NTWK 2214 Switching Basics and Intermediate Routing (On Demand)

Course Number and Title
NTWK 2214 Switching Basics and Intermediate Routing

Catalog Description
This course is covers network design including routing and switching technologies used in business networks. Focus is on advanced switching and routing technologies on redundant networks (several generations of Spanning Tree, EtherChannel, BPDU Guard, HSRP and GLBP) and other intermediate routing protocols (single-area OSPF, multi-area OSPF, EIGRP). This course is designed to provide students with classroom and laboratory experience in advanced features of routers, routing concepts and networking switching. This is the third course in the Cisco Networking Academy CCNA curriculum. Outside lab time will be required. This course will assist students in preparing for the ICND2 or the CCNA exam which are industry recognized certifications. Preparation for the ICND exam should include both NTWK 2214 and 2224. Preparation for the CCNA exam should include all four semesters of CCNA training (NTWK 2014, NTWK 2084, NTWK 2214, and NTWK 2224)

Prerequisites
NTWK 2014   Network & Information Systems (CCNA1)
NTWK 2084   Network Hardware Support (CCNA 2)

Credit Hours/Contact Hours/Load Hours
4/4/4

Target Audience/Transferability
The target audience includes but is not necessarily limited to the following:
- Students pursuing a career in Networking or other computer-related field.
- Students who wish to enhance their understanding of networking hardware.
- Community members or Networking professionals who wish to expand their understanding of networking hardware.

This course does not transfer to the University of Arkansas, Fayetteville.

Student Learning Outcomes
Students completing this course will:
- Describe the functions of the hierarchical network design model.
- Complete basic configuration tasks on Cisco switches.
- Configure PVST+, PortFast, and BPDU Guard
- Configure HSRP and GLBP
- Configure and troubleshoot EtherChannel
- Configure and troubleshoot wireless LANs
- Configure and troubleshoot OSPFv2 & OSPFv3
- Configure and troubleshoot Multiarea OSPFv2 & OSPFv3
- Configure and troubleshoot EIGRPv2 &EIGRPv3
- Manage Cisco IOS licensing

Forms of Assessment

On-line chapter quizzes, hands-on lab assignments, a case study, a comprehensive on-line final exam and a comprehensive hands-on final exam will be required.