Course Contents

• This course is designed to provide network administrators and network security professional with hands-on tasks on the most fundamental perimeter security technologies. The network perimeter is often the first line of defense in an organization’s network. The course covers the issues every administrator must be familiar with.
Course Objectives

• Describe the core issues of building a perimeter network defense system.
• Investigate the advanced concepts of the TCP/IP protocol suite
• Secure routers through hardening techniques and configure Access Control
• Design and configure multiple firewall technologies
• Examine and implement IPSec and Virtual Private Networks
• Design and configure an Intrusion Detection System
• Secure wireless networks through the use of encryption systems.

Course Textbook

Lamar University
What is SCP?

- Security Certified Program (SCP) is designed to help network professional to develop and validate your skills as a computer and network security professional.
- SCP certifications include three vendor-neutral security certifications

Security Certification Path
SCP Structure

- The SCP structure is unique as it measures competence in core security skills as well as skills needed for specific security technologies, such as Packet Structure, Signature Analysis, Operating System Hardening, Router Security, Firewalls, Virtual Private Networks, Intrusion Detection, Risk Analysis, Wireless Security, Digital Signatures and Certificates, Cryptography, Biometrics and Network Forensics.
Course Contents

• The primary focus of this class is on the defense of the perimeter, which covers the core security technologies used in defending today’s business environments, including the following lessons:

Lesson 1: Network Defense Fundamentals
Lesson 2: Advanced TCP/IP
Lesson 3: Routers and Access Control Lists
Lesson 4: Designing Firewalls
Lesson 5: Configuring Firewalls
Lesson 6: Implementing IPSec and VPNs
Lesson 7: Designing an Intrusion Detection System
Lesson 8: Configuring and IDS
Lesson 9: Securing Wireless Networks
Working Environment

- Windows 2003
- Linux SUSE enterprise 10

Course Requirement

- This course is designed for online course format. You must have your own computer and have administrator privilege so that you can install some software, and to do hand-on exercise. The recommended computer needs to have 2GB memory and 50GB free disk space, with network interface.