# **DEPARTMENT OF CRIMINAL JUSTICE, CRIMINOLOGY AND** FORENSIC SCIENCES

# Contacts: Dr. Dhruba Bora, Chair

Website: http://www.marshall.edu/cos/cjcfs (http://www.marshall.edu/ cos/cjcfs/)

### cjcfs@marshall.edu

The Department of Criminal Justice, Criminology, and Forensic Sciences offers a unique and dynamic educational experience for students who are passionate about exploring the complexities of crime and justice. The department is renowned for its commitment to excellence in education, research, and service, and the faculty are experts in their respective fields. The department is also committed to providing students with a rigorous and challenging educational experience that prepares them to be leaders in their chosen fields.

The programs within the department offer a diverse range of studies in Criminal Justice & Criminology, Cyber Forensics & Security, and Forensic Science (graduate only). The Criminal Justice undergraduate degree is designed to provide students with a strong foundation in criminology and in the practices of law enforcement, justice, and corrections. The undergraduate Cyber Forensics & Security degree is particularly innovative, providing students with the skills and knowledge needed to combat cybercrime, train law enforcement in digital evidence recovery, and protect sensitive information.

# Programs

- Criminal Justice, Accelerated Graduate Degree (http:// catalog.marshall.edu/undergraduate/programs-az/science/ criminal-justice-criminology/criminal-justice-accelerated-graduatedegree/)
- Criminal Justice, B.A. (http://catalog.marshall.edu/undergraduate/ programs-az/science/criminal-justice-criminology/criminal-justicebs/)
- Criminal Justice, Minor (http://catalog.marshall.edu/ undergraduate/programs-az/science/criminal-justice-criminology/ criminal-justice-minor/)
- Cyber Forensics and Security, B.S. (http://catalog.marshall.edu/ undergraduate/programs-az/science/cyber-forensics-security/ cyber-forensics-security-bs/)
- Cyber Forensics and Security, Minor (http://catalog.marshall.edu/ undergraduate/programs-az/science/criminal-justice-criminology/ cyber-forensics-security-minor/)
- Information Assurance, Certificate (http://catalog.marshall.edu/ undergraduate/programs-az/science/cyber-forensics-security/ information-assurance-certificate/)

# Courses

💎 - General Education Course

# Criminal Justice and Criminology

# CJ 200 💎 Intro to Criminal Justice

**3 Credit hours** 

**3 Credit hours** 

This survey course examines the various components of the criminal justice system, including law enforcement, courts, and corrections. Students will be introduced to various criminal justice agencies and career possibilities.

Attributes: Core II Social Sciences Grade Mode: Normal Grading Mode

### CJ 211 💎 Intro to Law Enforcement

Designed to examine the philosophical and historical background of law enforcement in the United States. Addresses constitutional limitations on law enforcement, objectives of law enforcement, and processes of law enforcement. Attributes: Core II Social Sciences

Grade Mode: Normal Grading Mode CJ 221 💎 Intro to Criminal Courts

# **3 Credit hours**

This course addresses the evolution of current functioning of the American criminal court system. Students are exposed to court administration, court procedures, and the state and federal court system.

Attributes: Core II Social Sciences Grade Mode: Normal Grading Mode

#### CJ 223 Introduction to Legal Research **3 Credit hours**

An introduction to the processes and strategies involved in legal research. Students will develop an understanding of the sources of legal information and judgment in selecting appropriate sources and formats for specific projects.

Grade Mode: Normal Grading Mode

#### **3 Credit hours** CJ 231 💎 Intro to Corrections

A survey of the historical development of the systems of punishment and rehabilitation. Analysis of the reasons for incarceration of offenders.

Attributes: Core II Social Sciences Grade Mode: Normal Grading Mode

# CJ 280 Special Topics

1-4 Credit hours Lower level specialized courses of contemporary interest. Grade Mode: Normal Grading Mode

CJ 281 Special Topics 1-4 Credit hours Lower level specialized courses of contemporary interest. Grade Mode: Normal Grading Mode

CJ 282 Special Topics 1-4 Credit hours Lower level specialized courses of contemporary interest. Grade Mode: Normal Grading Mode

# CJ 283 Special Topics

1-4 Credit hours

**3 Credit hours** 

Lower level specialized courses of contemporary interest. Grade Mode: Normal Grading Mode

# CJ 300 Admin of Criminal Justice

This course provides an analysis of the theories of organization and the administration of criminal justice agencies, including management styles, techniques of leadership, and decision-making. Pre-req: CJ 200.

