Homeland Security is an emerging and growing field that includes many concentrations. These concentrations range from physical security, emergency preparedness and response for natural disasters and terrorism, border patrol, security management, cyber security, software security, computer security, and network security. The Computer Science Homeland Security, Associate of Science Degree is designed to provide a broad coverage of security issues as they relate to computer and information systems, network environment, threats and challenges faced by Homeland Security.

How You Will Benefit (Objectives)

The Los Angeles Southwest College Computer Science Homeland Security degree is a forward-looking, fundamental, and broad-based program in Homeland Security emphasizing on the Information Technology essentials, computing forensics and network security. This Associate in Science in Computer Science Information Technology degree has been designed to:

- Equip students with the appropriate and much needed skills to successfully enter the area of homeland security.
- Provide students with skills, knowledge, and experience that will allow them to be competitive candidates and therefore increase their employability in the field of homeland security.
- Train students to successfully adapt to change in this dynamic field quickly and efficiently, preparing them for a lifelong learning process.
- Transfer students to a four year universities to pursue their Bachelor Degree in Computer Science Homeland Security.

What You Will Do (Activities)

- Apply a systematic approach to conducting a computer forensics investigation, both law enforcement and a corporate investigation.
- Investigate the requirements of a computer forensics lab including data recovery workstations, hardware and software.
- Collect evidence at private-sector incident scenes as well as at a crime scene using state-of-art data acquisition tools.
- Install and configure a Network Operating Systems Server.
- Secure remote access, wireless, and virtual private networks (VPN).
- Defend against network attacks.
- Planning for server deployment, installation and configuration.
- Setting up Active Directory and accounts management and prepare for management, monitoring and maintaining servers security and policies.
- Understand fundamental networking technologies include topologies, Open System Interconnection (OSI), network architecture, simple and complex network operations and protocols.
- Formulate the basic steps of an attack that can be launched against a computer or network and assess the five steps in a defense of an attack that can be launched against a computer or network.
- Enumerate the phases of the security systems development life cycle (SecSDLC) and identifying specific threats and creating specific controls to counter those threats.
Los Angeles Southwest College Computer Science Homeland Security degree program will equip the learners with the necessary skills to be successful in the Homeland Security field. This A.S. degree in Computer Science Homeland Security focuses on the following selected topics: Networking Essentials and Security, Server Administration and Network Security including configuration and controls, Principles of Information Systems Security, and Computer Forensics fundamentals providing an overview of computer forensic types, techniques, their electronic evidence and capture. Graduates of this program will be well prepared to enter the dynamic and rewarding field of homeland security and be candidates for the following occupations: IT Specialist (Information Security), Computer Support Specialists and Systems Administrators, Network and Computer Systems Administrators, and Information Security Analysts, Web Developers, and Computer Networks Architects. Students will be ready to transfer and pursue a Bachelor degree in Computer Science Homeland Security Track at a four year university.

**How Much Will This Degree Cost? (Tuition and Books)**

The expected cost is: 44 units x $46 per unit = $2024. You may need to add books and materials costs.

**Needs More Information? (Contact)**

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