# I.T.C. Energy Systems Technology

## 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></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>
</tr>
</thead>
<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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</tbody>
</table>

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

- 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
- 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

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1 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)