

The Computer Security and Investigations/Digital Forensics certificate will provide individuals with the networking, investigative and critical thinking skills that are imperative for digital forensic examiners.

# COMPUTER SECURITY AND INVESTIGATIONS DIGITAL FORENSICS CERTIFICATE PROGRAM

## **Program Description**

This model will not only present students with the technological side of security management, but the law enforcement perspective and investigative skills needed to respond appropriately to breaches of security. The issues of system security and the need for digital forensics training is complex and needs to be addressed at many different levels and in many different areas.

There is a critical need to improve the quality of education and training in the digital forensics component of information security. Finding people with the full set of skills in computer security and digital forensics is challenging.

This certificate as proposed will provide individuals with the networking, investigative and critical thinking skills that are imperative for digital forensic examiners. Many different experts have been consulted and curriculums studied. The formulation of coursework has also been discussed with industry leaders at advisory board meetings. Also, articulations with SUNY Buffalo and Hilbert College will be forthcoming. It would seem to mesh with the college's mission as it leverages materials previously developed in the information systems security area.

Coursework includes Linux operating systems, hardware fundamentals, introduction to digital forensics, advanced digital forensics, networking and network forensics. In addition, criminal law and criminal procedure relating to search and seizure issues and New York State evidentiary law will be discussed.

Students should be aware that background checks may be necessary for participation in this certificate program.

## **Program Competencies**

Upon completion of the Computer Security and Investigations/ Digital Forensics certificate, students will:

- Be able to acquire, validate, extract, analyze and report upon digital evidence
- Be conversant with multiple digital devices including, but not limited to: computers, personal digital assistants, cameras, cell phones, iPods, removable flash media
- Comprehend the process for digital evidence to be admissible in a court of law
- Comprehend the "Chain of Custody" process
- Understand the Federal Rules of Evidence and basic New York State law with regard to the search and seizure of digital evidence
- Be knowledgeable about the physical handling of digital devices
- Be able to create understandable and accurate reports

Degree: Certificate

Hegis: CASA 0702 CIP 11.9999

Curriculum Code: 1492 Location: North

#### **CURRICULUM**

DA 155	Operating Systems and Shell Scripting (4cr)
DA 102	Introduction to Computer Security
	Investigations and Hardware
	Fundamentals (4cr)
CR 170	Criminal Law (4cr)
DA 204	Digital Forensics I (4 cr)
CR 260	Criminal Procedure (4cr)
DA 205	Digital Forensics II (4 cr)
DA 206	Networking and Network Forensics (4cr)

#### **Additional Requirements:**

Students must have GED or high school diploma and English composition EN 110 is a co-requisite.



(716) 851-1ECC - www.ecc.edu

Erie Community College is committed to equal opportunity in educational programs, admissions and employment. It is the policy of ECC to provide equal opportunity for all qualified applicants, students and employees, and to prohibit discrimination. Title VII of the Civil Rights Act of 1964, as amended, prohibits discrimination based on race, color, religion, national origin, age, sex (including pregnancy), disability, sexual orientation, marital status or veteran status. Discrimination of this nature is unacceptable and impermissible conduct which will NOT be tolerated.