Grade Mode: Normal Grading Mode

# CJ 302 CJ Research Methods

Logic of social research methods, survey research, methods of evaluation, sampling, and the contrast between qualitative and quantitative CJ research.

Pre-req: CJ 200 with a minimum grade of D. Grade Mode: Normal Grading Mode

# CJ 314 Crime Scene & Investigations

This course exposes students to crime scene processing techniques and technology, criminal investigation procedures, sources of information, interrogation, victim and witness interviewing, legal issues in criminal investigations.

Pre-req: CJ 211 with a minimum grade of D. Grade Mode: Normal Grading Mode

### CJ 322 Criminal Law

History and development of criminal law, elements of a crime; parties to a crime, types of offenses. Pre-req: CJ 200 with a minimum grade of D.

Grade Mode: Normal Grading Mode

# CJ 323 Criminal Procedure

**3 Credit hours** 

**3 Credit hours** 

**3 Credit hours** 

Admissibility of evidence and confessions, recent civil rights decisions, reconciling individual rights and community interest in law and order. Pre-reg: C| 200.

Attributes: Social Sciences Grade Mode: Normal Grading Mode

### CJ 325 Juvenile Justice

**3 Credit hours** 

A survey of the process--the police, the courts, and corrections-through which the juvenile delinquent passes. Pre-req: CJ 200 with a minimum grade of D. Attributes: Social Sciences Grade Mode: Normal Grading Mode

# CJ 331 Probation & Parole

Organization of systems of after-care treatment of juvenile and adult offenders released under probation and parole. Pre-req: CJ 231 with a minimum grade of D. Attributes: Social Sciences

Grade Mode: Normal Grading Mode

# CJ 332 Correctional Rehab

**3 Credit hours** 

**3 Credit hours** 

Examines the theories, treatment strategies and the role of the correctional counselor. Special emphasis is given to the topics of classification, development of treatment plans and principles of effective intervention.

Pre-reg: CI 231 with a minimum grade of D. Grade Mode: Normal Grading Mode

# CJ 340 Drugs and Crime

Examines the history and consequences of mind-altering drugs, and criminal behavior as it is affected by drugs, the legal response to substance abuse, treatment and prevention of substance abuse. Grade Mode: Normal Grading Mode

# CJ 341 Victims of Crime

**3 Credit hours** 

**3 Credit hours** 

Examines victims of crime, the process and consequences of victimization. Also covered are victims' rights and services available for victims and victim compensation.

Grade Mode: Normal Grading Mode

#### 3 Credit hours CJ 400 Applied Ethics in CJ

Examines ethical issues and moral dilemmas faced by criminal justice professionals. Traditional ethical theories and practices designed to foster public trust in the criminal justice system are examined and applied.

Pre-req: CJ 200 with a minimum grade of D. Grade Mode: Normal Grading Mode

# CJ 403 Understanding Cybercrime

Examination of hacking, piracy, cyber stalking, cyber bullying, identity theft, and other cybercrimes through the lens of various criminological theories with an emphasis on research methodology and criminal justice policy.

Grade Mode: Normal Grading Mode

# CI 404 Theoretical Criminology

A critical analysis of the major criminological theories and their empirical foundations. Current theory and research receive greater emphasis than historical development. Pre-req: CJ 200 with a minimum grade of D.

Grade Mode: Normal Grading Mode

# CJ 405 Women & the CJS

Examines factors surrounding women and the criminal justice system from a theoretical and practical perspective. Explores feminist ideologies, plus women as victims, offenders, and professionals in the justice system.

**Pre-req:** CJ 200 with a minimum grade of D. Grade Mode: Normal Grading Mode

# CJ 406 💎 Race, Ethnicity, Class & Crime

Examines the impact and relationship of race, ethnicity, and social class within the criminal justice system.

Pre-req: C| 200. Attributes: Multicultural

Grade Mode: Normal Grading Mode

# CJ 410 Police Administration

Functions and activities of police agencies. Police department organizations, responsibilities of upper level administrators. Current administrative experimentation on law enforcement agencies. Pre-req: C| 211.

Grade Mode: Normal Grading Mode

# CJ 415 Rural Criminology

Critical analysis of rural crime and the criminological sub-field of rural criminology. Examines the economic, racial, and cultural conditions in rural America which reproduce exploitive economies and overall destructive behaviors.

Grade Mode: Normal Grading Mode

# CJ 416 Terrorism

# **3 Credit hours**

**3 Credit hours** 

Provides students with a working knowledge of the history of terrorism, the current status of terrorist groups, terrorism tactics, and methods to counteract terrorism. Grade Mode: Normal Grading Mode

# CJ 417 CJ Decision Making

Focuses on theories of criminal justice decision-making and decision points across the criminal justice system. Topics include the decision to report crime, police decisions, jury decisions, and sentencing decisions. Pre-req: CJ 200 with a minimum grade of D.

