CNSE List of Approved Certificates (Count = 9)
New Cybersecurity and Cloud Certificates pending in 2020/21

CNSE: CyberSecurity Penetration Tester

The Cybersecurity Penetration Tester Certificate of Achievement prepares students for entry-level cybersecurity jobs. Students who complete the award will be able to secure networks by performing penetration testing, security audits, assist with investigations, and oversee security policies. Course choices include network security, ethical hacking, advanced Linux and scripting, and Python security. Students completing this 11 unit award can continue obtaining cybersecurity professional certification.

Required Courses	Course Title	Units
CNSE M56	Advanced Linux & Scripting	3
CNSE M82	Intro Network Security	3
CNSE M84	Certified Ethical Hacker	2
CNSE M100	Cybersecurity Analysis	3
	Total Units	11

CNSE: CyberSecurity Administration

The Cybersecurity Administration Certificate of Achievement award prepares students for entry-level cyber security jobs. Students who complete the award will be able to secure networks by performing penetration testing, security audits, assist with investigations, and oversee security policies. Course choices include network security, Windows and Linux security, web security and protocols. Students completing this 11-unit award can continue obtaining cybersecurity professional certification.

Required Courses	Course Title	Units
CNSE M31	Windows Server	3
CNSE M56	Advanced Linux and Scripting	3
CNSE M84	Certified Ethical Hacker	2
CNSE M100	Cybersecurity Analysis	3
	Total Units	11

--- Additional Pages Follow --

CNSE: Cyber Investigations & Computer Forensics Certificate of Achievement

The Cyber Investigations and Computer Forensics Certificate is applicable and relevant to current and emerging digital forensic investigative missions. Students learn to conduct digital investigations conforming to accepted industry, professional standards based upon best practices governing the criminal investigative process. This includes identification, preservation, examination, analysis and reporting of evidence related to general and criminal investigations. Graduates of the program will understand the methods and practice presentation of digital evidence in criminal and civil investigations. Graduates will:

- Understand and apply standard, industrially accepted and legally recognized, foundational investigative techniques in computer networks, operating systems, file systems, hardware and mobile devices to cyber investigations.
- Access and critically evaluate relevant technical and legal information and relate this information to emerging industry trends.
- Communicate and effectively present the results of computer, network and/or data forensic analysis verbally and in writing.
- Learn to effectively present the results of investigations to technical/lay audiences.

Required Courses	Course Title	Units
CNSE M06	Fundamentals of Computer Networking	4
CNSE M83	Intro Computer Forensics	3
CNSE M82	Introduction to Network Security	
Select 1 (One) Course from the following list:		
CNSE M18	Cisco Networking A	4
CNSE M31	MS Windows Server	4
CNSE M82 **OR** CNSE M30	Network Security	3
END CNSE courses (Complete 11 CNSE Units) and beginning Criminal Justice courses		
CJ M15	Legal Aspects of Computer Forensics	3
CJ M04	Legal aspects of Evidence	3
CJ M01 **OR** CJ M08	Intro- Criminal Justice — Intro Constitutional Law	3
CJ M122 **OR** CJ M80	Independent Study – CJ — Internship CJ	1
End CJ courses (Complete 10 CJ Units)		
	Total Units	**21**

--- Additional Pages Follow --

CNSE: Basic Network Specialist Certificate of Achievement

To earn a CNSE: Basic Network Specialist Certificate of Achievement, students must complete 15-16 units in basic networking courses. Students will have basic foundational knowledge in networking and have completed basic courses in either Microsoft, Cisco or CompTIA curriculum. Students will be positioned for an entry-level job at a help desk.

Required Courses	Course Title	Units
CNSE M05	Fundamentals of IT Essentials	4
CNSE M01	Networking Fundamentals	4
CNSE M13	Internetworking and TCP/IP	4
Select 1 (One) Course from the following list:		
CNSE M18	Cisco Networking A	4
CNSE M31	MS Windows Server	4
CNSE M82	Network Security	3
CNSE M105	Cloud Foundations	3
	Total Units	**15-16**

CNSE: Windows Administration Certificate of Administration (COA)

To earn a Windows Administration Certificate of Administration, students must complete 9 units in operating system administration curriculum. Students will obtain an advanced knowledge of Microsoft and Linux networking technology. Students will be well positioned to solve technical issues dealing with Microsoft technologies in a medium-sized organization. Completion of this certificate program prepares students to take the Microsoft Certified IT Professional and Linux+ exams.

