

# Industrial Engineering Technology/Pre-Engineering Technology – Associate of Science

The Associate of Science with an emphasis in Industrial Engineering Technology/Pre-Engineering Technology is a two-year degree for students who intend to transfer upon graduation. Transfer students should follow the requirements of the institution to which they wish to transfer. Students should contact the transfer institution of their choice to determine transferability of courses.

## Prerequisites

The student will need to demonstrate proficiencies in reading, English, and mathematics based on the COMPASS assessment test, ACT or SAT scores, or by taking the recommended/required classes. Some of the courses in this curriculum have specific prerequisites.

## General Education (GE) Courses

In order to graduate with a college degree, all students are required to take certain general education courses. These include English composition, speech, wellness, science, art and humanities, mathematics, computer systems, and social and behavioral science.

## Program Core Courses

MATH 150 Analytic Geometry and Calculus I, PHYS 104/140 Engineering Physics I/Lab, PHYS 105/145 Engineering Physics II/Lab.

## Program Elective Courses

Industrial Engineering program electives should be chosen based on the requirements of the transfer institution. Students should consult the transfer institution of their choice to determine transfer institution requirements and transferability of courses. Electives could include ETEC 194 Intro to Technology Systems, ETEC 125 Computer Applications in Manufacturing, ETEC 121 Engineering Graphics I, ETEC 123 Blueprint Reading, ETEC 153 Computer-Aided Design I, ETEC 111 Tools and Machines – Maintenance and Safety, ETEC 259 Computer-Aided Manufacturing,

## Program Outcomes

1. Demonstrate technical skills and application in mathematics to support planning, analyzing, and problem solving.
2. Apply the scientific method and principles to support planning, analyzing, and problem solving.
3. Demonstrate effective oral, written, and interpersonal communication skills to support their role in industry.

## Course Sequence

The listing that follows is a recommended sequence of courses for full-time students. The student should consult with an advisor for information specific to their academic situation.

## Industrial Engineering Technology/Pre-Engineering Technology – Associate of Science Recommended Sequence of Courses

<b>(Fall) Semester I</b>		<b>Cr Hrs</b>
MATH 150	Analytic Geometry and Calculus I*	5
CHEM 125	College Chemistry I	3
CHEM 126	College Chemistry I lab	2
COMM 207	Fundamentals of Speech	3
PSYC 100	First Year Seminar	1
ENGL 101	English Composition I	3
<b>Total</b>		<b>17</b>

<b>(Spring) Semester II</b>		
ENGL 289	English Composition II	3
PSYC 155	General Psychology	3
MATH 143	Elementary Statistics	3
	Approved Arts/Humanities Course	3
HPER 150	Lifetime Fitness	1
CSIS 100/130	Computer Concepts and Applications** or Intro to Computer Information Systems	3
<b>Total</b>		<b>16</b>

<b>(Fall) Semester III</b>		
PHYS 104	Engineering Physics I	4
PHYS 140	Engineering Physics I Lab	1
	Approved Social Science Course	3
	Approved Arts/Humanities Course	3
ACCT 201	Financial Accounting I or Program Course	3
	Program or Transfer Course	3
<b>Total</b>		<b>17</b>

<b>(Spring) Semester IV</b>		
PHYS 105	Engineering Physics II	4
PHYS 145	Engineering Physics II Lab	1
	Biological Science and Lab or Program or Transfer Course(s)	5
	Approved Social Science Course	3
	Approved Arts/Humanities Course	3
<b>Total</b>		<b>16</b>

**Total Program Credits** **66**

\*Assuming the student has passed the equivalent of MATH 113 College Algebra, and MATH122 Plane Trigonometry. If not, the student must enroll in those courses.

\*\*If not required by transfer institution, student may satisfy this requirement by passing computer proficiency exam.

### For more information contact:

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