Grade Mode: Normal Grading Mode

3 Credit hours

**3 Credit hours** 

**3 Credit hours** 

**3 Credit hours** 

# **3 Credit hours**

**3 Credit hours** 

**3 Credit hours** 

# CJ 418 Crime and Pop Culture

A critical examination of the popular cutlure presentation of crime, offenders, victims, and the criminal justice process. Pre-req: CJ 200 with a minimum grade of D.

Grade Mode: Normal Grading Mode

# CJ 420 Homeland Security

# 3 Credit hours

This course takes a comprehensive approach to studying the facets of homeland security, the complexity of homeland security and terrorism, defeating terrorists, and Homeland Security's response to terrorist threats.

Grade Mode: Normal Grading Mode

# CJ 422 Law of Evidence

3 Credit hours

Leading rules and principles of exclusion and selection; burden of proof, nature and effect of presumptions; proof of authenticity and contents of writings; examinations, compentency and privilege of witnesses.

Pre-req: CJ 200.

Grade Mode: Normal Grading Mode

# CJ 424 Computer Crime

**3 Credit hours** 

**3 Credit hours** 

**3 Credit hours** 

Students will identify and define criminal acts committed with computers or directed toward computer systems, electronic search and seizure and electronic evidence. Grade Mode: Normal Grading Mode

CJ 426 Civil Liability Issues CJ

This course examines various theories of civil liability that relate to Criminal Justice professionals, the civil justice system, and preventing and defending civil liability claims.

Pre-req: CJ 200 with a minimum grade of D. Grade Mode: Normal Grading Mode

# CJ 427 Environmental Criminology

Explores theoretical, methodological, and practical approaches about environmental crime from a critical lens. Grade Mode: Normal Grading Mode

CJ 433 Correctional Administration

Objectives of correctional institutions; records; personnel, program development, security; educational programs. Pre-req: C| 231.

Grade Mode: Normal Grading Mode

# CJ 440 CJ Response to Dom Violence

**3 Credit hours** This course focuses on the legal response to child abuse, domestic violence, and elder abuse. Examines dynamics of abusive relationships, the effects of victimization, and current research on these issues. Grade Mode: Normal Grading Mode

#### CJ 450 Business & Industrial Security **3 Credit hours**

Selection, training, and staffing of a security force; security devices

available; techniques of internal security; ground security; security techniques applicable to personnel selection; legal problems. CJ majors only.

Pre-req: CJ 200 with a minimum grade of D. Grade Mode: Normal Grading Mode

# CI 453 Seminar in Crime Prevention

**3 Credit hours** 

This course examines theory, operation, and evaluation of crime prevention as a function of the criminal justice system. Techniques for crime prevention are analyzed from various orientations, including environmental design.

Pre-req: CJ 200 with a minimum grade of D. Grade Mode: Normal Grading Mode

#### 3 Credit hours CJ 460 Miscarriages of Justice

This course provides a critical examination of the processes and procedures used by police, prosecutors, defense attorneys, judges, and corrections agents which may potentially produce errors or "miscarriages" of justice. Pre-req: CJ 200.

Grade Mode: Normal Grading Mode

# CJ 480 Special Topics

A study of special interest criminal justice topics under the supervision of a qualified faculty member. Grade Mode: Normal Grading Mode

CJ 481 Special Topics

A study of special interest criminal justice topics under the supervision of a qualified faculty member. Grade Mode: Normal Grading Mode

# CJ 482 Special Topics

1-4 Credit hours A study of special interest criminal justice topics under the supervision of a qualified faculty member. Grade Mode: Normal Grading Mode

# 1-4 Credit hours

CJ 483 Special Topics A study of special interest criminal justice topics under the supervision of a qualified faculty member. Grade Mode: Normal Grading Mode

# CJ 485 Independent Study

1-4 Credit hours

3 Credit hours

1-4 Credit hours

1-4 Credit hours

This course permits the student to undertake supervised research (field or library) in any area where there is no appropriate course. Grade Mode: Normal Grading Mode

# CJ 486 Independent Study

1-4 Credit hours

This course permits the student to undertake supervised research (field or library) in any area where there is no appropriate course. Grade Mode: Normal Grading Mode

# CJ 487 Independent Study

This course permits the student to undertake supervised research (field or library) in any area where there is no appropriate course. Grade Mode: Normal Grading Mode

# CJ 488 Independent Study

This course permits the student to undertake supervised research (field or library) in any area where there is no appropriate course. Grade Mode: Normal Grading Mode

# CJ 490 Internship

The placement of an individual into a criminal justice ageny (police, probation, courts, jails) to observe and participate in its operation. Grading is CR/NC only.

