INTRODUCTION TO IT SECURITY — ISTC 1061

A. Course Description
   - Credits: 3.00
   - Lecture Hours/Week: 2.00
   - Lab Hours/Week: 1.00
   - OJT Hours/Week: 0
   - Prerequisites:
     - ISTC 1045: Network Systems I: Introduction to Networking
   - Corequisites: None
   - MnTC Goals: None

This course is designed to investigate the analysis and implementation of network security policies, procedures and guidelines for establishing, monitoring and controlling methodologies for local and wide area networks. The course covers authentication methods, communication security, infrastructure security, cryptography, operational security and firewalls. Prerequisites: ISTC 1045 Network Systems I

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

C. Outline of Major Content Areas
   - As noted on course syllabus

D. Learning Outcomes
   1. Examine various "attacks" against IT systems
   2. Describe the basic steps of an attack.
   3. Describe the five basic principles of cyber defense.
   4. Examine methods for securing (hardening) data, applications, operating systems, and networks.
   5. Examine authentication and access control methods.
   6. Examine cryptography methods and algorithms.
   7. Describe different types of malware.
   8. Examine disaster recovery and business continuity plans.
   9. Examine IT security policies and procedures.
   10. List techniques for mitigating and deterring attacks.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
F. Learner Outcomes Assessment
   As noted on course syllabus

G. Special Information
   None noted