

A.S. Mechanical Engineering 2021-2022

EXPECTED DEGREE

AS in Engineering - Mechanical (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.

PROGRAM DESCRIPTION

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 mechanical 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: <https://catalog.ntcc.edu/>

Information for Financial Aid assistance can be found at: <https://catalog.ntcc.edu/>

RECOMMENDED COURSE SELECTION

| Fall 1st Year | SCH | Semester Completed | Grade | Notes for Students: |
|---------------------------------------|-----------|--------------------|-------|--|
| MATH 2413 - Calculus I ^ | 4 | | | ^ Prerequisite for Calculus I (MATH 2413): Precalculus (MATH 2412) or equivalent or approval by division chair |
| CHEM 1409 - Gen Chem for Eng Majors + | 4 | | | |
| ENGR 1201 - Intro to Eng + | 2 | | | |
| ENGL 1301 - English Comp I | 3 | | | |
| Semester Credit Hours | 13 | | | |
| Spring 1st Year | SCH | Semester Completed | Grade | Notes for Students: |
| MATH 2414 - Calculus II | 4 | | | |
| PHYS 2425 - Advanced Physics I | 4 | | | |
| ENGL 2311 - Tech & Business Writing | 3 | | | |
| ENGR 1304 - Engineering Graphics I + | 3 | | | |
| Semester Credit Hours | 14 | | | |
| Summer 1st Year | SCH | Semester Completed | Grade | Notes for Students: |
| Core Course: History | 3 | | | |
| Core Course: History | 3 | | | |
| Semester Credit Hours | 6 | | | |
| Fall 2nd Year | SCH | Semester Completed | Grade | Notes for Students: |
| MATH 2415 - Calculus III | 4 | | | |
| PHYS 2426 - Advanced Physics II + | 4 | | | |
| ENGR 2301 - Statics + | 3 | | | |
| Core Course: Government | 3 | | | |
| Semester Credit Hours | 14 | | | |
| Spring 2nd Year | SCH | Semester Completed | Grade | Notes for Students: |
| MATH 2320 - Differential Equations + | 3 | | | DO THIS: Apply for graduation for AS Engineering |
| ENGR 2302 - Dynamics + | 3 | | | |
| ECON 2301 - Prin of Macroecon I | 3 | | | |
| Core Course: Government | 4 | | | |
| Semester Credit Hours | 13 | | | |

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

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

| <i>Career option #1</i> | <i>Mechanical Tech</i> | <i>Career option #2</i> | <i>Mechanical Eng</i> | <i>Career option #3</i> | <i>Mechanical Engineer</i> |
|-----------------------------|------------------------|----------------------------|-----------------------|--------------------------|----------------------------|
| <i>\$Starting Salary</i> | <i>\$44,274</i> | <i>\$Starting Salary</i> | <i>\$61,538</i> | <i>\$Starting Salary</i> | <i>\$84,614</i> |
| <i>w/Associate's Degree</i> | | <i>w/Bachelor's Degree</i> | | <i>w/Doctoral Degree</i> | |