Required Courses	Course Title	Units
CNSE M30	MS Windows Administration	3
CNSE M31	MS Windows Server	3
Select 1 (One) Course from following list:		
CNSE M55	Linux Networking	3
CNSE M67	VMware Virtualization	3
	Total Units	**9**

--- Additional Pages Follow --

CNSE: Windows Engineering (COA)

To earn a Windows Engineering Certificate of Achievement students must complete at least 18.0 units in Microsoft and Network Administration related curriculum. Students will obtain an advanced knowledge of Microsoft networking technology such as Microsoft Server and Microsoft Desktop. Students will be well positioned to solve technical issues dealing with Microsoft technologies in a large enterprise organization. Completion of this certificate program prepares students to take the Microsoft Certified Technology Specialist examinations.

Required Courses	Course Title	Units
CNSE M06 **Or** CNSE M13	IT Essentials **Or** TCP/IP	4 4
CNSE M30	Windows Administration	3
CNSE M31	MS Windows Server	3
CNSE M55 **Or** CNSE M67	Linux **Or** VMware Virtualization	3 3
CNSE M80	Internship	1-4
	Total Units	**18**

--- Additional Pages Follow --

CNSE: Technical Support Specialist (COA)

To earn a Certificate of Achievement in CNSE: Technical Support Specialist, students must complete a minimum of 20-22 units. The Technical Support Specialist program offers training in the fundamentals of computer hardware, networking, and software applications. The program is oriented towards hands-on courses in order to prepare students for employment in the computer service and support industry. Computer support specialists provide technical assistance, support, and advice to customers and other users. This occupational group includes technical support specialists and help-desk technicians. In addition, this program could also serve as a starting point for certifications and/or degrees in computer science, computer networking, and computer information systems including professional certifications offered by Microsoft and Cisco.

Required Courses	Course Title	Units
CNSE M05	Fundamentals of Computer Networking	4
CNSE M01	Networking Fundamentals	4
CNSE M30	Windows Administration	3
CNSE M55	Linux Administration	3
Select 3-4 units from List A		
CNSE M06	IT Essentials	4
CNSE M105	Cloud foundations	3
Select 3-4 units from List B		
CS M10A	Programming C++	4
CS M10J	Java Programming	4
CNSE M67	VMware vSphere	3
CNSE M82	Security+	3
CNSE M106	Cloud Architecture	3
Total Units		**15-16**

--- Additional Pages Follow --

CNSE: Advanced Network Specialist Certificate of Achievement

To earn an Advanced Network Specialist Certificate of Achievement students must complete 38-42 units in basic and advanced networking courses. Students will have advanced knowledge in networking and have completed multiple courses using Microsoft and Cisco curriculum. Students will be well positioned for an entry level job in help desk or technical support employment.

Required Courses	Course Title	Units
CNSE M05	Fundamentals of Computer Networking	4
CNSE M01	Networking Fundamentals	4
CNSE M13	Internetworking and TCP/IP	4
CNSE M18	Cisco A	4
CNSE M19	Cisco B	4
CNSE M30	Windows Administration	3
CNSE M31	Windows Server	3
CNSE M55	Linux Administration	3
CNSE M82	Security+	3
CNSE M105	Cloud Foundations	3
CNSE M80	Internship	1-4
Select 1 (One) Course from the following list:		
CNSE M56	Advanced Linux Scripting	3
CNSE M67	VMware Virtualization	3
CNSE M83	Computer Forensics	3
CNSE M84	Certified Ethical Hacker	3
CNSE M86	Firewall Administration	3
CNSE M100	CyberSecurity Analysis	3
CNSE M106	Cloud Architecture	3
	Total Units	**20**

--- **Additional Pages Follow** --

CNSE: Cisco System Network Associate (COA)		
To earn a Cisco System Network Certificate of Achievement, students must complete 8 units in the Cisco curriculum. Students will obtain advanced knowledge of Cisco networking technology. Students will be positioned to solve technical issues dealing with Cisco technologies in a medium-sized organization. Completion of these two courses prepares students to current Cisco certification exams.		
Required Courses	Course Title	Units
CNSE M18	Cisco Part A	4
CNSE M19	Cisco Part B	4
Total Units		8

*New Cloud Certificates and Cyber Certificates pending Approvals in 2020/21

Contact Ed Garcia egarcia@vcccd.edu