Program Name: Network Administration Outcomes		IST 108 Microsoft Windows	IST 109 UNIX Operating System	IST 150 PC Tech—Repair & Troubleshooting	IST 151 PC Tech—Operating Systems	IST 154 Networking Basics	IST 155 Networking I	IST 156 Networking II	IST 261 Windows Server I
Outcome #1	Think critically	Implement a functional Windows XP workstation operating environment; Use critical thinking and demonstrate the ability to perform basic system troubleshooting skills	Choose appropriate UNIX/Linux operating system commands to make effective use of the environment to solve problems	Assemble, setup, and upgrade personal computer systems; Diagnose, isolate faulty components; Prepare for certification, specifically: A+	Install, configure and maintain the operating system in both single and dual boot configurations within the Windows family of operating systems;Utilize system utilities to allocate and organize storage and manage peripheral devices; Configure, navigate, and synchronize mobile devices, including netbooks and tablets, and IoT; Prepare for certification, specifically: A+	Install, configure, use and manage TCP/IP on both wired and wireless Per-to-peer networks; Use critical thinking skills in troubleshoot problems in an existing network environment; Prepare for CompTIA's vendor-independent networking certification exam, Network+; Take CompTIA Net+ certification	Create a physical layer network infrastructure including selection of appropriate media (wired or wireless), media termination, installation of vertical and horizontal cabling, and proper termination/documentation. Develop a logical network infrastructure using the OSI and TCP/IP models to implement appropriate layer protocols including TCP/IP with classless addressing and subnets.	Using IOS commands and the correct cabling configure a router to forward packets with the proper interfaces, routing protocols, and transport protocols enabled. Provide LAN connectivity through proper switch configuration and LAN services including DHCP and NAT.	install and configure Microsoft Server 2012 systems
Outcome #2	Communicate effectively with both verbal and written forms	Develop a sound, efficient system maintenance plan	Write efficient, effective scripts with documentation			Demonstrate knowledge of network architecture through drawing and site assessment through written documentation	Communicate effectively with both verbal and written forms		Troubleshoot an enterprise server environment; Prepare for and take the Microsoft Exam 70-410
Outcome #3	Perform and share cooperatively in teams or groups		Research and present information and resources utilizing new commands			Install, configure, use and manage TCP/IP on both wired and wireless Per-to-peer networks			
Outcome #4	Review and practice computer and network etiquette and ethics found in working environments								
Outcome #5	Administer and troubleshoot a network infrastructure	Perform basic Windows XP diagnostics using tools and utilities; Protect data and facilitate user and system security through the use of available operating system tools.		Demonstrate customer service, troubleshooting and preventative maintenance skills; Prepare for certification, specifically: A+	Demonstrate customer service, troubleshooting and preventative maintenance skills; Prepare for certification, specifically: A+	Install, configure, use and manage TCP/IP on both wired and wireless Per-to-peer networks	Develop a logical network infrastructure using the OSI and TCP/IP models to implement appropriate layer protocols including TCP/IP with classless addressing and subnets.	Troubleshoot router connectivity issues at all layers of the TCP/IP model and maintain a router and switch through IOS and configuration management	Install and configure Microsoft Server 2012 systems
Outcome #6	Evaluate best practices in security concepts to maintain confidentiality, integrity and availability of computer systems	Practice good file management and disk organization both in local systems and on the cloud Demonstrate a working knowledge of the Command line and the Registry Prevent data loss and facilitate security through use of available operating system tools	Choose appropriate UNIX operating system commands to make effective use of the environment to solve problems					Provide security for a network segment by drafting access control lists and configuring ACL's on the proper in/out bound interfaces.	