

CYBER FORENSICS AND SECURITY (CFS)

CFS 500 Intro to Digital Forensics 3 Credit hours

Introduces students to core digital forensic concepts, including data storage, imaging, the digital forensics process, common Windows artifacts, and the fundamentals of the forensic examination of digital media using AccessData.

Grade Mode: Normal Grading Mode

CFS 505 OSINT Practicum I 3 Credit hours

Students will learn how to use advanced tools that can aid investigators in searching the Internet and resources that can be applied to domestic and international investigations.

Grade Mode: Normal Grading Mode

CFS 520 Incident Response 3 Credit hours

Course examines forensic and investigate aspects of incident response. Topics include pre-incident preparation, developing leads, scoping an incident, data collection, forensic duplication, evidence from hosts, networks, application and enterprise environments.

Grade Mode: Normal Grading Mode

CFS 545 Mobile and Web Pen Testing 3 Credit hours

Students will learn the advanced skills and techniques required to test mobile and web applications. This advanced pen-testing course uses a combination of lecture, real-world experiences, and hands-on exercises.

Grade Mode: Normal Grading Mode

CFS 548 Multimedia Forensics 3 Credit hours

Course will introduce principles of multimedia forensics (images, audio, and video) and their application to cyber forensics. Practical forensics enhancement, analysis, and reporting tools and techniques are covered.

Grade Mode: Normal Grading Mode

CFS 554 Adv Network Defense 3 Credit hours

Tools and techniques used to protect, monitor, analyze, detect and respond to unauthorized activity computers and networks.

Grade Mode: Normal Grading Mode

CFS 561 Applied Cyber Warfare 3 Credit hours

Latest developments and advancement in cyber warfare facing nation-state and non-nation-state actors.

Grade Mode: Normal Grading Mode

CFS 562 Network Forensics 3 Credit hours

Examination of techniques and tools used to investigate, search, collect, analyze and report on network based breaches and events.

Grade Mode: Normal Grading Mode

CFS 564 Network and Cyber Crime 3 Credit hours

Examines fundamental security concepts, protocols, and procedures commonly in use today. Topics include governance, access control, cryptography, physical security, security architecture, and application development security.

Grade Mode: Normal Grading Mode

CFS 567 Mobile Device Forensics 3 Credit hours

Identification, preservation, collection, analysis, and reporting techniques and tools used in the forensic examination of mobile devices such as mobile phones, tablets and GPS units.

Grade Mode: Normal Grading Mode

CFS 581 Special Topics 3 Credit hours

Study of emerging and advanced topics in Cyber Forensics and Security. Topics vary with instructor and change from one semester to another.

Grade Mode: Normal Grading Mode

CFS 630 Cyber Threat Intelligence 3 Credit hours

A detailed study of the cyber threat intelligence process and its products. Topics include threat modeling, structured analysis, adversary groups, tactical, operations, and strategic threat intelligence.

Grade Mode: Normal Grading Mode

CFS 650 Adv Cyber Defense 3 Credit hours

An advanced study cyber defense, including coverage of topics such as social engineering, authorization techniques, security models, trusted computing, network architecture security, operating system security, endpoint security, database security, and physical security.

Grade Mode: Normal Grading Mode

CFS 660 Red Team 3 Credit hours

Students will learn how to plan and execute and end-to-end adversary emulation and build a red team program, leverage threat intelligence to map against adversary tactic and tool automation.

Grade Mode: Normal Grading Mode

CFS 665 Cyber Sec IoT and ICS 3 Credit hours

Students will learn the tools and techniques to defend IoT and ICS systems that run the Power Grid and other critical systems.

Grade Mode: Normal Grading Mode

CFS 670 Practicum 3-6 Credit hours

Students will gain experience and practical knowledge working with professionals in the field of Cyber Forensics and Security as well as gaining real-world experience.

Grade Mode: Normal Grading Mode

CFS 675 Reserach in CFS 1-6 Credit hours

Students will plan, implement, research and present a solution to a real-world problem within cyber forensics & defense, demonstrating their technical and professional skills. Must be pre-approved before registering.

Grade Mode: Normal Grading Mode

CFS 680 Special Topics 3 Credit hours

Grade Mode: Normal Grading Mode

CFS 690 Capstone 3 Credit hours

This capstone course is the culminating experience for the Masters Degree in Cyber Forensics and Security. This course builds on the concepts covered within the program of study.

Grade Mode: Normal Grading Mode