# **DEGREE PROGRAMS**

# MASTER OF ENGINEERING IN ELECTRICAL ENGINEERING

The Electrical Engineering Master's program provides you a solid foundation in both the theory and application in the field of Electrical Engineering and the program strives to offer you the breadth of education and depth of training necessary for leadership in the profession. The program requires 30 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. At the department of Electrical Engineering, you will find a welcoming community and we are always searching for outstanding new graduate talent.

#### **Unconditional Admission**

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

- 1 .Applicants must meet the all 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 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.
- 3 .Applicants must submit a letter of intent that addresses the applicant's intended focus and reasons for applying to the degree 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 from professors familiar with the applicants' academic.
- 5 .Approval from the Graduate Program.

#### **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 or 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 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. Course and research/design project requirements.

A minimum of 30 semester credit hours at the graduate level which may include up to 6 credit hours for the research project or design option. Courses may be taken in-person or online.

- Non-research option students must take 15 credit hours of ELEG (or approved MCEG) courses. Twelve (12) of these hours must be 6000 level.
- Research project/design option students must take 15 credit hours of ELEG (or approved MCEG) 6000 level courses of which up to 6 credit hours may be research project or engineering design courses.
- A minimum of six (6) semester hours from courses designated as MATH or STAT.
- Students participating in the accelerated degree program are allowed to include up to 12 hours of 5000 level courses for both undergraduate and graduate credit.
- Both the research project and non-research-based students may take 9 credit hours of electives that have been approved by the student's major advisory committee and the Graduate Program Director.
- 2. A cumulative grade point average of a 00 or better must be achieved in all graduate work attempted at ATU, 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. Non-research option students must successfully complete a comprehensive final examination, consisting of both a written and oral portion administered by the student's Graduate Advisory Committee, in addition to the coursework requirements. This exam will be administered during the student's final semester and may be attempted a maximum of three times. Research option students will submit a final written report of their research which also include an oral presentation. They are exempt from taking the final comprehensive exam unless their research/design project final report and presentation were found to be unacceptable.
- 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 24 semester hours of graduate course work completed at ATU.

### **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 current program of study, but a "what-if" scenario can be generated for any program to see how progression looks with the courses currently 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.