

## PRE-ENGINEERING

### Associate of Science

62 credit hours\*

The Associate of Science Degree in Pre-Engineering is intended to provide the graduate with a foundational understanding of core sciences, an in-depth foundation in mathematics, and core curriculum prerequisites.

Students working toward this degree will be eligible for a Common Core Certificate of Completion.

Upon program completion students will be able to:

- Demonstrate effective written and verbal communication skills.
- Exhibit an in-depth understanding of mathematics.
- Display foundational knowledge of chemistry, physics and engineering.
- Apply their learning to a Bachelor's of Science degree in engineering.

*\*Additional hours may be required for program requirements for transfer students who are NMGEC complete.*

*Any student who is ineligible for state, national, or industry licensure or certification is ineligible for entry into this program.*

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#### Institutional and Related Requirements – 9 hours

ENGL 1110 – Composition I (3)  
FYEX 1110 – First-Year Seminar (3)  
BCIS 1115 – Introduction to Computers (3) **OR**  
BUSA 1110 – Introduction to Business (3)

*Note: If institutional/related requirements are waived, additional elective courses will be needed to meet the minimum hours required for the degree.*

#### Program Requirements – 29 hours

##### Required courses:

CHEM 1215/L– General Chemistry I for STEM Majors/  
Lab (4)\*\*  
CHEM 1225/L– General Chemistry II for STEM Majors/  
Lab (4)\*\*  
ECON 2110 – Macroeconomic Principles (3)  
ENGL 2210 – Professional & Technical  
Communication (3)  
MATH 1220 – College Algebra (4)\*  
MATH 1230 – Trigonometry (3)  
MATH 1510 – Calculus I (4)  
MATH 1520 – Calculus II (4)

*\*May be used to satisfy NMGEC Mathematics requirement.*

*\*\*May be used to satisfy NMGEC Science requirement.*

#### New Mexico General Education Curriculum (NMGEC) – 32 hours (as itemized below)

Communications – 6 hours  
Mathematics – 4 hours  
Science – 4 hours  
Social and Behavioral Sciences – 3 hours  
Humanities – 3 hours  
Creative and Fine Arts – 3 hours  
Flexible Nine – 9 hours