# Louisiana Delta Community College Academic Affairs Master Syllabus

**Course Name**: INDUSTRIAL ELECTRICITY

**Course Number:** IMMT 1421

Credit Lecture hours: 0 Credit Lab Hours: 4 Contact Hours: 120

Textbook, Author, and Publisher: To be provided by College Campus

Instructor Information: To be provided by College Campus

Class Location: To be provided by College Campus

**Course Description:** A study of industrial electrical applications utilizing practical techniques to introduce the installation, diagnosis and repair of electrical circuits and components. Safe practices and basic wiring schemes will be emphasized.

**Prerequisites:** IMMT 1410; IMMT 1411; IMMT 1110

Co-requisites: None

### **Learning Outcomes:**

On completion of this course, the student should be able to perform the following with a proficiency that complies with the minimum standard of industry:

- 1. Identify various electrical hazards and safety concerns associated with industrial and residential electricity.
- 2. Discuss and demonstrate proper use of electrical tools.
- 3. Discuss the maintenance principles of industrial electrical circuits and components.
- 4. Identify and interpret wiring symbols and diagrams.
- 5. Explain and demonstrate the proper wiring techniques involved in making splices, soldering connections and solderless connections.
- 6. Wire up a three-way and four way lighting circuit using non-metallic sheathed cable.
- 7. Wire up a receptacle using conduit.
- 8. Install and wire a service.
- 9. Install a control circuit transformer on a piece of industrial equipment or trainer.
- 10. Discuss and demonstrate proper service and repair techniques for industrial electrical systems.
- 11. Discuss the operation of three phase current.
- 12. Wire a simple three phase motor circuit using conduit.
- 13. Install a breaker box with a main disconnect.
- 14. Install a breaker box with a main disconnect.
- 15. Measure amp flow to a three phase industrial component using an amp probe.

**Assessment Measures:** To be provided by the College Campus.

## **Library Resource Center:**

The Delta Library and Learning Resource Center is committed to providing quality information and learning resources and services, including technology, in supporting the overall mission of Delta Community College and its commitment to lifelong learning.

### **Special Accommodations:**

Louisiana Delta Community College complies with Section 504 of the Rehabilitation Act, as well as the Americans with Disabilities Act. Students with disabilities who attend the Monroe campus may make a request by contacting the Director of Counseling and Disability Services (See College Directory for contact information.) at the beginning of each semester. Reasonable accommodations will be attempted for students with documented disabilities. If an impairment is identified later in the semester, a non-retroactive accommodation plan will be developed. Students at satellite campuses should contact the Coordinator of Student Affairs at their particular campus.

#### Title IX:

Louisiana Delta Community College is committed to protecting the rights of students, which includes compliance with Title IX requirements. As such, the institution and members of our community will not tolerate the offenses of dating violence, domestic violence, sexual assault, and stalking. Students with Title IX concerns should contact the College's Title IX Coordinator (See College Directory for contact information.) Students are required to complete Sexual Assault Awareness and Prevention Online Training. Access to this online course will be sent out through the Delta email account.

#### **Student Code of Conduct:**

Louisiana Delta Community College encourages an environment of academic integrity and mutual respect. Students should read and follow both academic and behavioral expectations identified in the Code of Student Conduct that can be found online at <a href="https://www.ladelta.edu">www.ladelta.edu</a>. Students are expected to act with integrity, respect the rights of others, and conduct themselves in a professional manner. The Honor Code prohibits academic misconduct such as cheating, engaging in unauthorized collaboration, and plagiarism. Violations of the Code of Student Conduct may result in disciplinary action as provided in the Code. Incidents are reported through the online Student Conduct system.