With the rise of the digital age, the law enforcement and scientific communities are continually faced with greater and greater challenges in apprehending those who use technology to break the law. Advances in technology have opened new avenues for criminals to conduct business. As computers become smaller, faster, and capable of storing more data, individuals can produce and store large amounts of information more easily than ever before. High speed connections allow the sharing of this information and new operating systems and software programs allow this data to be hidden or encrypted. As a result, scientists must find new ways to circumvent these problems.

The goals of the Certificate Program in Computer Forensics at Marshall University are to provide students with an educational foundation in computer forensics, prepare them for employment in the digital forensics field, and to provide them with further education and training. Students completing the certificate program will be knowledgeable in the legal issues surrounding digital forensics and the latest techniques and technologies used to combat computer criminals.

The Marshall Information Security and Digital Evidence (MISDE) Program is the combined effort of the Marshall University Forensic Science Center, the Department of Integrated Science and Technology and the College of Information Technology and Engineering. We are dedicated to providing individuals in high tech environments with a basic knowledge of computer forensics as well as improving their ability to respond to threats against their technology infrastructure.

MISDE is currently housed in the newly renovated Marshall University Forensic Science Center. Our new facilities include a spacious lab dedicated to the forensic examination of digital evidence and two computer enabled classrooms with distance learning capabilities.
CERTIFICATE REQUIREMENTS

To earn the certificate, participants must complete five required courses each with a grade of "C" or better. Students not pursuing the certificate program are welcome to take as many individual courses as they wish. For more information about the program, please call (304) 690-4372.

REQUIRED COURSE DESCRIPTIONS

IST 264. Computer Hardware Technologies
Analysis and examination of various hardware technology issues that impact computer usage. (3 credit hrs.)

- One of the following courses from the Criminal Justice Program:

  CJ 221. Introduction to Criminal Courts 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. (3 credit hrs.)

  CJ 312. Criminal Investigations Investigation methodology, relations of the detective with other police divisions, modus operandi, sources of information, surveillance, interrogation, follow-up procedures. (3 credit hrs.)

  CJ 321. Criminal Justice Administration Criminal procedure from apprehension to conviction, arrests, extradition proceedings, information and indictment, functions of the grand jury and the coroner, trial procedure. (3 credit hrs.)

- Three of the following courses offered through Integrated Science and Technology:

  IST 446. Introduction to Digital and Multimedia Evidence This course will introduce the student to the principles of forensics and their application to the practice of computer forensics. The foundations of criminal and civil law and the judicial system will be reviewed. The law of evidence will be applied to the forensic process and the scientific method. (3 credit hrs.)

  IST 447. Search and Seizure Techniques in the Field of Digital and Multimedia Evidence This course provides basic information to the student in the proper procedures for seizing digital evidence used in the commission of crime. This course also includes legal issues peculiar to seizing digital evidence. (3 credit hrs.)

  IST 448. Forensic Uses of Digital Imaging This course will introduce the student to the principals of digital imaging analysis and their application to the practice of forensic image analysis. In addition, students will learn how to prepare court exhibits. (3 credit hrs.)

  IST 449. Data Recovery and Analysis This course teaches students 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. (3 credit hrs.)

WHO CAN APPLY?

Students are expected to have prior knowledge in core hardware objectives including the installation, configuration and upgrading of hardware and PC preventative maintenance, diagnosis and troubleshooting. Since this is an Online certificate program students are not required to attend any course on campus. Therefore, anyone with this foundational knowledge may apply. You must have a computer with an internet connection and be prepared to spend the extra time required to complete the assignments for each course.

HOW DO I APPLY?

For more information about the application process, please visit Marshall University’s Admissions web page at http://www.marshall.edu/admissions. Students may apply using the on-line application form located at the web site. For more information about Marshall’s online programs visit http://www.marshall.edu/muonline. Here you can find information about MUOnline, the application process, as well as tuition and fees.

When completing the application please enter the following information in the respective fields:

Type of Student: Non degree (unless you plan to complete a degree)

College: College of Science

NEED MORE INFORMATION?

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