Date Submitted: 10/11/19 3:01 pm

Viewing: SC-MS-FRSC: Forensic Science, MS

Last approved: 12/07/18 5:10 pm

Last edit: 10/14/19 10:54 am

Changes proposed by: jbazaz

Catalog Pages
Using this Program
Forensic Science, MS

Are you completing this form on someone else's behalf?

Yes

Requestor:

In Workflow

- 1. FRSC Chair
- 2. SC Curriculum
 Committee
- 3. SC Associate Dean
- 4. SC CAT Editor
- 5. Assoc Provost-Graduate
- 6. Registrar-Programs:

Duration

7. Registrar-Programs

History

- 1. Nov 8, 2017 by clmig-jwehrheim
- 2. Jan 29, 2018 by Rebekah Zacharias (rzachari)
- Jan 30, 2018 by Rebekah Zacharias (rzachari)
- 4. Mar 6, 2018 by Rebekah Zacharias (rzachari)
- 5. Mar 7, 2018 by pchampan
- 6. Dec 7, 2018 by Jennifer Bazaz Gettys (jbazaz)

Name	Extension	Email
Emily Rancourt	5234	erancour

Effective Catalog: 2020-2021

Program Level: Graduate

Program Type: Master's

Degree Type: Master of Science

Title: Forensic Science, MS

Banner Title: Forensic Science, MS

Registrar/OAPI Use

Approved

Only - SCHEV

Status

Registrar's Office Use Only – Program Start

Term

Registrar/OAPI Use Only – SCHEV Letter

Concentration(s):

Conce	100000000000000000000000000000000000000	
	Associated Concentrations	Registrar's Office Use Only: Concentration Code
1	Crime Scene Investigation	CSIN
2	Forensic Biology Analysis	FRSB
3	Forensic Chemistry Analysis	FRCA
4	Forensic/Biometric Identity Analysis	FRBI

Registrar/IRR Use

Only -

Concentration CIP

Code

College/School: College of Science

Department /

Forensic Science Program

Academic Unit:

Jointly Owned

No

Program?

Justification

For preparation of the Forensic Science Education Programs Accreditation Commission accreditation and to be better competitors with peer institutions. Our goal with these changes is to increase our elective course offerings to be competitive with our peer university programs, and give our program more flexibility to offer Selected Topics elective courses that are 1-3 credits. We are still fine-tuning our new Biometric Identity Analysis concentration, and therefore modified a 1 credit course to become 3 credits at the request of the professor who needed more time to share the information required on this topic. Finally, we decided to give

the students in our Crime Scene Investigation and Biometric Identify Analysis concentrations the option of doing either a research project or a comprehensive exam for those students who will not be doing research for their future professions.

Total Credits

Total credits: 36

Required:

Registrar's Office Use Only - Program Code:

SC-MS-FRSC

Registrar/IRR Use Only – Program CIP Code

Admission Requirements:

Admissions

Application Requirements

University-wide admissions policies can be found in **Graduate Admissions Policies**.

To apply for this program, please complete the George Mason University Admissions Application.

In addition to fulfilling Mason's admission requirements for graduate study, applicants must provide:

- Three letters of recommendation from academic references or references in the industry or government who are familiar with the applicant's academic and/or professional accomplishments.
- Resume
- Detailed goal statement to include why you are interested in coming into Mason's Forensic Science
 Master's program, career goals, and professional aspirations, and proposed area of interest for your final research project.
- Two copies of official transcripts from each institution of higher education attended.
- A Virginia Domicile Classification Form.

TOEFL scores are required of all international applicants who do not hold at least a bachelor's degree from a regionally-accredited institution within the US (some exceptions apply). The TOEFL score has to at least be a total of 88, with a minimum of 20 in each section.

The GRE is not required for admission into this program. Additional requirements for each specific concentration are listed below.

Concentration-Specific Requirements

Forensic Biology Analysis and Forensic Chemistry Analysis Concentrations

A bachelor's degree in a forensic or natural science.

Forensic/Biometric Identity Analysis Concentration

A bachelor of science or bachelor of arts 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).

Crime Scene Investigation Concentration

A bachelor of science or bachelor of arts degree in a related field.

Program-Specific Policies:

Policies

For policies governing all graduate programs, see AP.6 Graduate Policies.

Premium Tuition

Students enrolled in this professional MS program are charged at a differential (premium) tuition rate. Therefore, any courses or secondary programs that they may enroll in are subject to the differential tuition rate. The <u>Forensics Graduate Certificate</u> has the same premium tuition rate, making it the ideal program for concurrent enrollment (if desired).

Concentration Declaration

Students must declare their intended concentration upon application. In the event that a student wishes to change their concentration, students may request to change their concentration by submitting a letter to the Forensic Science Program Director detailing the request and providing justification. These requests and possible substitutions/waivers will be considered on a case-by-case basis and only when the appropriate admissions requirements are met.

