

Louisiana Delta Community College

Academic Affairs Master Syllabus

Course Name: ADVANCED ROUTING

Course Number: INCT 2150

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 teaches students how to implement, monitor, and maintain routing services in an enterprise network. Students will learn how to plan, configure, and verify the implementation of complex enterprise LAN and WAN routing solutions, using a range of routing protocols in IPv4 and IPv6 environments. The course also covers the configuration of secure routing solutions to support branch offices and mobile workers. Comprehensive labs emphasize hands-on learning and practice to reinforce configuration skills.

Prerequisites: INCT 2140 or CCNA Certification

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. Explain complex network requirements and design models for implementing advanced routing services in an enterprise network
2. Implement EIGRP and OSPF in an enterprise network
3. Exchange routing information between interior gateway protocols
4. Implement various mechanisms for controlling routing updates and traffic
5. Implement BGP to allow an enterprise network to connect to an ISP
6. Describe a basic implementation for branch office and mobile worker connectivity
7. Implement IPv6 in an enterprise network

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.