



# FORENSIC SCIENCE

## **Applicant Packet**

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Forensic Science Center  
1401 Forensic Science Drive  
Huntington, WV 25701  
1-304-691-8931  
forensics@marshall.edu  
www.marshall.edu/forensics

\*Required Documents for Admission

# FORENSIC SCIENCE M.S. DEGREE PROGRAM



## About Our Program



The nationally accredited Forensic Science Program at Marshall University is a two-year academic program leading to a master of science in forensic science. Nationally one of a limited number of graduate-level programs that is FEPAC accredited (go to [aafs.org](http://aafs.org) for more details). MUFSP offers a unique opportunity for students to learn in and near accredited (ISO 17025) forensic testing and DNA databasing labs.

With the increasing introduction of scientific evidence into court testimony and the demand for standardized educational programs, Marshall University's Forensic Science Program satisfies federal and state standards and guidelines to enable its graduates to enter this fascinating field well equipped to respond to future challenges.

The program includes a five-semester core curriculum with both thesis and non-thesis options. In addition to this strong, broad-based core curriculum, four areas of emphasis are offered to allow students to obtain additional in-depth education and training. Students may select any combination of the emphases, up to 4, in which can be completed in the standard five semester program. These areas of emphasis include Crime Scene Investigation, Digital Forensics, DNA Analysis, and Forensic Chemistry.

On-site research and service forensic laboratories at the Marshall University Forensic Science Center (MUFSC) provide students with opportunities to observe inner workings of a forensic laboratory. These include accredited laboratories providing CODIS databasing, parentage testing, and DNA casework, as well as forensic chemistry, digital forensics, microscopy/comparative sciences, and microbial forensics.

## Admission Policy

Admission to the Forensic Science Program is highly selective, with ~20 students selected each year. Applicant materials should be submitted by March 1, program entrance begins the fall semester only. The program observes a rolling application policy so that individuals may apply and be admitted for the next fall class at any time.

The program reserves the right to withdraw its offer should the applicant fail to successfully meet all requirements for fall enrollment.

*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.*

## Admission Requirements

- Submission of the Marshall University Graduate College Application available online via [www.marshall.edu/graduate/](http://www.marshall.edu/graduate/)
  - 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) Has received a Bachelor's degree from an accredited institution of higher learning in a forensic or natural science, computer science, computer electronic or electrical engineering, information systems or information technology (or its equivalent coursework in a relevant field). C) Completed one academic year (two semesters or three quarters) of the following courses with associated labs, with no grade of less than a C: Biology, General Chemistry, Organic Chemistry, Physics. D) It should be noted that successful completion of an undergraduate course in biochemistry is recommended, but not required, prior to entry into this program.
  - Graduate Record Exam (GRE) – Tested AFTER 8/1/11, Applicants should perform in the top 50% of test-takers in each of the three categories: verbal, quantitative, and writing. Tested BEFORE 8/1/11, applicants should have a combined score (Verbal + Quantitative) of  $\geq 1000$ .
  - Formal Letters: Personal Request for Admission; Three Letters of Recommendation on formal letterhead from individuals familiar with the 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.
  - Required Hepatitis B vaccination/titer or formal declination of vaccination.
  - Receipt of other documentation required for enrollment.

## Academic Common Market Information

Academic Common Market (ACM) is a program through which students from states without a M.S. program in Forensic Science may qualify for the equivalent of in-state tuition. As of 2012, those states include: DE, GA, KY, LA, SC, and TN.

## Financial Aid Information

There are several forms of financial support available to U.S. citizen graduate students who have completed their FAFSA including: loans, graduate and teaching assistantships, work studies, and scholarship waivers. Please contact Marshall's Financial Assistance Office for more information, [sfa@marshall.edu](mailto:sfa@marshall.edu).

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## QUICK FACTS

Ranked #1 in the U.S. on the 2007, 2009, and 2012 Forensic Science Assessment Test (FSAT)

Small student to faculty ratio

Students complete a research-based internship in a working laboratory, at the local, state, or federal level

Multiple on-site forensic laboratories, as well as a mock Crime Scene House, provide real-world experience

Our alumni span the globe; many are employed by the FBI, ATF, DEA, AFDIL, Secret Service, State Department, state crime labs, private laboratories and agencies

Specializations available in up to four areas of emphasis: Crime Scene Investigation, Digital Forensics, DNA Analysis, and Forensic Chemistry.

