

## Computer Crime & Forensics

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Cybercrime is a pervasive threat and the organizational demand for individuals capable of providing collaboration and support in dealing with this threat continues to grow. To prepare students from a variety of disciplines with the foundational study for this demand, the Computer Crime and Forensics minor provides a background in criminal justice and digital forensics, as well as computer science, computer programming, and information assurance. Students wishing to pursue the minor must obtain the approval of the School Director and complete each of the required courses with a grade of C or higher.

### Goals:

To develop in students:

- An understanding and appreciation of the fundamentals of computer science, cybersecurity, and information assurance;
- Knowledge and basic facility with a high-level programming language;
- A foundation of understanding and skills in digital forensics and cyber-investigation;
- The foundation for practical work and further study in information assurance, cyberlaw, and digital forensics;
- Understanding of the constraints, legal procedures, and multi-jurisdictional nature and scope, of digital incidents and the responses to them; and,
- The ability to identify, think critically, analyze, and solve, cybercrime and cyberlaw problems.

### Outcomes:

Upon graduation successful students will competently demonstrate:

- Use of the fundamental concepts and terminology regarding computers, computer security, and information assurance;
- Application of the essential cybercrime and digital forensic concepts, techniques and procedures;
- Ability to recognize, define, and use, the technical terminology of information assurance (IA);
- Application of the fundamentals of information assurance in both personal and organizational contexts;
- A breadth of knowledge and the ability to apply it regarding cyberlaw and cybercrime, including: identifying and classifying cybercrimes; the motivations of cybercriminals; seizure and handling of digital evidence; admissibility of digital incident evidence; preparing and delivering professional testimony; and, the key regulations and laws regarding cybercrimes of varying types and jurisdictions; and,
- High ethical, personal and professional standards, especially in regards to information assurance and its impact on individuals, organizations, and society.

### Careers for this Minor:

Computers and mobile phones are now common tools used in the commission of ordinary crime, and the frequency, magnitude, and scope, of cybercrimes have increased dramatically. The Computer Crime & Forensics minor prepares students with the following career paths to better deal with them:

- Attorneys
- Crime Analysts
- Federal, state and local law enforcement
- Federal intelligence agents

- Private security personnel
- Probation and parole officers

## Minor

### Computer Crime and Forensics Minor 2021-2022 Catalog

A Computer Science & Information Assurance major is ineligible to declare the minor. Approval of the School Director is required. Each course requires a grade of C or higher.

|                                      |   |              |
|--------------------------------------|---|--------------|
| CS 100                               | Foundations of Computer Science and Information Assurance | 3            |
| CJ 301                               | Criminal Procedure <sup>1</sup>                           | 3            |
| Select one course from               |   |              |
| IA 241                               | Cyberlaw and Cybercrime                                   | 3            |
| IA 340                               | Introduction to Information Assurance                     | 3            |
| Select one course from               |   |              |
| DF 242                               | Computer Forensics I                                      | 4            |
| DF 395                               | Cyber Criminalistics                                      | 3            |
| Select two courses from <sup>2</sup> |   |              |
| CJ 318                               | Transnational Crime                                       | 3            |
| CJ 330                               | Terrorism   | 3            |
| CJ 423                               | Evidence  | 3            |
| CJ 430                               | Homeland Security   | 3            |
| CJ 444                               | Crime Analysis and Mapping                                | 3            |
| PY 234                               | Forensic Psychology                                       | 3            |
| PY 344                               | Cognition   | 4            |
| <b>Total Cr.</b>                     |   | <b>18-20</b> |

<sup>1</sup> Prerequisite course CJ 101

<sup>2</sup> One course must be Criminal Justice (CJ) subject.