



# Academic & Career **PATHWAYS**

## Associate in Engineering (A.E.) Chemical – Advising Guide

The Associate in Engineering degree program prepares students to transfer to a four-year institution to major in chemical engineering.

| <b>Semester 1</b>   |                |  |
|---|----------------|--|
| Course  | Credits        | Action Steps   |
| ^CHEM 111 (General Education Requirement: Science)  | 5              | <ul style="list-style-type: none"> <li>Meet with Academic Advisor to build plan in Starfish</li> </ul> |
| ^ENGL 101 or ^COMM 100 (General Education Requirement: Communications)  | 3              |  |
| ENGR 101 (Program Requirement)  | 1              |  |
| CIMM 101, ^CIMM 102, ^CIMM 103, ^CSIS 123, ^CSIS 223, ^CSIS 271, ENGR 113, ^ENGR 180, ^ENGR 190, ^ETEC 130, ^ETEC 152, ^ETEC 271, GEOL 101, ^MATH 141, ^SRVY 135, WELD 100 (Program Elective)   | 1-5*           |  |
| ^MATH 180 (General Education Requirement: Mathematics)  | 5              |  |
| ^CHEM 112, ^CHEM 221, ^CHEM 222, CIMM 101, ^CIMM 102, ^CIMM 103, ^CSIS 123, ^CSIS 223, ^CSIS 271, ENGR 113, ^ENGR 180, ^ENGR 190, ^ENGR 204, ^ENGR 215, ^ENGR 223, ^ENGR 230, ^ENGR 233, ^ENGR 234, ^ENGR 240, ^ETEC 130, ^ETEC 152, ^ETEC 271, GEOL 101, ^MATH 141, ^SRVY 135, WELD 100 (Program Elective) | 1 – 5*         |  |
| <b>Total Credits</b>  | <b>16 - 24</b> |  |
| <b>Semester 2</b>   |                |  |
| ^CHEM 112, CIMM 101, ^CIMM 102, ^CIMM 103, ^CSIS 123, ^CSIS 223, ^CSIS 271, ENGR 113, ^ENGR 180, ^ENGR 190, ^ETEC 130, ^ETEC 152, ^ETEC 271, GEOL 101, ^MATH 141, ^SRVY 135, WELD 100 (Program Elective)  | 1 – 5*         | <ul style="list-style-type: none"> <li>Research/ contact transfer institutions</li> </ul>              |
| ^ENGL 101, ^ENGL 102, ^ENGL 215 or ^COMM 100 (General Education Requirement: Communications)  | 3              |  |
| ^MATH 190 (General Education Requirement: Mathematics)  | 5              |  |
| ^PHYS 220 (General Education Requirement: Science)  | 5              |  |
| <b>Total Credits</b>  | <b>14-18</b>   |  |
| <b>Semester 3 - Summer</b>  |                |  |
| ECON 210 or ECON 211 (Program Elective)   | 3              |  |
| ^MATH 230 (General Education Requirement: Mathematics)  | 3              |  |
| <b>Total Credits</b>  | <b>6</b>       |  |



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| <b>Semester 4</b>   |                |   |
|---|----------------|---|
| ^PHYS 221 (General Education Requirement: Science)  | 5              | <ul style="list-style-type: none"> <li>Apply for admission at transfer institution</li> <li>Apply for scholarships at transfer institution</li> </ul> |
| ^MATH 210 (General Education Requirement: Mathematics)  | 5              |   |
| ^CHEM 112, ^CHEM 221, CIMM 101, ^CIMM 102, ^CIMM 103, ^CSIS 123, ^CSIS 223, ^CSIS 271, ENGR 113, ^ENGR 180, ^ENGR 190, ^ENGR 204, ^ENGR 215, ^ENGR 223, ^ETEC 130, ^ETEC 152, ^ETEC 271, GEOL 101, ^MATH 141, ^SRVY 135, WELD 100 (Program Elective)            | 1 – 5*         |   |
| ^CHEM 112, ^CHEM 221, CIMM 101, ^CIMM 102, ^CIMM 103, ^CSIS 123, ^CSIS 223, ^CSIS 271, ENGR 113, ^ENGR 180, ^ENGR 190, ^ENGR 204, ^ENGR 215, ^ENGR 223, ^ETEC 130, ^ETEC 152, ^ETEC 271, GEOL 101, ^MATH 141, ^SRVY 135, WELD 100 (Program Elective)            | 1 -5*          |   |
| <b>Total Credits</b>  | <b>12 - 20</b> |   |
| <b>Semester 5</b>   |                |   |
| ART 108, ART 150, ART 151, ENGL 201, ENGL 214, ENGL 216, ENGL 254, ENGL 268, HIST 133, HIST 134, MUSI 108, MUSI 160, PHIL 100, or THEA 106 (General Education Elective: Humanities & Fine Arts)   | 3              | <ul style="list-style-type: none"> <li>Apply for graduation</li> <li>Complete Civics Exam with 70% or higher</li> </ul>                               |
| HIST 120, HIST 121, or POLS 136 (General Education: History & Social Science)   | 3              |   |
| ^CHEM 112, ^CHEM 221, ^CHEM 222, CIMM 101, ^CIMM 102, ^CIMM 103, ^CSIS 123, ^CSIS 223, ^CSIS 271, ENGR 113, ^ENGR 180, ^ENGR 190, ^ENGR 204, ^ENGR 215, ^ENGR 223, ^ETEC 130, ^ETEC 152, ^ETEC 271, GEOL 101, ^MATH 141, ^SRVY 135, WELD 100 (Program Elective) | 1-5*           |   |
| ^CHEM 112, ^CHEM 221, ^CHEM 222, CIMM 101, ^CIMM 102, ^CIMM 103, ^CSIS 123, ^CSIS 223, ^CSIS 271, ENGR 113, ^ENGR 180, ^ENGR 190, ^ENGR 204, ^ENGR 215, ^ENGR 223, ^ETEC 130, ^ETEC 152, ^ETEC 271, GEOL 101, ^MATH 141, ^SRVY 135, WELD 100 (Program Elective) | 1-5*           |   |
| ^ENGR 229 (Program Requirement)   | 3              |   |
| <b>Total Credits</b>  | <b>11-19</b>   |   |
| <b>Credits Required</b>   |                | <b>77*</b>  |
| <p><i>*The A.E. degree requires 77 total credits for graduation. When selecting a course from multiple options, please consider the number of credits for each course to ensure meeting the minimum requirements for graduation.</i></p>                        |                |   |

This Pathway Map is an advising tool designed for full-time students on this AE degree and identifies the course taking recommendation for timely degree completion. Please be aware that all pathway maps can be modified to fit the individual needs of students. Degree requirements and prerequisite information can be found here: <https://mcckc.edu/programs/ae/index.aspx> All students are encouraged to meet with their academic advisor to develop an individualized completion plan that best meets their goals, interests, and objectives.

^Course requires a prerequisite or appropriate placement, see catalog for additional information