Our M.S. Program is Fully FEPAC accredited by the American Academy of Forensic Science—[aafs.org](http://aafs.org)



Forensic Science Education Program Accreditation Commission

# AREAS OF EMPHASIS

The FEPAC-accredited Forensic Science Program provides a broad-based graduate level curriculum in forensic science. In addition to the core curriculum, the Marshall University Forensic Science Program offers four areas of emphasis: Crime Scene Investigation, Digital Forensics, DNA Analysis, and Forensic Chemistry. While one area of emphasis is required, students may complete up to four areas of emphasis during their standard five-semester course of study. Completing multiple areas of emphasis is contingent on maintaining good academic standing while enrolled in the program. Our program is unique in that it encourages a variety of specializations.

Core Curriculum		
Course		Credits
FSC 604	Genetics and DNA Technologies	3
FSC 606	Crime Scene & Death Investigation	2
FSC 612	Forensic Microscopy	2
FSC 618	Forensic Comparative Sciences	2
FSC 619	Forensic Statistics	3
FSC 622	Forensic Analytical Chemistry	3
FSC 623	Forensic Analytical Chemistry Lab	1
FSC 624	Biochemistry	4
FSC 630	Forensic Science Internship	5
FSC 632	Foundations and Fundamentals in Digital Evidence	3
FSC 665	Legal Issues in Forensic Science	3
FSC 680	Seminar (Semesters 1, 2, 4, 5)	4
	Approved Elective	3
<b>TOTAL</b>		<b>38</b>

Digital Forensics		
Course		Hrs
FSC 605	Forensic Digital Imaging	3
FSC 609	Network Forensics	3
FSC 634	Digital Evidence Search & Seizure	3
FSC 676	Advanced Digital Evidence Detection & Recovery	2

DNA Analysis		
Course		Hrs
FSC 600	Cell and Molecular Biology OR BSC 550 Molecular Biology	3
FSC 603	Genetics & DNA Laboratory	1
FSC 627	Human Genetics	2
FSC 629	Advanced DNA Technologies	2

Forensic Chemistry		
Course		Hrs
FSC 608	Forensic Toxicology	3
FSC 626	Advanced Drug Analysis	2
FSC 628	Chemical Analysis of Trace Evidence	2

Crime Scene Investigation		
Course		Hrs
FSC 607	Bloodstain Pattern Analysis	3
FSC 615	Advanced Crime Scene Investigation	3
FSC 617	Advanced Photography and Documentation	3

## 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.

## DNA Analysis

The Marshall University Forensic Science Center is home to the academic program as well as a service-oriented DNA laboratory. The Combined DNA Indexing System (CODIS) for West Virginia is a secure facility that uses state-of-the-art technology. MU DNA Lab faculty and staff serve as instructors and supervisors for various DNA-based courses while providing select students with real-world experience, training, and exposure to the inner workings of a forensic DNA laboratory. The DNA emphasis exceeds the DNA Advisory Board standards by requiring a total of 12 graduate level credit hours addressing the DNA guidelines.

## Forensic Chemistry

Students pursuing careers in forensic drug analysis, toxicology, and trace evidence will benefit from the completion of the Forensic Chemistry emphasis. As some agencies may require 30 or more hours of chemistry coursework, the Forensic Chemistry emphasis provides additional education and hands-on training to meet these federal and state guidelines.

## Crime Scene Investigation

The Crime Scene Investigation emphasis provides students with the tools and hands-on experience to excel and become leaders in their field. The Forensic Science Program has its own Crime Scene House that allows students to obtain real-world experience and training through the completion of mock crime scene exercises. Upon completion of this emphasis, students qualify to sit for the International Association for Identification Basic Student Knowledge in Crime Scene Examination.

Visit [www.marshall.edu/forensics](http://www.marshall.edu/forensics) for more information or to download an Admissions Packet.



