

Fall 2026

Registration Opens: April 13, 2026

Course Preview Week: September 01 - September 07, 2026

Semester Dates: September 08 - December 18, 2026

Core Courses

CYB 700: Fundamentals of Cybersecurity

Introduces fundamental concepts and design principles in cybersecurity. Students will understand what, why, and how to protect in the cyberworld. Topics include CIA (Confidentiality, Integrity, Availability), threats and adversaries, threat management techniques and defensive strategies, access control, security policies, critical controls, incident handling and contingency planning, risk assessment and management.

[CYB 700 Syllabus](#)

CYB 710: Introduction to Cryptography

Introduces fundamentals of applied cryptography, including encryption and decryption, symmetric and asymmetric systems, pseudorandom functions, block ciphers, hash functions, common attacks, digital signatures, key exchange, message authentication and public key cryptography. Covers implementation of cryptographic systems in approved programming language, and survey of relevant mathematical concepts, including elementary number theory.

[CYB 710 Syllabus](#)

CYB 715: Managing Security Risk

Covers risk management processes and tools, risk assessment and analysis models, economic and control implications, risk measurement, and ethics of risk. Students will communicate technical and management aspects of risk, based on research of their chosen industry, regulation, recent industry reports, and risk implications to organizations, individuals and the nation.

[CYB 715 Syllabus](#)

Digital Forensics

CYB 730: Computer Criminology

A primer on modern criminology with specific attention to the aspects of technology that facilitate criminal behaviors. Topics include computer crime laws, criminological theories of

computer crime, court room and evidentiary procedure, idiographic and nomothetic digital profiling, computer crime victimology, habit/authorship attribution, stylometry, and case linkage analysis.

[CYB 730 Syllabus](#)

Cyber Response

CYB 740: Incident Response and Remediation

Students will learn about the phases of an incident response system, and the use of IDS and forensics, dealing with false alarms and the remediation process to minimize business impact, plan business continuity, and work with law enforcement, auditors, insurance, and compliance in how to prevent future incidents.

Prerequisites: CYB 700, CYB 703, CYB 705, CYB 707, CYB 715, CYB 720

[CYB 740 Syllabus](#)

Governance and Leadership

CYB 760: Cybersecurity Leadership and Team Dynamics

Focuses on leadership best practices and the interpersonal processes and structural characteristics that influence the effectiveness of teams. Emphasis will be placed on leadership models, principles of team building, group dynamics, problem solving, and crisis management in cybersecurity issues. Course will include case studies of modern security incidents.

[CYB 760 Syllabus](#)

Capstone Courses

CYB 789: Cybersecurity Pre-Capstone

Prepares student for capstone experience. Drawing on skills learned, students will submit a written project proposal – with organization, timeline, learning objectives, and specific deliverables identified – for faculty approval. This course is a pre-requisite for the capstone course.

Prerequisites: All seven core courses must be completed

[CYB 789 Syllabus](#)

CYB 790: Cybersecurity Capstone

Students present project identified in Capstone Preparation and submit a written report plus oral presentation to both faculty and host organization. Students will be assessed on clarity and content of written report and presentation. Host evaluation will account for a significant percentage of student's final grade.

Prerequisites: CYB 789

[CYB 790 Syllabus](#)