

Electrical Engineering B.S.E.E.

Electrical Engineering B.S.E.E. Eight-Semester Degree Program

The following section contains the list of courses required for the Bachelor of Science in Electrical Engineering and a suggested eight-semester sequence. See the Eight-Semester Degree Policy (<http://catalog.uark.edu/undergraduatecatalog/academicregulations/eightsemesterdegreecompletionpolicy>) for more details. Not all courses are offered every semester, so students who deviate from the suggested sequence must pay careful attention to course scheduling and course prerequisites.

| First Year | Units | |
|--|-------|--------|
| | Fall | Spring |
| GNEG 1111 Introduction to Engineering I | 1 | |
| ENGL 1013 Composition I (ACTS Equivalency = ENGL 1013) | 3 | |
| MATH 2554 Calculus I (ACTS Equivalency = MATH 2405) | 4 | |
| CHEM 1103 University Chemistry I (ACTS Equivalency = CHEM 1414 Lecture) | 3 | |
| PHYS 2054 University Physics I (ACTS Equivalency = PHYS 2034) | 4 | |
| GNEG 1121 Introduction to Engineering II | | 1 |
| ENGL 1023 Composition II (ACTS Equivalency = ENGL 1023) | | 3 |
| MATH 2564 Calculus II (ACTS Equivalency = MATH 2505) | | 4 |
| Select one of the following: | | 3 |
| HIST 2003 History of the American People to 1877 (ACTS Equivalency = HIST 2113) | | |
| HIST 2013 History of the American People, 1877 to Present (ACTS Equivalency = HIST 2123) | | |
| PLSC 2003 American National Government (ACTS Equivalency = PLSC 2003) | | |
| Freshman Science Elective II [*] | | 4 |
| Year Total: | 15 | 15 |

| Second Year | Units | |
|---|-------|--------|
| | Fall | Spring |
| ELEG 2104 Electric Circuits I | 4 | |
| ELEG 2904 Digital Design | 4 | |
| Sophomore Science Elective ^{**} | 4 | |
| MATH 2584 Elementary Differential Equations | 4 | |
| CSCE 2004 Programming Foundations I | | 4 |
| ELEG 2114 Electric Circuits II | | 4 |
| MATH 2574 Calculus III (ACTS Equivalency = MATH 2603) | | 4 |
| Humanities Elective (from University/State Core List) | | 3 |
| Year Total: | 16 | 15 |

| Third Year | Units | |
|---|-------|--------|
| | Fall | Spring |
| ELEG 3124 System & Signal Analysis | 4 | |
| ELEG 3214 Electronics I | 4 | |
| ELEG 3924 Microprocessor Systems Design | 4 | |
| ELEG 3704 Applied Electromagnetics | 4 | |
| ELEG 3143 Probability & Stochastic Processes | | 3 |
| ELEG 3224 Electronics II | | 4 |
| ELEG 3304 Energy Systems | | 4 |
| Social Science Elective (from University/State Core List) | | 3 |
| Math/Science/Technical Elective | | 3 |
| Year Total: | 16 | 17 |

| Fourth Year | Units | |
|---|-------|--------|
| | Fall | Spring |
| Engineering Science/Technical Elective ^{***} | 3 | |
| Two Electrical Engineering Technical Elective ^{****} | 6 | |
| ELEG 4063 Electrical Engineering Design I | 3 | |
| Select one of the following: | 3 | |
| ECON 2013 Principles of Macroeconomics (ACTS Equivalency = ECON 2103) | | |
| ECON 2023 Principles of Microeconomics (ACTS Equivalency = ECON 2203) | | |
| ECON 2143 Basic Economics: Theory and Practice | | |
| Electrical Engineering Technical Elective ^{****} | | 3 |
| ELEG 4071 Electrical Engineering Design II | | 1 |
| Two Technical Elective | | 6 |
| Social Science Elective (from University/State Core List) | | 3 |
| Fine Arts Elective (from University Core) | | 3 |
| Year Total: | 15 | 16 |

Total Units in Sequence: 125

* Freshman Science Elective -CHEM 1123/CHEM 1121L University Chemistry II or PHYS 2074 University Physics II (ACTS Equivalency = PHYS 2044 Lecture)

** If CHEM 1123/CHEM 1121L University Chemistry II was taken for Freshman Science Elective, then PHYS 2074 University Physics II. If PHYS 2074 University Physics II was taken for the Freshman Science Elective, then CHEM 1123/CHEM 1121 University Chemistry II or BIOL 1543/BIOL 1541L Principles of Biology or BIOL 2213/BIOL 2211L Human Physiology, PHYS 2094 University Physics III

*** Engineering Science/Technical Elective: MEEG 2103 Introduction to Machine Analysis, MEEG 2303 Introduction to Materials, MEEG 2403 Thermodynamics, CHEG 2313 Thermodynamics of Single-Component Systems, INEG 2413 Engineering Economic Analysis (Sp, Fa), or another Technical Elective

**** CSCE 4114, CSCE 4613, CSCE 4233 are approved ELEG Technical Electives for students pursuing a dual ELEG / CSCE undergraduate degree.

Students should become very familiar with the Academic Regulations chapter for university requirements that apply to the electrical engineering program as well as the College of Engineering requirements (in particular the "D rule" and the "Transfer of Credit" for courses taken at another institution). In addition to these graduation requirements, candidates for an electrical engineering degree must have earned a grade-point average of no less than 2.00 on all ELEG courses.