I.T.C. Energy Systems Technology

(1 Year)

Program Prerequisites:
Students must be qualified for college-level coursework in English and Math (see an advisor for details).

<table>
<thead>
<tr>
<th>Placement Test</th>
<th>English</th>
<th>Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>SAT</td>
<td>360</td>
<td>500</td>
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<tr>
<td>ALEKS</td>
<td>30</td>
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<tr>
<td>Accuplacer</td>
<td>232</td>
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Description:
Fundamental electronics, electrical, and energy systems program.

Objective:
To prepare students as entry-level technician and maintenance assistants to meet the needs of industry.

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ESET 0100</td>
<td>Engineering Technology Orientation</td>
<td>1</td>
</tr>
<tr>
<td>ESET 0100L</td>
<td>Engineering Technology Orientation Lab</td>
<td>1</td>
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</table>

Select a minimum of sixteen (16) credits from the following courses: 16

- ESET 0101  Electrical Circuits I
- ESET 0101L  Electrical Circuits I Laboratory
- ESET 0102  Electrical Circuits II
- ESET 0102L  Electrical Circuits II Laboratory
- ESET 0110  Introduction to Process Control
- ESET 0110L  Introduction to Process Control Laboratory
- ESET 0121  Basic Electricity and Electronics
- ESET 0121L  Basic Electricity and Electronics Laboratory
- ESET 0122  Electrical Systems and Motor Control Theory
- ESET 0122L  Electrical Systems and Motor Control Theory Laboratory
- ESET 0123  Mechanical Power Transmission
- ESET 0123L  Mechanical Power Transmission Laboratory
- ESET 0125  Introduction to Structural Welding
- ESET 0126  Introduction to Mechanical Drafting and Computer Aided Design
- ESET 0127  Mechanical Power Transmission II
- ESET 0127L  Mechanical Power Transmission Laboratory II
- ESET 0151  Nuclear Industry Fundamental Concepts
- ESET 0151L  Nuclear Industry Fundamental Concepts Lab
- ESET 0152  Nuclear Careers and Information
- ESET 0153  Radiological Control Fundamentals

Select a minimum of eight (8) credits from the following math courses: 8

- ESET 0140  Applied Technical Intermediate Algebra
- MATH 1143  College Algebra
- MATH 1144  Trigonometry
- MATH 1147  College Algebra and Trigonometry
- MATH 1153  Statistical Reasoning
- MATH 1170  Calculus
- MGT 2216  Business Statistics

Choose a minimum of 4 credits of General Education Course Electives:

- COMM 1101  Fundamentals of Oral Communication
- CHEM 1101  Introduction to Chemistry
- ENGL 1101  Writing and Rhetoric I
- PHYS 1101  Elements of Physics and Elements of Physics Laboratory

Total Credits: 30

Students continuing to the AAS are advised to take the following curriculum as part of the ITC:

- Electrical Engineering Technology --
  - ESET 0101, ESET 0101L, ESET 0102, ESET 0102L

- Instrumentation Engineering Technology --
  - ESET 0101, ESET 0101L, ESET 0102, ESET 0102L, ESET 0110, ESET 0110L,

- Mechanical Engineering Technology --
  - ESET 0121, ESET 0121L, ESET 0122, ESET 0122L, ESET 0123,
  - ESET 0123L, ESET 0125, ESET 0126, ESET 0127, ESET 0127L, ESET 0140

- Nuclear Engineering Technology --
  - ESET 0121, ESET 0121L, ESET 0122, ESET 0122L, ESET 0140,
  - ESET 0151, ESET 0151L, ESET 0152, ESET 0153

Major Academic Plan (MAP)