

Mathematics, Physical Science, & Pre-Engineering

Program Code (029)

Associate of Science

Required: 61-63 Credit Hours

Division of Math and Science

2.00 GPA

Students are required to complete the following General Education and Major Requirement courses. Students who complete an associate's degree are prepared to transfer and continue their education at a four-year college/university. Students should check with their academic advisor for consultation on course sequencing and transfer college opportunities.

GENERAL EDUCATION REQUIREMENTS (37 HOURS)	MAJOR REQUIREMENTS (24-26 HOURS)
<p>English Composition - 6 hours <i>(Select Both)</i> <input type="checkbox"/> ENGL 1113 Freshman Composition I <input type="checkbox"/> ENGL 1213 Freshman Composition II</p> <p>U.S. History - 3 hours <i>(Select One)</i> <input type="checkbox"/> HIST 1483 Am His 1492-1865 or HIST 1493 Am His 1865-Pr</p> <p>U.S. Government - 3 hours <input type="checkbox"/> POS 1113 American Federal Government</p> <p>Biological Science - 4 hours <i>(Select One)</i> <input type="checkbox"/> BOT 1114 or ZOO 1114</p> <p>Physical Science - 5 hours <input type="checkbox"/> CHEM 1115²</p> <p>Orientation - 1 hour <input type="checkbox"/> ORI 1111 Freshman Orientation</p> <p>Mathematics - 3 hours <input type="checkbox"/> MATH 1513 College Algebra</p> <p>Computer Proficiency - 3 hours <input type="checkbox"/> CS 1103 Microcomputer Applications</p> <p>Humanities - 6 hours <i>(Select Two)</i> <input type="checkbox"/> HUM 2113 Gen Hum. I <input type="checkbox"/> HUM 2223 Gen Hum II <input type="checkbox"/> ART 1113 Art Appreciation <input type="checkbox"/> DRMA 1213 Intro Theatre <input type="checkbox"/> HIST 1113 Early West Civ <input type="checkbox"/> MUS 1113 Music Appreciation <input type="checkbox"/> HIST 1123 Modern West Civ <input type="checkbox"/> PHIL 1113 Intro to Philosophy <input type="checkbox"/> PHIL 1213 Ethics <input type="checkbox"/> RLED 1123 New Testament <input type="checkbox"/> RLED 2113 World Religions <input type="checkbox"/> Any Literature Course/s</p> <p>Approved Elective - 3 hours <i>Select any one course in psychology, social sciences, foreign languages, & fine arts (art, music, drama) in conference with advisor</i> <input type="checkbox"/> Elective</p>	<p>Required Courses in Major – 13 hours <i>(Select All)</i> <input type="checkbox"/> MATH 1613 Plane Trigonometry <input type="checkbox"/> MATH 2265 Analytic Geometry and Calculus I <input type="checkbox"/> MATH 2275 Analytic Geometry and Calculus II</p> <p>Elective Courses in Major – 11-13 hrs</p> <p>Mathematics Option Electives – 11-13 hours <i>(Select three or more courses in conference with advisor)</i> <input type="checkbox"/> CHEM 1215 General Chemistry II³ <input type="checkbox"/> PHYS 1114 or PHYS 2014¹ <input type="checkbox"/> PHYS 1214 or PHYS 2114¹ <input type="checkbox"/> Elective chosen in conjunction with your advisor</p> <p>Pre-Engineering Option Electives – 11-13 hours <i>(Select three or more courses in conference with advisor)</i> <input type="checkbox"/> PHYS 2014 - Engineering Physics I <input type="checkbox"/> PHYS 2114 - Engineering Physics II <input type="checkbox"/> CHEM 1215 General Chemistry II <input type="checkbox"/> Elective chosen in conjunction with your advisor</p> <p>Physical Science (Chemistry & Physics) Option Electives – 11-13 hours <i>(Select three or more courses in conference with advisor)</i> <input type="checkbox"/> CHEM 1215 General Chemistry II <input type="checkbox"/> PHYS 1114 Gen Physics I or PHYS 2014 Eng Physics I¹ <input type="checkbox"/> PHYS 1214 Gen Physics II or PHYS 2114 Eng Physics II¹</p> <p>Approved Elective</p> <p>Notes to Advisee: Math prerequisite sequence is as follows: MATH 1513 is a prerequisite to MATH 1613 which is a prerequisite to MATH 2265 which is a prerequisite to MATH 2275</p> <p>Fall only courses: MATH 2265, PHYS 1114, PHYS 2014 Spring only courses: MATH 2275, PHYS 1214, PHYS 2114</p>
Totals: ----- Credit Hours: 37	Totals: ----- Credit Hours: 24-26

Notation:

- 1 – Receiving institution's degree plan should be consulted to see which Physics (General or Engineering) is required.
- 2 – CHEM 1115 has a co-requisite of MATH 1513 or MATH 1513 may be taken prior to taking CHEM 1115.
- 3 – Math Ed majors may need GEOG-2243 Fundamentals of Human Geography, instead of CHEM 1215.