GE Healthcare Education Services

Securing the Healthcare IT Environment Course Outline

Course Summary:
This instructor-led class is specifically designed for technical professionals responsible for the secure transport of electronic protected health information across healthcare IT infrastructures. This class is taught by experts in the healthcare IT field and topics include: a global security overview, relevant HIPAA Title II Privacy and Security Rule information, the top 10 HCIT network attacks and ways to prevent them, strategies to mitigate risk, and securing a home network. Hands-on labs include password cracking, configuring biometric identifiers, encryption, port scanning, using network analyzers, software firewall configuration, performing an MD5 Hash, and home router configuration. Students will perform a risk analysis of medical devices using MDS[2] documentation and ACCE/ECRI tools.   Basic computer skills and TCP/IP network troubleshooting techniques are required.

Course length:
5 days

Pre-requisites/Required Skills/Pre-course Work:
Essentials of Healthcare IT or equivalent

Location:
GEHC training facilities in Wisconsin
GEHC training facilities in Florida
At customer locations

Objectives:
- Awareness of the global data protection environment and relevant national standards organizations, including: ISO, HIPAA, BS, and TGA.
- Review the HIPAA Privacy and Security Rule standards and understand their impact on healthcare IT regarding information integrity, availability, and confidentiality
- Learn the 18 elements of electronic protected health information (ePHI)
- Understand how ePHI moves across a healthcare IT network
- Review MDS2 sheets to locate relevant ePHI information
- Learn the top ten network risks affecting healthcare IT systems
- Learn the AAA (authentication, authorization, and accounting) strategy for HCIT networks
- Configure software firewalls
- VPN, SSL, and IPSec concepts for securing remote data transport
- Explore the ACCE/ECRI risk analysis program for new and existing equipment
- Understand implications of applying patches and OS upgrades to devices on a HCIT network
- Examine physical security measures for healthcare IT systems

GE Healthcare Education Services

- Secure a home network

Equipment reviewed:
No GE Products

Related courses:
Essentials of Healthcare IT

Student requirements:
None

Intended audience:
Biomedical engineers
IT technicians

Capacity:
Minimum 6 and maximum 10

Other:
Class can be held at remote locations