

# CLOUD, SECURITY, AND SYSTEM ADMINISTRATION - ADVANCED TECHNICAL CERTIFICATE (ATC)

Explore More About This Program: <https://cwi.edu/program/cloud-security-and-system-administration>

## Program Learning Outcomes

**Upon successful completion of this program, students will be able to:**

- Install and configure a client operating system and demonstrate proficiency in file permissions, disk management, and peer-to-peer user and group management.
- Perform advanced subnetting with CIDR, create and document network addressing schemes, configure routers and switches for small to medium-sized networks, demonstrate the use of configuration tools, analyze data frames, test and troubleshoot network connectivity, and resolve any issues.
- Install and configure a server operating system, network services, directory services, network printing, and group policy objects.
- Install and configure a Linux operating system, network services within Linux, and file and folder security with Linux.
- Install and configure a secure network environment, identify common security threats, implement cryptography solutions, and install and configure firewalls for perimeter security.
- Install, configure, and troubleshoot domain controllers, directory services, and file services in an on-premises environment and cloud environment.
- Install, configure, maintain, and troubleshoot a secure email messaging system and client.
- Install, configure, maintain, and troubleshoot a database system.
- Install, configure, and manage a virtual environment using vSphere and Hyper-V to provide high availability.
- Exhibit competencies of Written or Oral Communication (GEM 1 or GEM 2), Mathematical Ways of Knowing (GEM 3), and Social and Behavioral Ways of Knowing (GEM 6).