**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 \_\_\_\_\_\_\_\_\_ Semester: None Prior**

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

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| **Course Outcome** | **Methods of Assessment** | |
| **Assessment Process** | **Level of Achievement** |
| **CLO #2:** Properly size conductor and overload protection for single and three phase motor control circuits. | **What:** Course mid-term. The mid-term shall complete our unit on Manual Motor Controls. The test shall consist of both a written exam and a hands-on exam. The hands-on test shall include material to cover this outcome assessment.  **How:** The students will then be given a real-world control problem that they shall have to design motor control circuit and select appropriate components sized for the simulated example.  **Who:** Matthew Leigh  **When:** Wednesday October 17th, 2018  **Where: Ranken’s Wentzville location, Taylor Building, room T-105** | **Criteria:**  The hands-on portion shall be graded based on the Manual Motor Controls rubric.  **Success Level:**  Students shall exhibit their knowledge on the hands-on portion of the mid-term 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?**

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| **Course Outcome** | **Assessment Results** | |
| **Analysis** | **Plan for Improvement** |
| **CLO # 2:** Properly size conductor and overload protection for single and three phase motor control circuits. | **Date of assessment:** October 19th. 2018  **Total Number of Students:** 11  **Number of students Meeting Success Level:** 11  **Number of students Not Meeting Success Level:** 0  **Key Findings:** As a part of the mid-term hands on assessment, the students wired up a three-phase motor to two motor starters, one for forward and one for reverse. The student needed the select the proper conductor size and color for both the source wiring and the load wiring. All students performed this task successfully.  **Conclusions:** The current 1st year classroom did not have three-phase power available. Students were required to move their panels to another classroom that provided the source power required. Equipment has been purchased and construction has begun on providing the needed power in the 1st year shop area.  **End Result:**  *(Did 85% meet expected achievement as described in Step 1?)*  Achieved  Not Achieved | **Effect on Student Learning:** No prior action plan was in place.  **Actions Taken**: Add three-phase power to 1st year classroom. Construction has already begun.  **Re-assessment Date:** Summer 2019. |