

Louisiana Delta Community College

Academic Affairs Master Syllabus

Course Name: CONTROLLERS

Course Number: INST 2610

Credit Lecture hours: 1 **Credit Lab Hours:** 2 **Contact Hours:** 75

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: This course includes the principles of operation, maintenance, testing, troubleshooting and repairing/replacing of pneumatic and electronic analog process controllers and associated test equipment.

Prerequisites: None

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:

Competency:

1. Troubleshoot and repair pneumatic analog controllers.

Objectives:

- a. Identify terms associated with pneumatic analog controllers.
- b. Identify types of pneumatic analog controllers.
- c. Describe the operation of pneumatic analog controllers.
- d. Identify the test equipment, tools, and materials needed for troubleshooting.
- e. Describe the calibration procedure for pneumatic analog controllers.
- f. Test and align a pneumatic analog controller.
- g. Demonstrate appropriate safety procedures.

Competency:

2. Troubleshoot and repair electronic analog controllers.

Objectives:

- a. Identify terms associated with electronic analog controllers.
- b. Identify types of electronic analog controllers.
- c. Describe the operation of electronic analog controllers.
- d. Identify the test equipment, tools, and materials needed for troubleshooting.
- e. Describe the calibration procedure for electronic analog controllers.
- f. Test and align an electronic controller.
- g. Demonstrate appropriate safety procedures.

Learning Outcomes continued:

3. Configure, troubleshoot, and repair digital controllers.

Objectives:

- a. Describe operating principles and circuitry of digital controllers.
- b. Identify test equipment, tools, and materials needed for troubleshooting.
- c. Describe troubleshooting techniques.
- d. Describe configuration of digital controllers.
- e. Configure digital controllers.
- f. Apply appropriate safety procedures.

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 (345-9152, Room 155) 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.

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.