

# Louisiana Delta Community College

## Academic Affairs Master Syllabus

**Course Name:** INDUSTRIAL SOLAR APPLICATIONS

**Course Number:** SOLR 1020

**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:** The student will gain sufficient skills required to specify, adapt, implement, configure, install, inspect, and maintain a stand-alone solar system that meets the performance and reliability needs of the customer, incorporates quality craftsmanship, and complies with all applicable codes, standards, and safety requirements.

**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:

1. Review safety basics.
2. Identify safety and environmental hazards associated with industrial battery installations.
3. Identify and implement appropriate codes and standards.
4. Conduct a site assessment.
5. Explain types, designs, operating behaviors and characteristics of lead-acid batteries.
6. Describe effects of ageing on batteries, criteria for selecting batteries, proper recycling, and safety practices and maintenance of batteries.
7. Explain various functions of charge controllers and inverters.
8. Select an appropriate system design.
9. Adapt an appropriate mechanical design.
10. Adapt an appropriate electrical design.
11. Install stand-alone PV system.
12. Perform a system checkout and inspection
13. Maintain and troubleshoot a system

**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](http://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.