



COGNITIVE DOMAIN: Knowledge; what graduates will know.

Knowledge and Comprehension

- ◆ Accurately identify methodologies about the multiple industrial systems and explain (elaborate) about the purpose regarding the exercises.
- ◆ Exhibit understanding of DC/AC circuits and the components that are frequently present in that system.
- ◆ Understand the elements that make up the whole fluid power system and how the different devices relate to and affect each other.
- ◆ Comprehend diagram and blueprints for fluid, electrical, mechanical, and PLC systems.

Application

- ◆ Produce simulations of real life examples by designing their own projects related to material that has been covered.
- ◆ Effectively install and maintain field devices for electro-mechanical, fluid power, and programmable systems.
- ◆ Exhibit trouble-shooting skills that help them isolate, replace, and repair components in electro-mechanical, fluid power, and replaceable systems.
- ◆ Interface software programs with hardware pilot devices that replace outdated electrical systems.
- ◆ Interchange electrical, fluid power, and programmable systems that behave in the same manner.
- ◆ Communicate effectively with supervisor and/or machine operators to determine points of failure so that they can perform the proper repair, modification or design.

Analysis, Synthesis & Evaluation

- ◆ Assess the faulted system to determine the fastest and most accurate way to solve the problem.
- ◆ Use critical thinking that will help them install, troubleshoot, repair or modify a system.
- ◆ Illustrate diagrams, timelines, and/or testing graphs that will assist the students to build and test their circuits.

AFFECTIVE DOMAIN: Attitude; growth in feelings or emotional areas

- ◆ Attracted to the industrial discipline
- ◆ Creative tendency
- ◆ Inquisitive nature
- ◆ Self-motivated
- ◆ Ability to meet deadlines
- ◆ Capable of making decisions without constant supervision
- ◆ Be a lifetime learner (in order to keep up-to-date in technology)

PSYCHOMOTOR DOMAIN: Skills; manual or physical

- ◆ Produce (hand) drawings and schematics of industrial machines
- ◆ Assemble models that simulate real-life operations
- ◆ Transform the laboratory over to simulation machinery for real-life.
- ◆ Use instruments to assess the (actual) activity in the (multiple) systems.