Global Knowledge Course Name: SND (Securing Cisco Network Devices) Code 5480

Course Overview:
Cisco Course v2.0 | Prepares you for Cisco Exam 642-552 SND
In this 5-day, entry-level network security course, you'll learn basic concepts such as network security policies, network attack methods, and threat mitigation techniques, along with the Cisco security product portfolio. You will examine the most important security technologies, including hardening Cisco IOS routers and switches against attack, Layer 2 security, stateful firewalling, Intrusion Prevention Systems (IPS), and Virtual Private Networks (VPNs).

SND 2.0 prepares you for the 642-552 SND exam as well. Professionals who pass the SND exam and the CCNA exam are awarded both the Cisco Information Security Specialist certification and the CNSS 4011 InfoSec Professional certification. Exam 642-552 SND is required for the Cisco Certified Security Professional certification and for several Cisco Qualified Specialist certifications, including: Cisco Firewall Specialist, Cisco IPS Specialist, and Cisco VPN Specialist.

What You'll Learn:

- Importance of security policies to the implementation of secure networks
- Recognize threats and vulnerabilities to networks and implement basic mitigation measures
- Products that form the basis of the Cisco security portfolio
- Various common security vulnerabilities and network attack methodologies
- Mitigation of common security vulnerabilities
- Hands-on experience with tools used by network attackers, including:
    - Port scanning
    - Port forwarding
    - Buffer overflow
    - ARP cache poisoning
- Hands-on experience with the security features of Cisco IOS Routers, including:
    - Security Device Manager
    - Securing the router itself
    - Authentication and authorization
    - SSH and HTTPS
    - Access control lists
    - Stateful firewalling
    - IOS Intrusion Prevention System
    - Site-to-Site VPN
    - Remote-Access VPN

- Hands-on experience with the security features of Cisco IOS Switches, including:
    - Port Security
    - Private VLAN Edge
    - DHCP Snooping
    - Dynamic ARP Inspection
- Discussion of specialized security devices and systems including PIX Firewalls, Adaptive Security Appliances, the 4215 IPS Sensor family, Cisco
- Security Agent, and the 3000 VPN Concentrator series.
- Who Needs to Attend?
- Network professionals who need to understand basic security concepts, require the basic knowledge and skills needed to deploy Cisco security, and are seeking CCSP certification, Cisco Qualified Specialist Certifications in Firewall, VPN, or IPS, or Cisco Information Security Specialist certification.

Course Content:

Appendix A:

- Network Address Translation

Introduction to Network Security Policies

- Understand the Requirement for a Network Security Policy
- Network Attack Mitigation Techniques
- Thinking Like a Hacker
- Designing a Secure Network Life-Cycle Model
- Developing a Comprehensive Security Policy
- Building Cisco Self-Defending Networks

Securing the Perimeter

- Applying a Security Policy for Cisco Routers
- Securing Administrative Access to Cisco Routers
- Configuring AAA Functions on a Cisco Router
- Cisco Security Device Manager (SDM)
- Disabling Unused Cisco Router Network Services
- Implementing Secure Management and Reporting
- Defending the Network Perimeter with Cisco Products

Securing LAN and WAN Devices

- Applying Security Policies to Network Switches
- Mitigating Layer 2 Attacks

- Using Cisco Catalyst Security Features
- Securing WLANs

Cisco IOS Firewall Configuration

- Firewall Technologies
- Building Static Packet Filters with Cisco ACLs
- Configuring a Cisco IOS Firewall with Cisco SDM
- Defending Your Network with the Cisco Security Appliance Product Family

Securing Networks with Cisco IOS IPS

- IDS and IPS
- Configuring Cisco IOS IPS
- Defending Your Network with the Cisco IPS Product Family

Building IPsec VPNs

- IPsec Chalk Talk
- IPsec VPNs
- Building a Site-to-Site IPsec VPN Using the IOS CLI
- Building a Site-to-Site IPsec VPN Using Cisco SDM
- Building Remote-Access VPNs
- Defending Your Network with the Cisco VPN Product Family