Grade Mode: Credit/No Credit Grade Only

# CJ 492 💎 Senior Seminar

# **3 Credit hours**

Capstone course. Integrates and applies material learned in the program of study. Serves as a culminating experience in which students demonstrate what they have learned in the classroom. **Pre-req:** (CJ 200 with a minimum grade of D and CJ 302 with a minimum grade of D and CJ 404 with a minimum grade of D). Attributes: Capstone Course

Grade Mode: Normal Grading Mode

**3 Credit hours** 

1-4 Credit hours

1-6 Credit hours

1-4 Credit hours

# **Cyber Forensics and Security**

# **CFS 200 Introduction to CFS**

# 3 Credit hours

**3 Credit hours** 

This course teaches student how information is recovered from electronic devices and the forensic techniques used to perform forensic examinations. In addition, legal issues regarding electronic data will be discussed.

Grade Mode: Normal Grading Mode

# **CFS 261 Introduction to Linux**

An introductory course for the Linux operating system, focusing on its application in information assurance and the digital forensics. **Pre-req:** CFS 200 with a minimum grade of D or IST 264 with a minimum grade of D or IST 280 with a minimum grade of D or DFIA 200 with a minimum grade of D.

Grade Mode: Normal Grading Mode

# **CFS 305 Open Source Intelligence**

3 Credit hours

This course identifies and demonstrates free online resources that can aid investigators in searching the Internet for resources that can be applied to domestic and international investigations.

**Pre-req:** CFS 200 with a minimum grade of D or IST 264 with a minimum grade of D or IST 280 with a minimum grade of D or DFIA 200 with a minimum grade of D.

Grade Mode: Normal Grading Mode

# CFS 357 Network Penetration and Attack 4 Credit hours

Students will explore tools and techniques used to penetrate, exploit and ex filtrate data from computers and networks.

**Pre-req:** CFS 200 with a minimum grade of D or IST 264 with a minimum grade of D or IST 280 with a minimum grade of D or DFIA 200 with a minimum grade of D.

Grade Mode: Normal Grading Mode

# **CFS 400 Intro to Cyber Forensics**

3 Credit hours

This course teaches students how information is recovering from electronic devices and the forensic techniques used to perform forensic examinations. In addition, legal issues regarding electronic data will be discussed.

**Pre-req:** CFS 200 with a minimum grade of D or IST 264 with a minimum grade of D or IST 280 with a minimum grade of D or DFIA 200 with a minimum grade of D. **Grade Mode:** Normal Grading Mode

CFS 405 OSINT Practicum Grade Mode: Normal Grading Mode	3 Credit hours
CFS 406 OSINT Practicum II Grade Mode: Normal Grading Mode	3 Credit hours
CFS 410 Collegiate Cyber Competition I Pre-req: CFS 200 with a minimum grade of D. Grade Mode: Normal Grading Mode	3 Credit hours
CFS 411 Collegiate Cyber Comp II Pre-req: CFS 200 with a minimum grade of D. Grade Mode: Normal Grading Mode	3 Credit hours
<b>CFS 420 Incident Response</b> This course examines forensic and investigative aspect intrusion. Topics include pre-incident preparation, deve scoping an incident, forensic data collection, evidence f	loping leads,

networks, and enterprise environments.

Pre-req: CFS 400 with a minimum grade of D. Grade Mode: Normal Grading Mode

# CFS 430 Exploit Development

Students will learn the skills required to reverse-engineer 32-bit and 64-bit applications, perform remote user application, analyze patches for 1-day exploits, and write complex modern software and operating systems.

**Pre-req:** CFS 200 with a minimum grade of D or IST 264 with a minimum grade of D or IST 280 with a minimum grade of D or DFIA 200 with a minimum grade of D.

Grade Mode: Normal Grading Mode

# **CFS 440 Digital Evidence**

Concepts of computer forensics, including handling digital evidence, case preparation, forensic imaging, data recovery, password cracking, e-mail analysis, and report writing. Proper usage of difference forensic tools is emphasized.

**Pre-req:** CFS 200 with a minimum grade of D or IST 264 with a minimum grade of D or IST 280 with a minimum grade of D or DFIA 200 with a minimum grade of D.

