



FIREWALLS — ISTC 2066

A. Course Description

- **Credits:** 3.00
- **Lecture Hours/Week:** 2.00
- **Lab Hours/Week:** 1.00
- **OJT Hours/Week:** 0
- **Prerequisites:**
 - ISTC 1060: Security I
- **Corequisites:** None
- **MnTC Goals:** None

This course is designed for the network administrator who needs to learn the basics of VPN security and network firewalls. Basic installation techniques are covered along with how to make an intelligent choice of firewall technology. Basic firewall troubleshooting is also presented. This course aligns with the CheckPoint CCSA Certification outline. Prerequisites: Security I ISTC1060

B. Course Effective Dates: 8/2/19 – Present

C. Outline of Major Content Areas

As noted on course syllabus

D. Learning Outcomes

1. Capture and view encrypted and unencrypted email across a network segment.
2. Capture packets.
3. Enable and troubleshoot Port Forwarding.
4. Install an Email Server and block common port numbers associated with email.
5. Install an FTP Server and block common port numbers associated with FTP.
6. Install and Troubleshoot a VPN server.
7. Install and troubleshoot a Proxy Server.
8. Install and troubleshoot a Web Server.
9. Install and troubleshoot an IPS/IDS.
10. Memorize and work with common Port Numbers.
11. Perform Password Recovery on a router/firewall.
12. Properly set up and configure a network with many applications and services running- then, properly

configure the set up of the firewall to filter only "wanted" network traffic.

13. Work with a minimum of three different firewall vendors.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

F. Learner Outcomes Assessment

As noted on course syllabus

G. Special Information

None noted