations more easily. A student may take up to six years to complete requirements.

The tentative schedule and course descriptions may be found on the MSE website under “Program Course Information” in the links in the left-side menu. We frequently record new classes that will be added to the schedule.

The current tuition and fees will be charged at the following rates.
- Tuition: $262.50/credit hour
- Distance technology fee: $50/credit hour
- Enrollment fee: $30/credit hour
- Total tuition and fees: $342.50/credit hour

A three hour class would be $1,027.50. Out-of-state students pay at the same tuition and fee rate as in-state students.

Our website, http://mse.uark.edu, has additional information that you may find helpful. If you have any additional questions or require additional information, please do not hesitate to contact me at mse@uark.edu or 479-575-3669.