POLK STATE
Corporate College

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

Computer Forensics

Eight-week course; Online self-paced independent study
Total Course Cost: $336
Cost Breakdown: Credit Cost: $336
Cost covered by the Grant: Books $149, Lab Fees: $60, and One-time exam fee: $250

This course surveys the principles and practices required to obtain and preserve evidence in a computer forensics investigation including computer forensic tools, incident and crime-scene processing, digital-evidence control, and reporting.

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

Digital Investigations
- Recognize the role of forensics in incident response and threat determination.
- Describe the different types of investigations (e.g., law enforcement, administrative, and regulatory investigations).

Digital Forensics
- Capture data and metadata of different file types.
- Interpret popular file types and their formats.
- Explain data type sizes: bits, nibbles, bytes.
- Explain how data types store value (i.e., decimal, binary, and hexadecimal).
- Manually convert data between binary, hexadecimal, and ASCII formats.
- Explain disk and data structures (e.g., filesystems, slack space, memory structures, network structures, volatile versus non-volatile files, allocated versus unallocated files, and file deletion and recovery).
- Interpret ASCII and Unicode encodings.

Acquisition of Evidence
- Acquire forensic data from devices (e.g., computers, laptops, servers, mobile phones).
- Acquire forensic data from virtual machines (e.g., virtualized computers).

Analysis of Evidence
- Assess the mechanisms by which tools perform data carving and recovery.
- Identify common forensic tools for specific forensic acquisitions.

Reporting
- Recognize the legal requirements for permissible court-related evidence.
- Demonstrate proficiency in maintaining a proper chain of custody.
- Document the legal processes for securing evidence..

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- Identify the role of organization policies and consent.
- Interpret court processes, assess the differences between technical and expert witnesses, and determine how to appropriately testify regarding an event.