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# Marshall University Forensic Science Graduate Degree Program

## APPLICANT REQUIREMENTS WORKSHEET



FORENSIC SCIENCE

**SUBMISSION OF THIS FORM IS REQUIRED FOR ADMISSION TO OUR PROGRAM.**

This worksheet outlines all items required for admission to the Marshall University Forensic Science graduate program. Each of the items below should be received at the graduate college by March 1, with exception the application and this worksheet, which should be sent by March 1 for the best chance to be accepted.

[Blank box for name entry]

FULL NAME

- PERSONAL STATEMENT.** You may discuss any topic of your choice, but we encourage you to address why you want to study forensic science, your academic and work experience in the field, and the strengths of your application.
- UNDERGRADUATE DEGREE.** You must have a degree in a forensic or natural science, computer science, computer electronic or electrical engineering, information systems or information technology (or its equivalent coursework in a relevant field from an accredited institution of higher education. If you attended a university where you did not earn a degree, indicate it along with the GPA for coursework performed, and mark "none" for degree earned.

Institution	Credit Hours	GPA	Degree Earned or Anticipated (BS, BA, None)	Major or Field of Study	Minor or Area of Emphasis

- GRE SCORES.** Tested AFTER 8/1/11, Applicants should perform in the top 50% of test-takers in each of the three categories: verbal, quantitative, and writing. Tested BEFORE 8/1/11, applicants should have a combined score (Verbal + Quantitative) of  $\geq 1000$ . You may indicate the highest sub-scores from separate sittings of the exam. An official score report must be sent to Marshall University Graduate College. Marshall's DI Code: 5396.

<input type="text"/>	+	<input type="text"/>	+	<input type="text"/>	=	<input type="text"/>
VERBAL		QUANT		ANALYTICAL WRITING		TOTAL or %

- CORE SCORES.** You must take at least one year of biology, general chemistry, organic chemistry, and physics AND each course's associated labs. Higher level courses may substitute for introductory courses. If it is unclear from your transcripts that you have taken a full year of each course and its associated lab (e.g., your lecture and lab courses are combined), please make note below and attach supporting documentation (photocopies of course catalog description or notes from professor, etc)

	Grades				Comments
	First Semester		Second Semester		
	Lecture	Lab	Lecture	Lab	
Biology					
General Chemistry					
Organic Chemistry					
Physics					

- THREE LETTERS OF REFERENCE.** Must be on formal letterhead from individuals familiar with academic performance, moral character, and/or work ethic.

Reference 1

Reference 2

Reference 3

**COMMENTS.** Additional details or clarifications.

  
  
  

- CERTIFICATION.** I certify that the above information is correct to the best of my knowledge.

APPLICANT SIGNATURE

DATE

*All materials should be submitted to:*  
 Marshall University Graduate Admissions Office  
 100 Angus E. Peyton Drive, South Charleston, WV 25303-1600  
 Telephone: 1-800-642-9842, services@marshall.edu





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## GRADUATE ADMISSION CHECKLIST

This checklist outlines all items required for admission to the Marshall University Forensic Science graduate program. All items must be submitted and received by March 1, to be considered for fall enrollment. Entrance into the Forensic Science Program is restricted to the fall semester only, but you may apply at any time. 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.

