

Louisiana Delta Community College

Academic Affairs Master Syllabus

Course Name: CABLING INFRASTRUCTURE

Course Number: INCT 2830

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 is designed for students interested in the physical aspects of voice and data network cabling and installation. The course focuses on cabling issues related to data and voice connections and provides an understanding of the industry and its worldwide standards, types of media and cabling, physical and logical networks, as well as signal transmission. Students will develop skills in reading network design documentation, part list set up and purchase, pulling and mounting cable, cable management, choosing wiring closets and patch panel installation and termination as well as installing jacks and cable testing. This hands-on, lab-oriented course stresses documentation, design, and installation issues, as well as laboratory safety, on-the-job safety, and working effectively in group environments. This course will help prepare students for the BICSI Registered Certified Installer, Level 1.

Prerequisites: INCT 2110 or Department Head Approval

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. The student will examine the cabling industry and its job market as well as US and international standards and worldwide standards organizations.
2. The student will distinguish basic networking concepts and topologies, as well as the OSI model and the main functions of each layer of the model.
3. The student will discuss signal transmission, basics of electrical and optical transmission theory, as well as the causes and effects of signal degradation.
4. The student will recognize the physical construction of copper cabling in the form of twisted-pair and shielded twisted-pair, as well as the respective standards and coaxial cable schematics.
5. The student will classify fiber optics usage in cabling, different modes of fiber optics and implications of dispersion and attenuation.
6. The student will demonstrate essential lab safety principles.

Learning Outcomes continued:

7. The student will describe local, national and international safety code of conduct for installers, tools of the trade and professional behavior and demeanor.
8. The student will demonstrate structured cabling and structured cabling subsystems basics, the difference between equipment rooms, telecommunications rooms, wiring closets, main distribution facilities and intermediate distribution as well as different types of cabling.
9. The student will outline cabling installation phases such as presales and sales process phases, documentation processes, software tools introduction, infrastructure design introduction, parts lists and purchases.
10. The student will demonstrate rough-in phase: upgrades and retrofits.
11. The student will demonstrate trim-out phase: the importance of cable management and copper and fiber optic media termination.
12. The student will demonstrate the finish phase: cabling system testing, cable certification and documentation.
13. The student will examine the customer support phase: cabling project completion and customer support.
14. The student will identify emerging networking technologies.

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.