



## Voice over IP (VoIP) Security Fundamentals

**Voice over IP (VoIP) Security Fundamentals** is designed for the IT professional or Telecommunications professional that is new to VoIP security. Voice over IP is becoming one of the most widely deployed protocols because it has the potential to lower telecommunications costs by lowering long distance charges and enhancing applications, such as, unified communications, remote Branch Office communications and remote workers solutions. Students will examine various threats to a VoIP environment. Students will look at security techniques and tools to understand how vulnerabilities can be exploited in a Voice over IP environment. This seminar will help students understand how to build a secure Voice over IP infrastructure.

### Course Outline

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- Advantages and Disadvantages of Enterprise VoIP Products
- VoIP Signaling and Media Protocols
- Understanding VoIP Security Requirements
- Common VoIP Authentication Mechanisms
- Preventing Toll Fraud Detection, Investigation and Mitigation
- Identifying Common Threats to VoIP Applications
- SIP and H.323 Signaling Attacks
- VoIP Media Attacks:
  - RTP Eavesdropping
  - RTP Recording
- Vulnerability Scanning
- Designing VoIP Security Infrastructure
- Best Practices in VoIP Security
- VoIP Penetration Testing
- Packet Capturing Techniques for SIP/SDP Analysis
- Packet Capturing Techniques for RTP/RTCP Analysis
- Product Security Considerations
- VoIP - Security Lab

**For more information about CTCLC  
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