



## Health Information Networking

In February of 2009, the Obama administration announced a stimulus package with incentives for 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 healthcare information technology, or healthcare 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 and will have with far-reaching consequences.

In response to the need for a skilled health IT workforce in the United States, Cisco Networking Academy® now offers curriculum specific to fundamental skills development in the field of healthcare networking systems, design, and implementation.

### The Solution

The Cisco® Health Information Networking course supplements Cisco CCNA® core curricula and is designed for US students seeking entry-level IT careers in healthcare. It provides an introduction to networking in the healthcare environment. The course is presented in a logical sequence that is driven by technologies, as is typical of college and university-level IT programs (Figure 1).

### Prerequisites

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

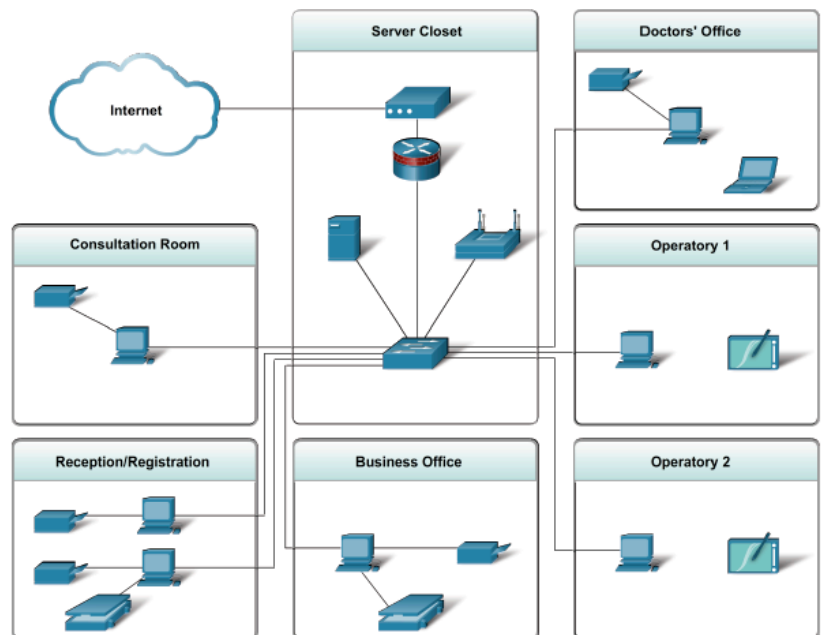
- General interest and aptitude for a career in computer networking
- Basic PC skills
- Basic desktop and Internet navigation skills
- CCNA Discovery or CCNA Exploration course requirements:

- CCNA Discovery students should complete the first two courses: Networking for Home and Small Businesses, and Working at a Small-to-Medium Business or ISP
- CCNA Exploration students should complete the first three courses: Network Fundamentals, Routing Protocols and Concepts, and LAN Switching and Wireless
- For instructors wishing to teach the HIN course concurrently with CCNA, we recommend teaching HIN in parallel with the fourth and final course in either the CCNA Discovery or CCNA Exploration curricula

### Course Description

The Health Information Networking course equips US students with knowledge and skills that can be applied toward entry-level specialist careers in healthcare networking. The course involves significant onsite or remote interaction with IT equipment and career opportunities and blends online learning with classroom instruction.

Figure 1. Cisco HIN: An Introduction to Designing and Configuring Networks for Healthcare





Course topics include:

- Basic information on healthcare settings
- Principles of security and privacy in healthcare
- Fundamentals of information technology in healthcare
- Fundamentals of EHR systems
- Basic information on medical office workflow and the importance of understanding how workflow will change with an EHR
- 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 are included in most chapters and provide skills integration challenges that are cumulative throughout the course, including a summative activity at the end of the course.

### About IT and Healthcare 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](http://www.cisco.com/go/netacad)

Cisco Networking Academy Course Catalog  
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