Course Title:
Fundamentals of Wireless Networking

Catalog Description:
Fundamentals of Wireless Networking course provides a broad survey of wireless communications including in-depth coverage of protocols, transmission methods, and IEEE wireless standards. Many hands-on exercises are included, which allow students to practice skills as they are learned.

Goal 2: Critical Thinking: ____ by meeting the following competencies:

Goal 3: Natural Sciences: ____ by meeting the following competencies:

Goal 4: Mathematics/Logical Reasoning: ____ by meeting the following competencies:

Goal 5: History and the Social and Behavioral Sciences: ____ by meeting the following competencies:

Goal 6: The Humanities and Fine Arts: ____ by meeting the following competencies:

Goal 7: Human Diversity: ____ by meeting the following competencies:

Goal 8: Global Perspective: ____ by meeting the following competencies:

Goal 9: Ethical and Civic Responsibility: ____ by meeting the following competencies:

Goal 10: People and the Environment: ____ by meeting the following competencies:

Prerequisites or Necessary Entry Skills/Knowledge:
None

Topics to be Covered (General)
1. Wireless Communications
2. Wireless Data Transmission
3. Antennas
4. Introduction to Wi-Fi WLANS
5. WLANs and WLAN Security
6. Radio Frequency Identification and Near-Field Communication
## Student Learning Outcomes

1. Describe a wireless LAN  
2. Describe the history of wireless networking  
3. Identify the hardware components of a wireless network  
4. Design a wireless network topology  
5. Describe wireless transmission methods  
6. Configure wireless hardware components  
7. Configure the client and adaptors for a wireless network  
8. Identify antenna types and functions  
9. Describe wireless security  
10. Perform a site survey for a wireless network  
11. Install a wireless network  
12. Describe the duties of a wireless network administrator

### Is this course part of a transfer pathway: Yes ☐ No ☒

*If yes, please list the competencies below

---

Revised Date: 2/16/2021