Program Title: Industrial Technology

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Cross Walk: Learning Outcomes and Relevant Courses

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<thead>
<tr>
<th>Learning Outcome</th>
<th>Relevant Course</th>
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<td>Outcome #1: Identify typical tools and proper use of a variety of devices including precision measurement.</td>
<td>INT 101 Introduction to Industrial Technology</td>
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| Outcome #2: Perform test procedures (start-up) for a variety of industrial equipment such as hydraulics, pneumatic, pumps, hvac systems, boilers, compressed air systems etc. | INT 101 Introduction to Industrial Technology        
INT 102 Introduction to PLC 
INT 110 Fundamentals of Electricity 
INT 105 Plumbing and Pipefitting 
INT 107 Introduction to HVAC |
| Outcome #3: Perform data collection and evaluation for equipment used in the industrial environment. | INT 101 Introduction to Industrial Technology        
INT 110 Fundamentals of Electricity 
INT 105 Plumbing and Pipefitting 
INT 107 Introduction to HVAC |
| Outcome #4: Understand and use proper communications. | INT 101 Introduction to Industrial Technology        |
Outcome #5: Maintain and troubleshoot a variety of systems.

| INT 101 Introduction to Industrial Technology |
| INT 102 Introduction to PLC |
| INT 110 Fundamentals of Electricity |
| INT 105 Plumbing and Pipefitting |
| INT 107 Introduction to HVAC |

Outcome #6: Recognize standard safety practices, procedures, and personal protection equipment.

| INT 104 Facilities Safety and Compliance |

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**Expected Learning Outcomes**

- Identify typical tools and proper use of a variety of devices including precision measurement.
- Perform test procedures (start-up) for a variety of industrial equipment such as hydraulics, pneumatic, pumps, hvac systems, boilers, compressed air systems etc.
- Perform data collection and evaluation for equipment used in the industrial environment.
- Understand and use proper communications.
- Maintain and troubleshoot a variety of systems.
- Recognize standard safety practices, procedures, and personal protection equipment.

**Assessment** (How do students demonstrate achievement of these outcomes?)

Final Project: Students will install components, test and start-up systems, and collect and analyze data.

Satisfactory scores on exams and projects.

Satisfactory scores on exams modeled after industry standard certification exams.

**Validation** (What methods are used to validate your assessment?)

1. Approval by Industrial Technology/Alternative Energy Technology Advisory Committee
3. Faculty Review

2. Project similar in scope real world experience/installation.
Results (What do the data show?)

Testing results internship evaluations, as well as hands-on practices show that the majority of the students are achieving desired program outcomes. Feedback from the advisory committee indicates that we are addressing needed skills related to Industrial Technology.

Follow-up (How have you used the data to improve student learning?)

The above data as well as student evaluations have been used to modify presentations and add more hands-on experiences.

Budget Justification
(What resources are necessary to improve student learning?)

Currently evaluating needs as a result of the above information for the FY15/16 budget year.