## Associate of Applied Science: Energy Systems Wind Engineering Technology

(2 Years)

### Applications for this program are not currently being accepted.

### Objective:
Graduates will be able to: (1) solve technical problems typical of those encountered in the energy systems wind engineering technology discipline by using critical thinking skills, current technology, and principles of mathematics and applied science; (2) work and communicate effectively in multidisciplinary teams in both industrial and academic settings; and (3) understand current professional issues and the need to pursue lifelong learning.

Students must register concurrently for the lab course associated with each theory course.

### Code | Title | Credits
--- | --- | ---
**Required Courses:**
ESET 0100 | Engineering Technology Orientation | 1
ESET 0121 | Basic Electricity and Electronics | 4
ESET 0121L | Basic Electricity and Electronics Laboratory | 3
ESET 0122 | Electrical Systems and Motor Control | 3
ESET 0122L | Electrical Systems and Motor Control Laboratory | 1
ESET 0123 | Mechanical Power Transmission | 2
ESET 0123L | Mechanical Power Transmission Laboratory | 1
ESET 0141 | Applied Mathematics I | 4
ESET 0142 | Applied Mathematics II | 4
ESET 0150 | Introduction to Wind Energy Systems | 2
ESET 0150L | Introduction to Wind Energy Systems Laboratory | 1
ESET 0212 | Electrical Systems Documentation and Standards | 1
ESET 0231 | Microcontrollers | 2
ESET 0231L | Microcontrollers Laboratory | 1
ESET 0232 | Electrical Machines | 3
ESET 0232L | Electrical Machines Laboratory | 3
ESET 0233 | Electrical Power Systems | 3
ESET 0233L | Electrical Power Systems Laboratory | 3
ESET 0240 | Pumps | 3
ESET 0240L | Pump Applications Laboratory | 3
ESET 0243 | Hydraulic and Pneumatic Power | 2
ESET 0243L | Hydraulic and Pneumatic Power Laboratory | 2
ESET 0247 | Wind Energy Control Systems | 2
ESET 0247L | Wind Energy Control Systems Laboratory | 1
TGE 0159 | Internship Strategies | 1

### General Education courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COMM 1101</td>
<td>Fundamentals of Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1153</td>
<td>Statistical Reasoning</td>
<td>3-4</td>
</tr>
<tr>
<td>or MATH 1170</td>
<td>Calculus I</td>
<td></td>
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<tr>
<td>PHYS 1101 &amp; 1101L</td>
<td>Elements of Physics and Elements of Physics Laboratory</td>
<td>4</td>
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Additional General Education courses | 6

**Total Credits** | 72-73

1. See General Education Requirements (minimum 15 credits) for A.A.S. Degree at the start of the College of Technology section of the catalog.
2. Contributes to a General Education requirement.