### NAME

- BACHELOR'S DEGREE**—Obtained from an accepted, regionally accredited college or university. Forensic Science requires a degree in a forensic or natural science, computer science, computer electronic or electrical engineering, information systems or information technology (or its equivalent coursework in a relevant field); overall 3.0 GPA.
- CORE SCIENCE COURSES**—You must take a year of each of these courses and their associated labs: biology, general chemistry, organic chemistry, and physics. Biochemistry is also suggested. Higher-level courses may substitute for introductory courses.
- DETERMINE RESIDENCY**—WV, Metro, Non-Resident, or Common Market.
  - Metro Counties**- In Ohio: Gallia, Jackson, Lawrence, Meigs, Pike and Scioto  
In Kentucky: Boyd, Carter, Elliott, Floyd, Greenup, Johnson, Lawrence, Martin and Pike
  - Common Market**- Residents of states that do not have a certain degree program offer a Academic Common Market Tuition Waiver which will bring the cost of tuition down from Non-resident (or Metro) to resident. Check qualifying states and print application for Common Market at [www.marshall.edu/academic-affairs/studentresources.asp](http://www.marshall.edu/academic-affairs/studentresources.asp). Current Common Market states for the Forensic Science Program include as of September 2010 include: GA, KY, LA, NC, SC, and TN.
- GRADUATE ADMISSIONS APPLICATION**—Complete and return all three pages of the form and submit *with* payment to the Graduate Admissions Office. (Online at [www.marshall.edu/graduate](http://www.marshall.edu/graduate))
- SEND OFFICIAL TRANSCRIPTS**— Request the registrars at all colleges and universities previously attended send official transcripts directly to the Graduate Admissions Office (transcript from the institution that awarded your bachelor's degree must contain the name of the degree earned and the date the degree was conferred.) Transcripts of all previous graduate work must be submitted. The Graduate Admissions Office cannot accept faxed transcripts and transcripts that are stamped "Issued to Student."
- SUBMIT GRE SCORES**—Take the Graduate Record Examinations (GRE) and have the scores sent to the Graduate Admissions Office by the testing agency. You may indicate the highest sub-scores from separate sittings of the exam. Tested AFTER 8/1/11, Applicants should perform in the top 50% of test-takers in each of the three categories: verbal, quantitative, and writing. Tested BEFORE 8/1/11, applicants should have a combined score (Verbal + Quantitative) of  $\geq 1000$ . Check [www.gre.org](http://www.gre.org) for test time and locations.
- THREE LETTERS OF REFERENCE**—The Forensic Science Program requires that 3 letters of reference/recommendation be submitted. These must be on formal letterhead from individuals familiar with the applicant's academic performance, moral character and/or work ethic.
- APPLICANT PERSONAL STATEMENT**—Providing justification for their admission to the Forensic Science Program.
- BACKGROUND CHECK**—The Forensic Science Program requires that a background check be performed prior to being fully admitted to the program. Background checks 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). A MUFSP staff member will send you the documents necessary to perform the check.
- HEPATITIS B VACCINATION/TITER**— Or formal declination of vaccination. Required prior to full-admission to the program.
- SUBMIT FAFSA**—Fill out the Free Application for Federal Student Aid (FAFSA) via [www.fafsa.ed.gov](http://www.fafsa.ed.gov) and indicate Marshall University's Federal School Code:

*All materials should be submitted to:*  
Marshall University  
Graduate Admissions Office  
100 Angus E. Peyton Drive  
South Charleston, WV 25303-1600  
Telephone: 1-800-642-9842  
[services@marshall.edu](mailto:services@marshall.edu)

## ACADEMIC COMMON MARKET PROCEDURES

The Academic Common Market Program enables students who come from states which do not offer a graduate-level Forensic Science Program to attend Marshall University at the in state tuition rate.

Students who wish to obtain Academic Common Market benefits at Marshall University must follow these steps:

1. Provide to the Office of Academic Affairs, 110 Old Main, an original certification from the student's residency state agency approving Academic Common Market to a specific program at Marshall University.
2. Provide proof of admission to Marshall University and to the specified program. This should be delivered to the Office of Academic Affairs.
3. Provide proof of satisfactory progress within the specified program each semester. This can be done by completing the Academic Common Market Satisfactory Progress Report, available in the Registrar's Office, 106 Old Main, online at [www.marshall.edu/academic-affairs](http://www.marshall.edu/academic-affairs) or within the forms section of this guide, prior to the due date for fee payments for any term of enrollment.

The deadline for submission of all materials is the last day of late registration for the semester for each term of enrollment.

Common Market States for Forensic Science (as of June 2011)

- Georgia
- Kentucky
- Louisiana
- North Carolina
- South Carolina
- Tennessee

**NOTE:** The Academic Common Market waiver (ACM waiver) **will not** change your student status from Non-resident to Resident. Your student status will remain Non-resident; therefore, your fees will always be assessed based on ones student status. Once the Office of the Bursar has been notified by the office of Academic Affairs that a student is academically eligible for the ACM waiver, it is applied to an account. The waiver amount will bring the cost of tuition down from Non-resident (or Metro) to resident.



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## GRADUATE APPLICATION FOR ADMISSIONS

Download the Admissions packet or International application packet by visit the Marshall Graduate Admissions page at <http://muwww-new.marshall.edu/graduate/>