



**North Central State College**  
**MASTER SYLLABUS**  
**2020-2021**

- A. Academic Division: Business, Industry, and Technology
- B. Discipline: Information Technology - Networking
- C. Course Number and Title: ITEC1645 – Switching, Routing, and Wireless Essentials CCNA2
- D. Course Coordinator: Brian Baldrige  
Assistant Dean: Toni Johnson, PhD

Instructor Information:

- Name: Click here to enter text.
- Office Location: Click here to enter text.
- Office Hours: Click here to enter text.
- Phone Number: Click here to enter text.
- E-Mail Address: Click here to enter text.

- E. Credit Hours: 2  
Lecture: 1 hour  
Laboratory: 2 hours
- F. Prerequisites: ITEC 1640 (minimum grade C-)
- G. Syllabus Effective Date: Fall 2020
- H. Textbook(s) Title:

Provided

- I. Workbook(s) and/or Lab Manual:
- J. Course Description: This is the second course in a series of three. The curriculum provides a comprehensive introduction to the networking field and in-depth exposure to fundamental networking, LAN switching, wireless LANs, basic routing, Cybersecurity, WAN concepts, VPNs, QoS, virtualization, and network automation. Threaded throughout the course are security concepts and skills including threat mitigation through LAN security, ACLs, and IPsec. Through hands-on lab activities, students learn how to implement network technologies and troubleshoot common issues. This course, together with [ITEC 1640](#) and [ITEC 1665](#), prepares students for Cisco's CCNA certification exam. CTIT008
- K. College-Wide Learning Outcomes:

College-Wide Learning Outcome	Assessments - - How it is met & When it is met
Communication – Written	
Communication – Speech	
Intercultural Knowledge and Competence	
Critical Thinking	
Information Literacy	
Quantitative Literacy	

L. Course Outcomes and Assessment Methods:

Upon successful completion of this course, the student shall:

Outcomes	Assessments – How it is met & When it is met
1. Configure devices using security best practices for a given set of conditions.	tests, labs, practice and final exams
2. Explain how routers use information in packets to make forwarding decisions.	tests, labs, practice and final exams
3. Configure IPv4 and IPv6 floating static routes.	tests, labs, practice and final exams
4. Implement VLANs and trunking in a switched network	tests, labs, practice and final exams
5. Explain how Layer 2 switches forward data.	tests, labs, practice and final exams
6. Implement DHCPv4 to operate across multiple LANs.	tests, labs, practice and final exams
7. Configure switch security to mitigate LAN attacks for a given set of conditions.	tests, labs, practice and final exams
8. Explain the operation of dynamic address allocation in IPv6 networks.	tests, labs, practice and final exams
9. Explain how WLANs enable network connectivity	tests, labs, practice and final exams
10. Implement a WLAN using a wireless router and WLC	tests, labs, practice and final exams
11. Explain how to troubleshoot static and default route configurations.	tests, labs, practice and final exams

M. Topical Timeline (Subject to Change):

N. Course Assignments:

1. Tests
2. Labs
3. Practice Exam
4. Final Exam

O. Recommended Grading Scale:

NUMERIC	GRADE	POINTS	DEFINITION
93–100	A	4.00	Superior
90–92	A-	3.67	Superior
87–89	B+	3.33	Above Average
83–86	B	3.00	Above Average
80–82	B-	2.67	Above Average
77–79	C+	2.33	Average
73–76	C	2.00	Average
70-72	C-	1.67	Below Average

67-69	D+	1.33	Below Average
63-66	D	1.00	Below Average
60-62	D-	0.67	Poor
00-59	F	0.00	Failure

P. Grading and Testing Guidelines:

Click here to enter text.

Q. Examination Policy:

Click here to enter text.

R. Class Attendance and Homework Make-Up Policy:

Click here to enter text.

S. Classroom Expectations:

Click here to enter text.

T. College Procedures/Policies:

**Important information regarding College Procedures and Policies can be found on the [syllabus supplement](#) located at <https://sharept.ncstatecollege.edu/committees/1/curriculum/SiteAssets/SitePages/Home/SYLLABUS%20SUPPLEMENT.pdf>**

**The information can also be found**  Choose an item.