

Louisiana Delta Community College

Academic Affairs Master Syllabus

Course Name: MOTOR CONTROLS

Course Number: IMMT 1430

Credit Lecture hours: 0 **Credit Lab Hours:** 4 **Contact Hours:** 180

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 AC motor controls designed to acquaint the student with the theory, diagnosis, and repair of various motor controllers and circuit components. Students will be involved in the construction of various controls circuits found in industry.

Prerequisites: IMMT 1110; IMMT 1410; IMMT 1411

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 working on motor control circuits.
2. Explain and interpret the wiring symbols and diagrams used in the construction and repair of motor control circuits.
3. Discuss the various ladder logic control devices.
4. Wire circuits containing the different ladder logic control devices.
5. Trouble shoot a motor control circuit using a test light.
6. Trouble shoot a motor control circuit using a multi-meter.
7. Wire a control station which contains a pilot light.
8. Wire a motor that is operated from a limit switch.
9. Install a control relay to increase switch output.
10. Describe the operation of a memory circuit added to a control switch.
11. Wire a motor control circuit using a momentary start-stop switch and a memory circuit.
12. Explain all the information found on various single phase motor nameplates.
13. Explain all the information found on various three phase motor nameplates.
14. Describe, identify and install full voltage manual starters.
15. Describe, identify and install drum switches.

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 www.ladelta.edu. 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.