CISCO II: ROUTING AND SWITCHING ESSENTIALS ARTICULATION

Pierce County Careers Connection Dual Credit Articulation Agreement

Upon completion of a full year of high school or equivalent to the following competencies:

	Switching, Routing, and Wireless Essentials advances your knowledge of the operation of routers and switches in small networks. SRWE will introduce you to wireless local area networks (WLANs) and network security
	concepts. By the end of this course you will be able to configure advanced functionality in routers and switches. You will also be able to perform basic troubleshooting of these components. Using security best practices, you will troubleshoot and resolve common protocol issues in both IPv4 and IPv6 networks.
	Understand and describe basic switching concepts and the operation of CISCO switches.
	Understand and describe the purpose, nature, and operations of a router, routing tables, and the route lookup process.
	Understand and describe how VLANs create logically separate networks and how routing occurs between them.
	Understand and describe dynamic routing protocols, distance vector routing protocols, and link-state routing protocols.
	Understand, describe, and configure ether channel.
	Understand and describe Hot Stand-by Router protocol.
	Understand, configure, and troubleshoot Dynamic Host Configuration Protocol (DHCP) for IPv4 and IPv6 networks.
	Understand and describe wireless local area network
	operation in an enterprise environment.
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Configure Switch security to mitigate LAN attacks.
Configure redundancy on a switched network using STP and Ether Channel.

A student earning a "C" grade or better may earn college credit at the following college:

<u>College</u>	<u>Course</u>	<u>Credits</u>
Bates Technical College	CNST 202 (CIP Code: 11.1003)	5
Pierce College	CNE 242	5

Revised: 10/14/2024