Grade Mode: Normal Grading Mode

# CFS 445 Mobile & Web Pen Testing

3 Credit hours

3 Credit hours

4 Credit hours

4 Credit hours

**3 Credit hours** 

This course is designed to teach students the advanced skills and techniques required to test mobile and web applications. **Pre-req:** CFS 200 with a minimum grade of D or IST 264 with a minimum grade of D or IST 280 with a minimum grade of D or DFIA 200 with a minimum grade of D.

Grade Mode: Normal Grading Mode

# **CFS 448 Multimedia Forensics**

Course will introduce principles of multimedia forensics and their application to digital forensics. Practical forensics enhancements and analysis techniques, including how to prepare forensically-sound exhibits are covered.

**Pre-req:** CFS 200 with a minimum grade of D or IST 264 with a minimum grade of D or IST 280 with a minimum grade of D or DFIA 200 with a minimum grade of D.

Grade Mode: Normal Grading Mode

# CFS 454 Network Defense

An in-depth examination of the principles, strategies, and tools used to defend, detect, and respond to a variety of common network attacks. **Pre-req:** CFS 200 with a minimum grade of D. **Grade Mode:** Normal Grading Mode

**CFS 460 Applied Cyber Forensics** 

Introduction to the principles, practices and tools of digital forensics and electronic discovery. Hands-on exercises in a simulated real-world environment are a critical component of the course. **Pre-req:** CFS 400 with a minimum grade of D. **Grade Mode:** Normal Grading Mode

CFS 461 Cyber Warfare

Broad examination of this new form of conflict including the role of nation states, the challenge of attribution, potential impact on the physical world, and current government policy and doctrine. **Pre-req:** CFS 200 with a minimum grade of D or IST 264 with a minimum grade of D or IST 280 with a minimum grade of D or DFIA 200 with a minimum grade of D.

Grade Mode: Normal Grading Mode

4 Credit hours

# **3 Credit hours**

# **CFS 462 Network Forensics**

Examination of techniques and tools used to investigate, search, collect, analyze, and report on network based breaches and events. Pre-req: (CFS 200 with a minimum grade of D or IST 264 with a minimum grade of D or DFIA 200 with a minimum grade of D) and CFS 400 with a minimum grade of D and CFS 261 with a minimum grade of D and CIT 352 with a minimum grade of D. Grade Mode: Normal Grading Mode

### **CFS 464 Network Security**

**3 Credit hours** 

Addresses security issues for TCP/IP-based networks, Access Control and Communications are covered as well as Internet security in areas of cryptography, protocols, applications, encryption, hash functions digital signatures, etc.

Pre-req: CFS 200 with a minimum grade of D. Grade Mode: Normal Grading Mode

#### **CFS 467 Mobile Device Forensics**

4 Credit hours

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

Pre-req: CFS 400 with a minimum grade of D and (CFS 200 with a minimum grade of D or DFIA 200 with a minimum grade of D or IST 264 with a minimum grade of D).

Grade Mode: Normal Grading Mode

CFS 470 Internship Grade Mode: Normal Grading Mode	3 Credit hours
CFS 480 Special Topics Grade Mode: Normal Grading Mode	3 Credit hours
CFS 485 Independent Study Grade Mode: Normal Grading Mode	3-6 Credit hours

CFS 490 💎 Capstone

**3 Credit hours** 

This course reinforces assesses the student's ability to apply core digital forensics and information assurance knowledge and skills in a series of realistic practical exercises.

Pre-reg: CFS 357 with a minimum grade of D and CFS 460 with a minimum grade of D and CFS 467 with a minimum grade of D. Attributes: Capstone Course

Grade Mode: Normal Grading Mode

# **CFS 491 Research**

3-6 Credit hours

Students will explore and apply common research methods used in digital forensics and information assurance. Students will complete a research project including a paper or poster during the semester. Grade Mode: Normal Grading Mode

# **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

# 4 Credit hours 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**

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** 

**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** 

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**

Latest developments and advancement in cyber warfare facing nationstate 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**

Identification, preservation, collection, analysis, and reporting techniques and tolls 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**

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** 

**3 Credit hours** 

**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 640 Adv Cyber Forensics**

**3 Credit hours** An advanced study of cyber forensics focusing on artifacts from a variety of evidentiary sources and environments. Topics include Windows and Apple computer systems as well as mobile and network devices.

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 teh 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 Research 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.

Attributes: Thesis

Grade Mode: Normal Grading Mode

CFS 680 Special Topics Grade Mode: Normal Grading Mode

**CFS 690 Capstone** 

# 3 Credit hours

**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

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