Health Information Networking

In February of 2009, the Obama administration announced a stimulus package incenting doctors and healthcare providers to adopt certified electronic health records (EHRs) for their practices. The $19.2 billion Health Information Technology Act is designed to help drive the change from paper to digital records management, improving overall patient care, quality of service and other interoperable services such as prescriptions, x-rays or MRIs.

Jobs in health information technology, or health IT, are expected to be in strong demand as more and more healthcare organizations make the transition to digital health records. Workers will be needed with the necessary skills to create and maintain integrated healthcare networks. This pioneering effort will significantly streamline healthcare management with far reaching consequences.

In response to the need for a skilled health IT workforce in the US, Cisco Networking Academy's Workforce Retraining Initiative now offers curriculum specific to fundamental skills development in the field of healthcare networking systems, design and implementation.

Figure 1. The Health Information Networking course helps students design and configure networks in the healthcare setting.

The Solution

The Cisco® Health Information Networking course supplements CCNA core curricula and is designed for students seeking entry-level health IT careers. The Health Information Networking course helps students develop the skills needed to succeed in IT-related degree programs and prepare for the CCNA certification. It provides an introduction to networking in the healthcare environment presented in a logical sequence driven by technologies as is typical of college and university-level IT programs.

Prerequisites

The Health Information Networking course prerequisites include the following skills and knowledge:

- Completion of CCNA Discovery or CCNA Exploration courses 1 and 2
- General interest and aptitude for a career in computer networking
- Basic PC skills
- Basic desktop and Internet navigation skills
About IT and Health IT Careers
The Health Information Networking course helps students develop networking skills and knowledge that extend beyond the minimum requirements for the CCNA certification. The Cisco Networking Academy preparatory curricula for CCNA certification, CCNA Exploration or CCNA Discovery, emphasize practical experience to help prepare students for entry-level networking and IT careers such as the following:
- Network administrator
- Network engineer
- Network installer
- Network technician
- Support engineer

With the addition of the Health Information Networking course to the CCNA curriculum, students can begin preparation for specialized careers, including network administrators and health information network technicians for physician offices, third party contractors, hospitals, and application providers.

Industry Recognized CCNA Certification
As part of the CCNA curriculum, students learn the basics of routing and switching, and are provided with an introduction to advanced technologies to help them prepare for the Cisco CCNA® certification exam. The CCNA certification is highly valued in the global networking industry and provides validation of the skills and knowledge required for entry-level networking careers. The Health Information Networking course supplements the CCNA curriculum and offers the opportunity for skill set differentiation in pursuing entry-level specialist careers in healthcare networking.

For More Information
Cisco Networking Academy
www.cisco.com/go/netacad
Cisco Networking Academy Course Catalog
www.cisco.com/go/netacadcourses
Certifications
www.cisco.com/go/certifications

Course Description
The Health Information Networking course equips students with knowledge and skills that can be applied toward entry-level specialist careers in healthcare networking. The course involves significant on-site or remote interaction with IT equipment in preparation for certification exams and career opportunities and blends on-line learning with classroom instruction.

Course topics include:
- Basic information on healthcare settings
- Principles of security and privacy in healthcare
- Fundamentals of information technology in healthcare
- Fundamentals of Electronic Health Records systems
- Basic information on medical office workflow and the importance of understanding how workflow will change with an Electronic Health Record
- Designing a network to support a medical group
- Securing a network for a medical group
- Troubleshooting a network for a medical group

The predominant lab types are procedural, skills integration challenges, troubleshooting, and model building.

Cisco Packet Tracer simulation and visualization software activities will be included in most chapters and cover skills integration challenges that are cumulative throughout the course, including a summative activity at the end of the course.