



# Polk State College Apprenticeship Partnership in Information Technology (MAP IT)

## **Firewall Services and Cybersecurity Essentials**

**Eight-week course; Starts January 6, 2021, Online, Self-paced independent study**

**Total Course Cost: \$336**

Cost Breakdown: Credit Cost: \$336

Cost covered by Grant: Lab Fees: \$60, and one-time \$500 certification exam included

This course surveys the fundamental tenants of cybersecurity and the general security concepts involved in maintaining a secure network computing environment. The student explores the nature and scope of today's cybersecurity challenges and applies various network-defense strategies. Detailed information about next-generation cybersecurity solutions is included, allowing the student to deploy a variety of security methodologies, technologies, and concepts involved in implementing a secure network environment. The curriculum focuses on the information and skillsets required to install, configure, and manage firewalls for defense of enterprise network architecture. The student applies the theory and configuration steps for setting up the security, networking, threat-prevention, logging, and reporting features of next-generation firewall technologies.

**OJT Competencies: This training develops the student's ability to:**

### Network Defenses

- Design and build a secure network.
- Mitigate an attack against a network device.

### Networking and Protocols

- Explain layer-three and layer-four protocols and their use-cases (IP/ICMP/TCP/UDP).
- Utilize Network Traffic Monitoring tools (tcpdump).

### Network Device Security

- Deploy a network device on the perimeter that can withstand attacks.

Polk State College

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