

Program Outcomes Guide

Directions: Please complete this form to document your progress toward improving student learning. For each item, indicate your progress and your anticipated next steps. Thank you!

Program Title: Digital Instrumentation and Process Control

Date: 6/4/18

Program Team: Juan C Luna

Expected Learning Outcomes:

1. Understanding of the Fundamentals of Digital Instrumentation and Process Control.
2. Ability to conduct standard measurements, to analyze, to write, and to interpret lab reports.
3. To design and understand pressure, level, flow, temperature, proportional control concepts, Integral control concepts, PID controllers, data collection and reporting, system maintenance, PLC (Programmable Logic Control), SCADA (Supervisory Control And Data Acquisition), embedded PC machine controls, automation and automation system networking.
4. Work effectively in teams solving technical problems.
5. Ability to communicate effectively both orally and in writing. Use of appropriate technical literature.

Assessment (How do or will students demonstrate achievement of each outcome?)

Students will demonstrate expected learning outcomes

Validation (What methods have you used or will you use to validate your assessment?)

Assessment of Hands-on Activities, and Assignments. Quizzes and exams will be designed around the expected learning outcomes objectives.

Results (What do your assessment data show? If you have not yet assessed student achievement of your learning outcomes, when is assessment planned?)

As it was expected, students are able to fulfill the learning outcomes for every course, and the whole program whenever their participation is above 80% in all group of assessments: quizzes, exams, assignments and lab activities.

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

I created excel graphs and calculations to show overall progress of the student outcomes. The data shows that all assessment components are important, contrary to the student belief that only exams are important.

Budget Justification

(What resources are necessary to improve student learning?) None