

# GRADUATE CERTIFICATE IN DIGITAL FORENSICS



FORENSIC SCIENCE

## About Our Program



### Digital Forensics

Computers and other digital devices hold a wealth of information including text, digital images, audio and video, which can serve as key evidence for solving crimes. Forensic software programs can be used to image digital storage media and the images can be analyzed using a variety of investigative software programs. Mobile phone forensics is an area that is emphasized in the forensic science courses, as well as investigation of computers and gaming devices. The opportunity to participate in hands-on experiences with investigative tools allows students to participate in mock investigations in preparation for careers in this exciting discipline.

## Required Curriculum

### **FSC 632 Foundations and Fundamentals of Digital Evidence (3 hours)**

This course provides fundamental information to lay the foundation for the Digital Forensics certificate program. Topics include laws and regulations for stored digital data, quality assurance and ethics in a digital laboratory, basic terminology, computer hardware and various storage media, filing systems, and computer security. Class is taught primarily in lecture format with discussions, practical exercises, and supplement lectures.

### **FSC 605 Forensic Digital Imaging (3 hours)**

Introductory course in digital imaging processing. Covers techniques used in forensic laboratory to enhance, analyze, and catalog digital images. Instruction in a laboratory setting.

### **FSC 609 Network Forensics (3 hours)**

Teaches the basics of how computers and networks function, how they can be involved in crimes as well as a source of evidence.

### **FSC 634 Digital Evidence Search and Seizure (3 hours)**

Topics covered in this course expand upon material covered in FSC 632. Additional areas include affidavits and warrants, national information security concepts, evidence collection, transport and preservation, computer networks, e-mail traces, imaging of original evidence, introduction to forensic tools, Windows registry, malware and spyware, virtualization and hand held devices. Classes are presented in a lecture format and culminates with a mock, digital crime scene exercise.

### **FSC 676 Advanced Digital Evidence Detection and Recovery (3 hours)**

This course will provide an overview of the advanced procedures and techniques used by investigators working with digital evidence. The course will be taught as a combination of lectures, laboratory, and practical exercises.

## Required Curriculum Continued

NOTE: Successful completion of Digital Forensics Certificate Program requires that the students:

1. Maintain a cumulative grade point average (GPA) of 3.0 or better in 5 requires courses.
2. Successfully pass a comprehensive examination which spans these subject areas.

## General Admission Requirements

- Completion of a Free Application for Federal Student Aid (FAFSA) as soon after January 1 as possible at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). (US Citizens).
  - Submission of official transcript(s) documenting that the applicant has: A) Achieved an overall Grade Point Average of 3.0 or better. B) Bachelor's degree from an accredited institution of higher learning
  - Applicants must submit their Graduate Record Examination (GRE) scores to the Graduate Admissions Office.
  - Formal Letters: Personal Statement from applicant: Two Letters of Recommendation on formal letterhead (both signed and dated) from individuals familiar with applicant's moral character and academic record.
- Full admission to the program (once an offer is made) is also contingent on successful completion of:
- A background check similar to those required for law enforcement officers are likely to be a condition of employment (Reference: NIJ Report NCJ 203099 – "Qualifications for a Career in Forensic Science." pp. 7-10). We encourage all students to maintain a drug-free lifestyle to ensure they will not be denied internships or future employment.
  - Receipt of other documentation required for enrollment.

## Financial Aide

A student may pursue the graduate certificate while enrolled in the Forensic Science MS program OR as a certificate only student. Students already enrolled in the MS degree program should submit to Graduate Admissions a Secondary Program Request. ([www.marshall.edu/graduate/forms/SecondaryProgramRequestForm.pdf](http://www.marshall.edu/graduate/forms/SecondaryProgramRequestForm.pdf))

Applicants interested in the certificate-only program should apply for admission to Marshall University as a Certificate/Professional Development student and select on the application form the Certificate in Digital Forensics.

The Graduate Certificate does not assume that applicants have any experience in the field of digital forensics. The course sequence includes instruction ranging from basic fundamentals to advanced topics. Applicants must have an undergraduate degree and gain full admission into the Marshall University Graduate College.

*All application, admission, and degree-granting requirements and regulations shall be applied equitably to individual applicants and students regardless of age, sex, race, disability, religion, or national origin.*

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For further details on Admission requirements, please go to :

[http://www.marshall.edu/catalog/files/Gr\\_2015-16\\_published.pdf](http://www.marshall.edu/catalog/files/Gr_2015-16_published.pdf)



Revised 11/2/2016