



COGNITIVE DOMAIN: Knowledge; what graduates will know.

Knowledge and Comprehension

- ◆ Accurately identify methodologies about the multiple electronic and robotic systems and explain the purpose regarding the exercise.
- ◆ Exhibit understanding of DC/AC circuits and components that are present in those systems.
- ◆ Understand the elements that comprise the various subsystems and components of industrial electronic and robotic systems.
- ◆ Comprehend schematic and system diagrams for electronic, PLC, fluidic and robotic systems.

Application

- ◆ Effectively install and maintain electronic, PLC, programmable, fluidic and robotic systems.
- ◆ Exhibit trouble-shooting skills that help them isolate, replace and repair components and subsystems in electronic, fluidic, programmable, PLC and robotic systems.
- ◆ Interface microprocessor systems to electronic subsystems with outdated controls.
- ◆ Communicate effectively with supervisory and/or production staff to determine failure modalities and effect proper repair, modification or design.

Analysis, Synthesis & Evaluation

- ◆ Assess the faulted system to determine the fastest and most accurate solution for the problem.
- ◆ Use critical thinking that will assist the installation, troubleshooting, repair and/or modification of a system.
- ◆ Illustrate schematics, simulation systems and test instruments that will assist the students in the construction and testing of their circuits.

AFFECTIVE DOMAIN: Attitude; growth in feelings or emotional areas

- ◆ Attracted to the electronic discipline.
- ◆ Creative tendency.
- ◆ Inquisitive nature.
- ◆ Self-motivated.
- ◆ Ability to meet deadlines.
- ◆ Capable of making decisions without constant supervision.
- ◆ Be a lifetime student (keep up-to-date with technology).

PSYCHOMOTOR DOMAIN: Skills; manual or physical

- ◆ Produce schematic and system diagrams for electronic systems
- ◆ Assemble prototypes models of electronic subsystems.
- ◆ Automate laboratory via programmable and/or simulation technology.
- ◆ Use instruments to assess and evaluate performance in complex systems.

September 8, 2009