FORENSIC SCIENCE, MASTER OF SCIENCE (M.S.) WITH A CONCENTRATION IN DIGITAL FORENSICS AND INCIDENT RESPONSE

Student learning outcomes

1. Students will be able to apply basic scientific principles and laboratory procedures to forensic science.
2. Students will demonstrate capabilities, use, potential and limitations of forensic laboratory theory and techniques.
3. Students will demonstrate the ability to perform (report and orally present) independent research in an area of forensic science.
4. Students will demonstrate an understanding of legal procedure, rules of evidence, ethical and professional duties, and responsibilities of the forensic scientist.
5. Students will be able to assess and interpret scientific data, uncertainty and bias in forensic science practice.
6. Students will be able to evaluate and analyze hardware, software, and data-focused digital evidence, along with incident response, using current standard practices, and recommend alternative analysis methods where necessary to improve result outcomes.

VCU Graduate Bulletin, VCU Graduate School and general academic policies and regulations for all graduate students in all graduate programs

The VCU Graduate Bulletin website documents the official admission and academic rules and regulations that govern graduate education for all graduate programs at the university. These policies are established by the graduate faculty of the university through their elected representatives to the University Graduate Council.

It is the responsibility of all graduate students, both on- and off-campus, to be familiar with the VCU Graduate Bulletin as well as the Graduate School website (http://www.graduate.vcu.edu/) and academic regulations in individual school and department publications and on program websites. However, in all cases, the official policies and procedures of the University Graduate Council, as published on the VCU Graduate Bulletin and Graduate School websites, take precedence over individual program policies and guidelines.

Visit the academic regulations section for additional information on academic regulations for graduate students. (https://bulletin.vcu.edu/academic-regs/)

Degree candidacy requirements

A graduate student admitted to a program or concentration requiring a final research project, work of art, thesis or dissertation, must qualify for continuing master's or doctoral status according to the degree candidacy requirements of the student's graduate program. Admission to degree candidacy, if applicable, is a formal statement by the graduate student's faculty regarding the student's academic achievements and the student's readiness to proceed to the final research phase of the degree program.

Graduate students and program directors should refer to the following degree candidacy policy as published in the VCU Graduate Bulletin for complete information and instructions.

Visit the academic regulations section for additional information on degree candidacy requirements. (https://bulletin.vcu.edu/academic-regs/grad/candidacy/)

Graduation requirements

As graduate students approach the end of their academic programs and the final semester of matriculation, they must make formal application to graduate. No degrees will be conferred until the application to graduate has been finalized.

Graduate students and program directors should refer to the following graduation requirements as published in the Graduate Bulletin for a complete list of instructions and a graduation checklist.

Visit the academic regulations section for additional information on graduation requirements. (https://bulletin.vcu.edu/academic-regs/grad/graduation-info/)

Apply online today. (https://www.vcu.edu/admissions/apply/graduate/)

Additional admission requirements for concentration in digital forensics and incident response

In addition to the M.S. in Forensic Science general admission requirements, applicants to the digital forensics and incident response concentration must have completed the following:

1. Bachelor's degree in forensic or a natural science, computer science, electrical engineering, business or information systems, information technology or equivalent course work (30 upper-level credits in the above majors).
2. Completion of 16 credits in information technology, computer science, business/systems security, including six credits in a programming language.

Degree requirements

The graduate program is a full-time, two-year program. Courses will vary depending on the concentration selected. Required and elective courses are offered at various times, day and night, throughout the week. The M.S. in Forensic Science requires 42 graduate credit hours of course work, including 21 credit hours of required core course work and 21 credit hours of specialized course work designed for each concentration (including electives). The required course work includes a directed research project, which is an extensive research experience conducted within a forensic laboratory setting.

In addition to general VCU Graduate School graduation requirements (https://bulletin.vcu.edu/academic-regs/grad/graduation-info/), students are required to complete course work in core and elective courses and to conduct significant research.

1. Credit hour requirements: Students must complete a minimum of 42 graduate-level credit hours as outlined in the list of core and concentration requirements, including electives.
2. Grade requirements: Students must maintain an ongoing, cumulative minimum GPA of 3.0. Receipt of a grade of C in two or more courses

will constitute an automatic dismissal from the graduate program in forensic science. Receipt of a grade of D or lower in any one course will constitute an automatic dismissal from the graduate program in forensic science.

3. Other requirements: Students must maintain continuous, full-time enrollment. Interruption in continuous enrollment or full-time status for any reason without a leave of absence approved by the forensic science graduate committee will require that students reapply to the program. Request for credit for graduate course work taken at other institutions must be submitted to the director of graduate studies in forensic science and will be considered on a case-by-case basis by the forensic science graduate committee. If course work deficiencies are identified, students may be required to take additional foundational courses beyond those listed below. These will not count toward the 42 required credit hours.

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Program website: forensicscience.vcu.edu (http://forensicscience.vcu.edu/)

Curriculum requirements

Course	Title	Hours
FRSC 565	Scientific Crime Scene Investigation	3
FRSC 570	Forensic Science Seminar (one-credit course repeated for three credits) [1]	3
FRSC 580	Applied Statistics for Forensic Science [1]	3
or BIOS 544	Graduate Research Methods II	
or STAT 543	Statistical Methods I	
FRSC 660	Toolmark Examinations	3
or FRSC 661	Analysis of Pattern Evidence	
or FRSC 662	Firearm Identification	
FRSC 670	Forensic Evidence and Criminal Procedure	3
FRSC 677	Professional Practices and Expert Testimony	3
FRSC 793	Directed Research in Forensic Science	3
Digital forensics and incident response concentration courses		
FRSC 525	Introduction to Digital Forensics [1]	3
FRSC 530	Advanced Forensic Computer and Storage Device Analysis	3
FRSC 531	Hardware Forensics and Advanced Acquisition	3
FRSC 610	Forensic Video and Multimedia Analysis	3
FRSC 611	Cybersecurity, Networking and Ethical Hacking for Forensic Applications [1]	3
FRSC 612	Advanced Forensic Mobile and IoT Device Analysis	3
FRSC 613	Applied Forensic Digital and Multimedia Analysis	3
Total Hours		**42**

[1]

Courses required during the first fall semester upon entry in to the program

The minimum number of graduate credit hours required for this degree is 42.

Contact