



## Associate in Engineering in PRE-ENGINEERING

This program will prepare you for a bachelor's degree in engineering. You will obtain a general background in mathematics and the physical sciences, and will be introduced to the concepts and methods of engineering. This program is not a professional degree and does not prepare you for specific job opportunities. It does, however, provide a broad educational background on which to build a career through additional education or work experience.

Failure to maintain an overall GPA of at least a 2.00 in all coursework is sufficient cause for being dropped from the program.

<b>GENERAL EDUCATION (38)</b>	<b>COMPLETED</b>	<b>Planned Timeline (By Semester)</b>
<b><u>Communications (9)</u></b>		
ENG 111 English Composition I (3) <i>Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation</i>	_____	_____
ENG 116 Technical Writing (3) <i>Pre-requisite: ENG 111</i>	_____	_____
SPCH 130 Public Speaking (3) <i>Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation</i>	_____	_____
<b><u>Mathematics (11)</u></b>		
MATH 145 Introduction to Probability & Statistics (3) <i>Pre-requisite: MATH 130 or adequate score on the Course Placement Evaluation</i>	_____	_____
MATH 162 Calculus I (4) <i>Pre-requisites: MATH 150 and MATH 155 or MATH 160</i>	_____	_____
MATH 163 Calculus II (4) <i>Pre-requisite: MATH 162</i>	_____	_____
<b><u>Laboratory Science (12)</u></b>		
CHEM 121/L General Chemistry I/L (4) <i>Pre-requisite: MATH 130, high school chemistry, or an ACT score of 19 or higher in Natural Science</i>	_____	_____
PHYS 215/L Engineering Physics I with lab (4) <i>Pre-requisite: MATH 162</i>	_____	_____
PHYS 216/L Engineering Physics II with lab (4) <i>Pre-requisite: PHYS 215/L</i>	_____	_____
<b><u>Social/Behavioral Sciences (3)</u></b>		
ECON 201 Microeconomics (3) <i>Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation</i>	_____	_____
<b><u>Humanities and Fine Arts (3)</u></b>		
PHIL 220 Ethics (3) <i>Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation</i>	_____	_____
<b>HEALTH, PHYSICAL EDUCATION &amp; RECREATION (1)</b>		
Electives (1) _____	_____	_____
<b>PROGRAM REQUIREMENTS (26)</b>		
<b><u>Business (3)</u></b>		
BA Lower division elective (3) _____	_____	_____
<b><u>Engineering (23)</u></b>		
ME 160L General Engineering Design I (3) <i>Pre-requisite: MATH 160 or adequate score on the Course Placement Evaluation</i>	_____	_____
ME 202 Engineering Statics (3) <i>Pre-requisite: PHYS 215/L and MATH 163 or adequate score on the Course Placement Evaluation</i>	_____	_____
ME 260L Engineering Design II (3) <i>Pre-requisite: ME 160L and MATH 162 or adequate score on the Course Placement Evaluation</i>	_____	_____

EECE 203	Circuit Analysis I (3)	_____	_____
<i>Pre-requisite: MATH 163 and PHYS 216/L</i>			
EECE 152L	Computer Programming I (4)	_____	_____
<i>Pre-requisite: CS 102</i>			
EECE 231	Intermediate Programming I (3)	_____	_____
<i>Pre-requisite: EECE 152L</i>			
EECE 238L	Computer Logic Design (4)	_____	_____
<i>Pre-requisite: MATH 130 and PHYS 216L</i>			

**TOTAL CREDITS      65**

**SUGGESTED SEQUENCE OF COURSES**

**FIRST SEMESTER (17 crs)**

ENG 111	English Composition I (3)
MATH 162	Calculus I (4)
MATH 145	Introduction to Probability and Statistics (3)
ECON 201	Microeconomics (3)
CHEM 121/L	General Chemistry I (4)

**SECOND SEMESTER (15 crs)**

ENG 116	Technical Writing (3)
MATH 162	Calculus II (4)
PHYS 215/L	Engineering Physics I with Lab (4)
ME 160L	Gen. Eng. Design I (3)
HPER	Elective (1)

**THIRD SEMESTER (17 crs)**

SPCH 130	Public Speaking (3)
PHYS 216/L	Engineering Physics II with Lab (4)
ME 260L	Engineering Design II (3)
EECE 152L	Computer Programming I (4)
BA	Elective (3)

**FOURTH SEMESTER (16 crs)**

EECE 238L	Computer Logic Design (4)
EECE 203L	Circuit Analysis I (3)
PHIL 220	Ethics (3)
ME 202	Engineering Statics (3)
EECE 231	Intermediate Programming I (3)

## Educational Planning Form (Semester)

<b>Fall Semester</b>	<b>Spring Semester</b>	<b>Summer</b>
<b>Total Units</b>	<b>Total Units</b>	<b>Total Units</b>
<b>Fall Semester</b>	<b>Spring Semester</b>	<b>Summer</b>
<b>Total Units</b>	<b>Total Units</b>	<b>Total Units</b>
<b>Fall Semester</b>	<b>Spring Semester</b>	<b>Summer</b>
<b>Total Units</b>	<b>Total Units</b>	<b>Total Units</b>

**Advisor's Signature** \_\_\_\_\_

**Student Signature** \_\_\_\_\_