**Course Assessment Plan**

**Program: Electrical Automation Technology Course Title: Introduce to Automation and Control Circuits**

**Instructor: Matthew Leigh**

**Semester: Fall 2018 Total # Scheduled Sessions:80 Days**

**Action Plan implemented from Spring 2018 Semester**

**Step 1: How will the outcome(s) be assessed to determine achievement?**

|  |  |  |
| --- | --- | --- |
| **Course Outcome** | **Methods of Assessment** | |
| **Assessment Process** | **Level of Achievement** |
| **CLO #6:** Construct the wiring on various types of transformers, including buck-boost, single, and three phase transformers, for different voltage and current systems. | **What:** Hands-On test. The transformer unit hands on test shall complete our unit on Transformers. This hands-on test shall be used for this outcome assessment.  **How:** The students shall be tested on their knowledge in hands on form using a shop job to construct several three-phase configurations. The student shall receive a grade based on how they performed on this test.  **Who:** Matthew Leigh  **When:** Wednesday December 19th, 2018  **Where: Ranken’s Wentzville location, Taylor Building, room T-105** | **Criteria:**  The hands-on test shall be graded based on instructor evaluation.  **Success Level:**  Students shall exhibit their knowledge on this hands-on test by achieving a grade of 75% or higher.  **Expected Achievement**: 85% student success level  **Students Included:** All students enrolled in the course |

**Step 2: What were the results, what do they mean, and what is the plan to improve, if needed?**

|  |  |  |
| --- | --- | --- |
| **Course Outcome** | **Assessment Results** | |
| **Analysis** | **Plan for Improvement** |
| **CLO # 6:** Construct the wiring on various types of transformers, including buck-boost, single, and three phase transformers, for different voltage and current systems | **Date of assessment:** Friday December 14th, 2018  **Total Number of Students:** 11  **Number of students Meeting Success Level:** 11  **Number of students Not Meeting Success Level:** 0  **Key Findings:** More time needs to be spend on power distribution. Nine of the eleven students were in their 1st semester at Ranken even though this is 2nd semester material. Those nine students did not have a grasp on single phase power distribution and were being taught three-phase power distribution. This posed a barrier to student comprehension.  **Conclusions:** The unit on three-phase power distribution should be move to the Motor and Drives curriculum which would ensure that all the students within the unit understands single-phase power distribution.  **End Result:**  *(Did 85% meet expected achievement as described in Step 1?)*  Achieved  Not Achieved  Inconclusive | **Effect on Student Learning:** The unit on three-phase power distribution should be move to the Motor and Drives curriculum which would ensure that all the students within the unit understands single-phase power distribution.  **Actions Taken**: Transformers currently in place are not of the proper size and ratio for the three-phase portion. New, appropriate transformers need to be purchased to accommodate the necessary equipment required for a successful outcome.  **Re-assessment Date:** Summer 2019 |