

DEGREE PROGRAMS

MASTER OF ENGINEERING IN MECHANICAL ENGINEERING

The department of Mechanical Engineering takes an interdisciplinary approach to maximize the students success through a mixture of cutting-edge research, diversified coursework, and world class faculty. The department is continuously growing and has maintained a consistent leadership as one of the top Mechanical Engineering programs in the state of Arkansas. As a new Mechanical Engineering Master's student, you have two program options: coursework and research project. The program requires 36 course credits for completion, and it gives the students the flexibility to select a degree plan that is customized to their goals. Student's success is the prime goal of the department and we strive to provide the best opportunities for growth and professional development of our students.

Unconditional Admission

Students are eligible to apply for unconditional admission to the Master of Engineering degree program if they have:

- 1 .Applicants must meet the admission requirements for the [Graduate College](#).
- 2 .Applicants must have completed a bachelor's degree in engineering from an ABET accredited program with a cumulative grade point average of 2.75 or greater on a scale of 4.0. If their undergraduate engineering degree was obtained from a non-ABET accredited program, then they must submit an official copy of their recent (within the last five (5) years) Graduate Record Exam (GRE) Quantitative Reasoning Score equal to or greater than 146 (550 prior scale).
- 3 .Applicants must submit a letter of intent that addresses the applicant's intended focus and reasons for applying to the degree program. Based upon an applicant's intended program focus, deficiency courses may be identified to be completed before enrollment in some engineering graduate courses.
- 4 .Applicants must provide two letters of recommendation, using the form provided by the department, from professors familiar with the applicants academic ability.
- 5 .Approval from the Program Director.

Conditional Admission

Applicants not meeting the unconditional admission requirements will be considered on a case-by-case basis for conditional admission into the program. Any deficiencies identified for conditional admits should be satisfied within the first calendar year of enrollment, and until all deficiencies are resolved applicants may take a maximum of twelve (12) hours for graduate credit. Conditionally admitted students may be required to take one or more undergraduate courses which they must complete with a 3.0 average or better.

Each student is required to have a graduate advisor who is a member of the electrical or mechanical engineering departments and the graduate faculty. A formal letter from the advisor to the head of the student's major department acknowledging the advisor's willingness to serve as the student's graduate advisor is required during the students first semester of course work in the program. The advisor and two additional qualified personnel, selected by the student and advisor, will serve as the student's Graduate Advisory Committee. At least two committee members must be faculty in engineering. The student and advisor will work to develop a program of study which must be submitted for approval with the application for candidacy as discussed below.

Degree Requirements

- 1 .A minimum of 36 semester hours of coursework at the graduate level must be completed which includes twelve (12) semester hours in the common core, and an additional 24 semester hours which meet the requirements of the concentration area. A minimum of 18 semester hours must be at the 6000 level.

Common Core (12 hours)

[MGMT 5203 Project Management](#)
[COMM 5063 Organizational Communication](#)

Six (6) hours from:

[MATH 5103 Linear Algebra II](#)
[MATH 5153 Applied Statistics II](#)
[MATH 5273 Complex Variables](#)
[MATH 5243 Differential Equations II](#)
[MATH 5343 Introduction to Partial Differential Equations](#)

Concentration Area (24 hours)

In addition to the common core, 24 semester credit hours are required with a minimum of 18 hours of graduate engineering coursework and 12 hours of MCEG graduate courses.

[View Mechanical Engineering Courses](#)

- 2 .A cumulative grade point average of a 3.00 or better must be achieved in all graduate work attempted at Arkansas Tech University, with a maximum of six (6) hours of "C" grades. A student receiving more than six (6) hours of "C" or grades lower than "C" should refer to the section of the catalog on [Academic Probation and Dismissal](#).

- 3 .Successful completion of a comprehensive final examination, consisting of both a written and oral portion and administered by the student's Graduate Advisory Committee, is required in addition to the coursework requirements above. This exam will be administered during the student's final semester and may be attempted a maximum of three times.
- 4 .Completion of all requirements of the degree must be accomplished within six (6) years from the time of admission to the program.
- 5 .A minimum of 27 semester hours of graduate course work completed at Arkansas Tech University.

Degree Works

Degree Works is a software tool utilized by Arkansas Tech University designed to detail academic progression. It allows both students and advisors to monitor course progress towards degree completion and clearly indicates which course requirements have been met as well as how courses transfer into a program. Transfer courses must be approved through the use of a substitution/waiver form available via the Registrar for progress to display correctly within Degree Works.

Degree Works will display course progression based on the 2022 program of study, but a "what-if" scenario can be generated for any program to see how progression looks with the courses 2022ly completed and in progress. Note that if you have applied to and been admitted to a graduate program while still finishing your undergraduate program, Degree Works will show your new program of study in the graduate program and you would have to generate a "what-if" query to see your undergraduate degree progress.

Application for Graduation

In addition to satisfying all degree requirements, a candidate for a degree must file an [Application for Graduation](#) online or at the Graduate College. Students must apply for graduation upon completion of fifteen (15) graduate credit hours.

Special Conditions of Graduate Credit

Graduate Credit Taken Prior to Admission to Arkansas Tech University

A maximum of nine (9) semester hours of graduate credit with a grade point average of "B" or better may be transferred from an accredited graduate school if deemed appropriate to the graduate program by the head of the student's major department and the Graduate College Dean. Students must send a written request to the head of their major department to petition an acceptance of the transfer credit prior to requesting admission to candidacy to the graduate program. Graduate credit earned six (6) years prior to the completion date of all degree requirements may not be applied toward the degree without the approval of the appropriate program director and the Graduate College Dean. Credits earned by correspondence courses or for remedial purposes will not apply toward the graduate degree. No undergraduate course may be repeated for graduate credit.

Graduate Credit Taken After Admission to Arkansas Tech University

If after admission to graduate study, a student wishes to take a course at another institution to count toward degree requirements at Arkansas Tech University, the student must (in advance of enrollment) obtain written approval from the program director and the Graduate College Dean.