

A.S. Chemical Engineering 2021-2022

EXPECTED DEGREE

AS in Engineering - Chemical (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 Chairs: Dr. Mary Hearron, Dr. Paula Wilhite

Faculty Advisor: Dr. Drew Murphy (dmurphy@ntcc.edu) 903.434.8214

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 chemical 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 | | | ** Meet with faculty advisor or division chair ^ Prerequisite for Calculus I (MATH 2413): Precalculus (MATH 2412) or equivalent or approval by division chair |
| CHEM 1411 - Gen Chemistry I | 4 | | | |
| ENGL 1301 - English Comp I | 3 | | | |
| Semester Credit Hours | 11 | | | |
| Spring 1st Year | SCH | Semester Completed | Grade | Notes for Students: |
| MATH 2414 - Calculus II | 4 | | | ** Meet with faculty advisor or division chair DO THIS: Schedule campus tour w/ transfer university. ^ CHEM 1412 - Gen Chemistry II is also offered in Sum II semester. |
| PHYS 2425 - Advanced Physics I | 4 | | | |
| CHEM 1412 - Gen Chemistry II ^ | 4 | | | |
| ENGL 2311 - Tech & Business Writing | 3 | | | |
| Semester Credit Hours | 15 | | | |
| 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 | | | |
| CHEM 2423 - Organic Chemistry I + | 4 | | | |
| Core Course: Government | 3 | | | |
| Semester Credit Hours | 15 | | | |
| Spring 2nd Year | SCH | Semester Completed | Grade | Notes for Students: |
| MATH 2320 - Diffentials Equations | 3 | | | DO THIS: Apply for graduation for AS Engineering |
| CHEM 2425 - Organic Chemistry II | 4 | | | |
| ECON 2301 - Prin of Macroeconomics I | 3 | | | |
| Core Course: Government | 3 | | | |
| Semester Credit Hours | 13 | | | |

Total Required Associate of Science in Engineering (Chemical) = 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 | Chem Eng Tech | Career option #2 | Chemical Engineer | Career option #3 | Chemical Engineer |
|----------------------|---------------|---------------------|-------------------|-------------------|-------------------|
| \$Starting Salary | \$63,182 | \$Starting Salary | \$84,720 | \$Starting Salary | \$110,000 |
| w/Associate's Degree | | w/Bachelor's Degree | | w/Doctoral Degree | |