Continuous Improvement Plan Report to be Completed in Years 2/4 of Program Review Cycle

Date: 02/13/2025 **Name of Program: Electronics Engineering Technology**

Contact Name: Fawad Rauf **Contact Email: frauf@collin.edu** **Contact Phone: 9723771510**

Table 1: CIP Student/Program Level Learning Outcomes Targeted for Improvement, Description of Assessment Measure(s) and Targets Levels of Success Table (focus on at least one student/program level outcome for the next two years)

Description of Fields in CIP Table 1:

A. Student Learning Outcome(s) - Results expected in this program (e.g., students will be able to compare/contrast conflict and structural functional theories). Outcomes must be quantifiable and measurable.

B. Assessment Measure(s) – Assessment instrument(s)/process(es) used to measure results (e.g., embedded test questions 6 & 7 from final exam)

C. Targeted Level(s) of Success - Level of success expected (e.g., X% of students will score at least Y on the indicated assessment)

A. Student/Program Level Learning Outcome(s) Targeted for Improvement (e.g., "Students will be able to…")	**B. Description of Assessment Measure(s)** (Assessment instrument(s)/process(es) used to measure results - Include course in which assessment will be given)	**C. Targeted Level(s) of Success** (e.g., X% of students will score at least Y on the indicated assessment.)
Students will be able to demonstrate skill in the use of various types of industrial robots.	Lab-based assessment of Fanuc and Universal Robotics programming in RBTC 2345	70% of students will earn a grade of 70% or better on indicated measure

Add additional rows if necessary.

Table 2. CIP Student Learning Outcomes 1–3 (focus on at least one for the next two years)

Description of Fields in CIP Table 2:

A. Student/Program Level Learning Outcome(s) Targeted for Improvement - Results expected in this program (e.g., Students will be able to compare/contrast conflict and structural functional theories). Outcomes must be quantifiable and measurable.
B. Assessment Measure(s) – **Assessment** Instrument(s)/process(es) used to measure results (e.g., embedded test questions 6 & 7 from final exam)
C. Targeted Level(s) of Success - Level of success expected (e.g., X% of students will earn a score of Y or greater on the embedded test questions)
D. Description of Action Plan to Improve Learning - Describe action(s) to be taken to improve student attainment of the indicated student/program level outcome. What will you do?
E. Summary of Results/Data - Summarize the information and data collected in year 1/3 when action plan was implemented.
F. Findings - Explain how the information and data has impacted the expected student learning outcome.
G. Implementation of Findings – Describe how you have used or will use your findings and analysis of the data to make improvements.

Student/Program Level Learning Outcome Targeted for Improvement #1

A. Student/Program Level Learning Outcome Targeted for Improvement #1: Students will be able to demonstrate skill in the use of various types of industrial robots.	
B. Assessment Measure(s): Lab exercises requiring operation and program on Fanuc Robots and Universal Robots (RBTC 2345)	**C. Targeted Level(s) of Success:** 70% of students will earn a grade of 70% or better on indicated measure
D. Description of Action Plan to Improve Learning: Lab-based assessment of both Fanuc and Universal Robots using faculty-developed rubric.	
E. Summary of Results/Data: Lab-based assessments were created and data was collected over last two years in the RBTC 2345 course.	
F. **Findings:** First Year: 16 out of 16 students met the target of 70% or better. 100% met the target. Second Year: 21 out of 27 students met the target of 70% or better. 77.78% met the target.	
G. Implementation of Findings: Results changed significantly in the second year, department will retain this outcome and continue to monitor students results over the next CIP cycle to see the consistency in students' performance.	

Student/Program Level Learning Outcome Targeted for Improvement #2

A. Student/Program Level Learning Outcome Targeted for Improvement #2:	
B. Assessment Measure(s):	**C. Targeted Level(s) of Success:**
D. Description of Action Plan to Improve Learning:	
E. Summary of Results/Data:	
F. Findings	
G. Implementation of Findings:	

Student/Program Level Learning Outcome Targeted for Improvement #3

A. Student/Program Level Learning Outcome Targeted for Improvement #3:	
B. Assessment Measure(s):	**C. Targeted Level(s) of Success:**
D. Description of Action Plan to Improve Learning:	
E. Summary of Results/Data:	
F. Findings:	
G. Implementation of Findings:	

Program Assessment Data Report

Program: Electronics Engineering Technology **Terms Data Collected: Fall 2023 -- Fall 2024**

Program-Level Learning Outcome- (From Assessment Plan)	Assessment Measure(s) and Where Implemented in Curriculum – (From Assessment Plan)	Target Outcome(s)- Level of Success Expected – (From Assessment Plan)	Assessment Results – (Provide data in a form related to targeted levels of success to left. Indicate if targeted level of success was met, partially met, or not met.)
Students will be able to demonstrate skills in the use of instrumentation devices such as multi-meter, signal function generator, oscilloscope, and spectrum analyzer	Lab exercise requiring connection of digital multimeter, three-rail power supply, multi-function generator, and oscilloscope to a desktop PC for remote monitoring and control (INTC 1307)	70% of students will earn a grade of 70% or better on indicated measure	**Fall 2023** 100% of students earned a grade of 70% or better on indicated measure. Target Met **Fall 2024** 92.3% of students earned a grade of 70% or better on indicated measure. Target Met
Students will be able to troubleshoot and evaluate performance of electronic circuits and systems.	Class project requiring assembly of an electronic system to accomplish a task. Perform subsequent testing and evaluation of its performance (CETT 1457)	70% of students will earn a grade of 70% or better on indicated measure	**Spring 2024** 75% of students earned a grade of 70% or better on indicated measure. Target Met
Students will be able to perform maintenance and general repairs on electronic circuits and systems.	Lab exercise to perform maintenance on a given system consisting of input devices, communication	70% of students will earn a grade of 70% or better on indicated measure	**Spring 2024** 100% of students earned a grade of 70% or better on indicated measure.

	circuits, and output devices (CETT 1445)		Target Met
Students will be able to integrate electronic systems for emerging technologies.	Class project to integrate electrical and mechanical systems for a given application using MATLAB/Simulink (CETT 2471) Class project to build a communication system for a specific use with emphasis on the choice of frequency bands, modulation and coding schemes, and antenna technologies. (EECT 2439)	70% of students will earn a grade of 70% or better on indicated measures	**Fall 2023** 100% of students earned a grade of 70% or better on indicated measure. Target Met **Fall 2024** 100% of students earned a grade of 70% or better on indicated measure. Target Met **Spring 2024** 91.66% of students earned a grade of 70% or better on indicated measure. Target Met

Add additional rows if necessary.