



## CIT 274: Cybersecurity and Forensics Seminar

This capstone course provides students with the opportunity to apply cybersecurity and digital forensics principles to complete a comprehensive capstone project. Students will plan, design, implement, troubleshoot, and document an enterprise network such that access to internal services, both to the LAN and the Internet, can be allowed or denied in a secure manner. Students will work with Windows and Linux workstations, servers, switches, VLANs, firewalls, and routers to complete the project. Students will also work with forensically sound procedures in collecting, analyzing, and documenting digital evidence. Prerequisite(s): CIT 250 and CIT 251; pre or co-requisite(s): CIT 252, CIT 255 or permission of the instructor. Three lecture and two lab hours per week. Instructional Support Fee applies. Gen. Ed. Competencies Met: Critical Thinking, Information Literacy, and Scientific Reasoning and Discovery.

### Course Student Learning Outcomes

1. Construct an enterprise network using hardware and software resources for a given network design. 2. Demonstrate network security, endpoint protection, and access control of an enterprise network through appropriate configuration of network protocols and services. 3. Develop an information security plan for an enterprise organization using risk management frameworks. 4. Design the components of a business continuity and disaster recovery plan for an enterprise organization. 5. Apply forensically sound procedures to collect, analyze, and document digital evidence.

**Credits:** 4

**Program:** Computer Information Technology