# A.S. Electrical Engineering 2021-2022

## **EXPECTED DEGREE**

# **PROGRAM DESCRIPTION**

AS in Engineering - Electrical (60 sch)

+ These courses are only offered in the semester indicated.

\*\* Please see faculty advisor or division chair to discuss requirements for your transfer university.

Division Chair: Dr. Paula Wilhite (pwilhite@ntcc.edu) 903-434-8281 Faculty Advisor: Mark Ellermann (mellermann@ntcc.edu) 903-434-8297

Students should consult the division chair or a faculty advisor early in their program of study. These are suggested courses for students who plan to transfer to a four-year college or university and major in electrical engineering. Transferability and specific requirements can be determined only by the receiving institution. Only college-level courses apply toward completion of this curriculum and the graduation requirements for the A.S. **CIP: 24.0102** 

Tuition Costs and Scholarship Information for this degree can be found at: http://catalog.ntcc.edu Information for Financial Aid assistance can be found at: http://catalog.ntcc.edu

#### RECOMMENDED COURSE SELECTION

| RECOMMENDED COOKSE SELECTION         |     |                       |       |   |
|--------------------------------------|-----|-----------------------|-------|---|
| Fall 1st Year                        | SCH | Semester<br>Completed | Grade | Notes for Students:   |
| MATH 2413 - Calculus I ^             | 4   |                       |       |   |
| CHEM 1409 - Gen Chem for Engineers   | 4   |                       |       |   |
| ENGR 1201 - Intro to Engineering +   | 2   |                       |       |   |
| ENGL 1301 - English Comp I           | 3   |                       |       | ^ Prerequisite for Calculus I (MATH 2413): Precalculus (MATH 2412) or |
| Semester Credit Hours                | 13  |                       |       | equivalent or approval by division chair                              |
| Spring 1st Year                      | SCH | Semester<br>Completed | Grade | Notes for Students:   |
| MATH 2414 - Calculus II              | 4   |                       |       |   |
| PHYS 2425 - Advanced Physics I       | 4   |                       |       |   |
| ENGL 2311 - Tech & Business Writing  | 3   |                       |       |   |
| ECON 2301 - Prin of Macroeconomics   | 3   |                       |       |   |
| Semester Credit Hours                | 14  |                       |       |   |
| Summer 1st Year                      | SCH | Semester<br>Completed | Grade | Notes for Students:   |
| Core Course: History                 | 3   |                       |       |   |
| Core Course: History                 | 3   |                       |       |   |
| Semester Credit Hours                | 6   |                       |       |   |
| Fall 2nd Year                        | SCH | Semester<br>Completed | Grade | Notes for Students:   |
| MATH 2415 - Calculus III             | 4   |                       |       |   |
| MATH 2318 - Linear Algebra +         | 3   |                       |       |   |
| PHYS 2426 - Advanced Physics II +    | 4   |                       |       |   |
| COSC 1336 - Fund of Programming I    | 3   |                       |       |   |
| Semester Credit Hours                | 14  |                       |       |   |
| Spring 2nd Year                      | SCH | Semester<br>Completed | Grade | Notes for Students:   |
| MATH 2320 - Differential Equations + | 3   |                       |       |   |
| ENGR 2405 - Electrical Circuits +    | 4   |                       |       |   |
| GOVT 2305 - Federal Government       | 3   |                       |       |   |
| GOVT 2306 - Texas Government         | 3   |                       |       |   |
| Semester Credit Hours                | 13  |                       |       | DO THIS: Apply for graduation for AS Engineering                      |

## Total Required Associate of Science in Engineering (Electrical) = 60 Semester Credit Hours

CAREER OPPORTUNITIES - All data listed below incorporate Northeast Texas jobs and entry wages found on http://www.texaswages.com/WDAWages

Career option #1 Electronics Tech Career option #2 Electrical Engineer Career option #3 Electrical Engineer

\$Starting Salary \$42,400 \$Starting Salary \$64,936 \$Starting Salary \$92,000

w/Associate's Degree w/Bachelor's Degree w/Doctoral Degree