

## **Electrical Techniques**

## **Program Learning Outcomes**

Learning outcomes represent culminating demonstrations of learning and achievement. In addition, learning outcomes are interrelated and cannot be viewed in isolation of one another. As such, they should be viewed as a comprehensive whole. They describe performances that demonstrate that significant integrated learning by graduates of the program has been achieved.

## The graduate has reliably demonstrated the ability to

- 1. assist in the interpretation and preparation of electrical drawings including other related documents and graphics.
- 2. analyze and solve simple technical problems related to basic electrical systems by applying mathematics and science principles.
- 3. use and maintain test and instrumentation equipment.
- 4. assemble basic electrical circuits and equipment to fulfill requirements and specifications under the supervision of a qualified person.
- 5. assist in the installation and troubleshooting of basic electrical machines and associated control systems under the supervision of a qualified person.
- 6. assist in testing and troubleshooting electrical and electronic circuits, equipment, and systems by using established procedures under the supervision of a qualified person.
- 7. assist in the troubleshooting of control systems under the supervision of a qualified person.
- 8. use computer skills and tools to solve basic electrical related problems.
- 9. assist in conducting quality assurance procedures under the supervision of a qualified person.
- 10. assist in the preparation and maintenance of records and documentation systems.
- 11. install and assist in testing telecommunication systems under the supervision of a qualified person.
- 12. apply health and safety standards and best practices to workplaces.
- 13. perform tasks in accordance with relevant legislation, policies, procedures, standards, regulations, and ethical principles.
- 14. apply basic electrical cabling requirements and install and test system grounding for a specified number of applications under the supervision of a qualified person.
- 15. identify problems and troubleshoot electrical systems under the supervision of a qualified person.
- 16. assist in the selection of electrical equipment, systems and components to fulfill the requirements and specifications under the supervision of a qualified person.