**Program Title: Industrial Technology**

**Course Instructor(s): Anthony Valente, Instructor**
**William Bailey Adjunct Instructor**
**Denny Fulk, Adjunct Instructor**
**Richard Calhoun Adjunct Instructor**
**Dennis Ward Adjunct Instructor**
**Daryl Mummert Adjunct Instructor**

## Cross Walk: Learning Outcomes and Relevant Courses

| Learning Outcome | Relevant Course |
|---|---|
| Outcome #1: Identify typical tools and proper use of a variety of devices including precision measurement. | INT 101 Introduction to Industrial Technology |
| 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<br>INT 102 Introduction to PLC<br>INT 110 Fundamentals of Electricity<br>INT 105 Plumbing and Pipefitting<br>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<br>INT 110 Fundamentals of Electricity<br>INT 105 Plumbing and Pipefitting<br>INT 107 Introduction to HVAC |
| Outcome #4: Understand and use proper communications. | INT 101 Introduction to Industrial Technology |

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|---|---|
| Outcome #5: Maintain and troubleshoot a variety of systems. | INT 101 Introduction to Industrial Technology<br>INT 102 Introduction to PLC<br>INT 110 Fundamentals of Electricity<br>INT 105 Plumbing and Pipefitting<br>INT 107 Introduction to HVAC |
| Outcome #6: Recognize standard safety practices, procedures, and personal protection equipment. | INT 104 Facilities Safety and Compliance |

**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
2. Tests comparable to Industry Standard Certification Exams.
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-one 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.***

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**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.***