

MECHANICAL ENGINEERING

ASSOCIATE OF SCIENCE IN NUCLEAR TECHNOLOGY

Mechanical Engineering also offers a two-year program leading to the Associate of Science in Nuclear Technology (ASNT) degree. This degree is designed to allow students to obtain the knowledge base and training necessary to work in one of the many areas in the nuclear field. While many technology degrees, especially at the associate's level, are seen as less rigorous paths, the ASNT program at Arkansas Tech University includes most of the same courses as the first two years of the engineering programs.

Graduates of the program leading to the Associate of Science Degree in Nuclear Technology may find employment in many areas of the nuclear industry. Many past ASNT graduates have continued their studies to obtain bachelor's degrees in engineering or the physical sciences either at Arkansas Tech University or at other institutions.

For a detailed policy regarding transfer credit for the Mechanical Engineering programs, please see the [Department of Mechanical Engineering](#) page.

It is highly recommended that all freshmen engineering students starting fall 2017 purchase laptop computers. Laptop computer specifications are at: <https://www.atu.edu/engineering/specifications.php>.

Curriculum

The matrix below is a sample plan for all coursework required for this program.

Freshman

| Fall | Credits |
|--|-----------|
| ENGL 1013 Composition I ¹ | 3 |
| SS 1XXX Social Science Courses ¹ | 3 |
| MATH 2914 Calculus I ¹ | 4 |
| CHEM 2124 General Chemistry I and CHEM 2120 General Chemistry I Lab | 4 |
| MCEG 1011 Introduction to Mechanical Engineering or ELEG 1011 Introduction to Electrical Engineering | 1 |
| TECH 1001 Orientation to the University | 1 |
| Total Hours | 16 |

| Spring | Credits |
|---|-----------|
| ENGL 1023 Composition II ¹ | 3 |
| PHYS 2114 Calculus-Based Physics I and PHYS 2000 Physics Laboratory I | 4 |
| MATH 2924 Calculus II | 4 |
| MCEG 2023 Engineering Materials | 3 |
| | |
| | |
| Total Hours | 14 |

Sophomore

| Fall | Credits |
|---|-----------|
| SFHS 1XXX Social Sciences/Fine Arts/Humanities/Communication Courses ¹ | 3 |
| FAH 1XXX Fine Arts and Humanities Courses ¹ | 3 |
| USHG 1XXX U.S. History and Government ¹ | 3 |
| MCEG 2013 Statics | 3 |
| MCEG 3503 Basic Nuclear Engineering | 3 |
| | |
| Total Hours | 15 |

| Spring | Credits |
|--|-----------|
| SS 1XXX Social Science Courses ¹ | 3 |
| FAH 1XXX Fine Arts and Humanities Courses ¹ | 3 |
| MCEG 3313 Thermodynamics I | 3 |
| MCEG 3512 Radiation Detection Laboratory | 2 |
| MCEG 3523 Radiation Health Physics | 3 |
| Elective | 1 |
| Total Hours | 15 |

¹See appropriate alternatives or substitutions in "General Education Requirements".