

Networking Fundamentals I

Career Studies Certificate

Program Coordinator: Tamara Lasley • tlasley@vhcc.edu • 276-739-2503

Length: Two Semesters

Purpose

This certificate prepares students with introductory IT knowledge and skills to recognize, prevent and defend against threats to information and information systems. In order for students to be prepared in key areas of Cybersecurity and Network Administration, students need to be introduced to the basic topics of operating systems, computer hardware, networking concepts, programming and cybersecurity topics.

Occupational Objective

To create entry level employment opportunities in the network administration field.

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
First Semester (Fall)				
SDV 101	Orientation	1	0	1
ITN 106	Microcomputer Operating Systems ¹	3	0	3
ITN 154	Introduction to Networks - CISCO I	3	3	4
ITN 260	Network Security Basics ²	3	0	3
Total		10	3	11
Second Semester (Spring)				
ITN 107	Personal Computer Hardware and Troubleshooting ³	3	0	3
ITN 155	Switching, Routing, and Wireless Essentials- CISCO II	3	2	4
CSC 221	Introduction to Problem Solving and Programming ⁴	3	0	3
Total		9	0	10
Total Credits for Career Studies Certificate		21		

Footnotes:

¹ Upon completion of ITN 106 student may take CompTIA A+ Core 2 exam

² Prerequisite or corequisite: ITN 154. Counts as IT Elective toward AAS Degree

³ Upon completion of ITN 107 student may take CompTIA A+ Core 1 exam

⁴ Prerequisite: ITE 115, 119, or 152 and MTH 132 or division approval.

Both Core 1 AND Core 2 exams must be passed in order to receive A+ certification through CompTIA.

Upon successful completion of A+ certification, testing fees may be reimbursed by the College

Student may take Cisco Certified Network Associate (CCNA) certification after completion of ITN 155

<https://www.cisco.com/c/en/us/training-events/training-certifications/certifications/associate/ccna.html>

Upon successful completion of certification, testing fees may be reimbursed by the College.

Networking Fundamentals II

Career Studies Certificate

Program Coordinator: Tamara Lasley • tlasley@vhcc.edu • 276-739-2503

Length: Two Semesters

Purpose: This certificate prepares students with introductory IT knowledge and skills to recognize, prevent and defend against threats to information and information systems. In order for students to be prepared in key areas of Cybersecurity and Network Administration, students need to be introduced to the basic topics of operating systems, computer hardware, networking concepts, programming and cybersecurity topics.

Occupational Objective

To create entry level employment opportunities in the network administration field.

Students must complete the Networking Fundamentals I Career Studies Certificate prior to enrollment in the Networking Fundamentals II Career Studies Certificate unless the Program Coordinator grants approval.

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
First Semester (Fall)				
ITN 156	Enterprise Networking, Security, and Automation—CISCO III ¹	4	0	4
CSC 222	Object Oriented Programming ²	4	0	4
ITE 182	User Support/Helpdesk Principles	3	0	3
Total		11	0	11
Second Semester (Spring)				
ITE 119 or ITE 152	Information Literacy or Introduction to Digital and Information Literacy and Computer Applications	3	0	3
ITN 113	Active Directory	3	0	3
ITE 140	Spreadsheet Software	3	0	3
Total		9	0	9
Total Credits for Career Studies Certificate		20		

Footnote:

¹ Prerequisite: ITN 155

² Prerequisite: CSC 221 or Division approval