Criminal Background Check

The successful passing of a <u>Virginia Department of Forensic Sciences</u> background check is required prior to gaining access to <u>FRSC 540</u> Advanced Forensic Chemistry, <u>FRSC 541</u> Forensic Chemistry Laboratory, <u>FRSC 560</u> Advanced Forensic DNA Sciences, and <u>FRSC 561</u> Forensic DNA Laboratory.

Course Notes

FRSC 560 Advanced Forensic DNA Sciences and -and FRSC 561 Forensic DNA Laboratory

Students shall have completed undergraduate coursework in molecular and/or cell biology, as well as genetics, or students must obtain permission of the instructor prior to taking <u>FRSC 560</u> Advanced Forensic DNA Sciences and <u>FRSC 561</u> Forensic DNA Laboratory.

FRSC 540 Advanced Forensic Chemistry and FRSC 541 Forensic Chemistry Laboratory

Students shall have completed undergraduate coursework in general chemistry including polarity and acid/base chemistry. Students shall also have completed Organic Chemistry and be able to identify functional groups and other chemistry structures that make up a molecule. Exposure to instrumental techniques such as

gas chromatography, mass spectrometry and infrared spectroscopy is recommended or permission of instructor.

Degree Requirements:

Students should refer to the <u>Admissions & Policies</u> tab for specific policies related to this program. Select one concentration from the following:

Concentration in Crime Scene Investigation (CSIN)

This concentration educates students for a career as a crime scene investigator.

Course List

Code	Т	Title	Credits
Core Courses			
FRSC 500	Introduction to Forensic Science		3
FRSC 510	Basic Crime Analysis		3
FRSC 511	Advanced Crime Scene Analysis		3
FRSC 530	Law and Forensic Science		3
FRSC 570	Trace and Physical Evidence Concepts		3
Research Project or Non	-Research Project		5

Research Project Option

The Research Project Option is designed for students planning to pursue a doctoral degree or a career involving research in the field of forensic science or other related disciplines. The research project is based on laboratory research that must be preapproved by the advisory committee, which is appointed during the first semester of registration in <u>FRSC 610</u> (1 credit) Forensic Research Project. Students are responsible for selecting research advisors who can commit as an advisor during the semesters that the student indicates that they will be conducting their research and enrolled in <u>FRSC 610</u>. Students must then complete their written research project and present their research during an oral defense during the semester of registration in <u>FRSC 610</u> (3 credit) Forensic Research Project.

FRSC 600 Forensics Seminar

FRSC 610 Forensic Research Project

Non-Research Project Option

Students selecting this option are not required to complete a laboratory-based research project. Instead, they must successfully pass <u>FRSC 699</u> (0 credits) Forensic Comprehensive Examination to demonstrate thorough comprehension of the curriculum and must select 5 credits of additional elective coursework.

FRSC 699 Comprehensive Examination

Select 5 credits of additional FRSC elective courses

Electives

Select 16 credits from the following courses:

FRSC 512 Physical Evidence Laboratory

16

	Code	Title	Credits
	FRSC 513	Forensic Photography	
	FRSC 514	Survey of Forensic Chemistry, Biology, and DNA Analysis	
	FRSC 515	Selected Topics in Forensic Science	
	FRSC 516	Forensic Drone Photography	
	FRSC 517	Questioned Document Examination	
	FRSC 518	Analytical Thinking Violent Crime Profiling	
	FRSC 520	Toxicology	
	FRSC 550	Issues in Forensic Anthropology	
	FRSC 580	Facial Reconstruction	
_	FRSC 590	Medicolegal Death Investigation and Pathology	
	FRSC 600	Forensics Seminar	
	FRSC 620	Face and Biometric Pattern Analysis	
	FRSC 630	Fingerprint Identification	
	FRSC 640	Legal, Privacy and Ethical Issues in Identity Analysis	
	FRSC 650	Identity Analysis Applications	
	FRSC 690	Capstone - Moot Court Expert Testimony	
	FRSC 790	Internship in Forensic Science (Credits: 1-6)	
To	otal Credits		36

Concentration in Forensic Biology Analysis (FRSB)

This concentration educates students for a career as a forensic biology laboratory analyst.

The successful passing of a Virginia Department of Forensic Sciences background check is required prior to gaining access to <u>FRSC 560</u> Advanced Forensic DNA Sciences and <u>FRSC 561</u> Forensic DNA Laboratory. In order to obtain a career as a DNA Analyst, the student should have undergraduate coursework in Statistics, Molecular Biology, Genetics, and Biochemistry.

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Code	Title	Credits
Core Courses		
FRSC 500	Introduction to Forensic Science	3
FRSC 510	Basic Crime Analysis	3
FRSC 512	Physical Evidence Laboratory	3
or <u>FRSC 630</u>	Fingerprint Identification	
FRSC 514	Survey of Forensic Chemistry, Biology, and DNA Analysis	3
FRSC 530	Law and Forensic Science	3
FRSC 560	Advanced Forensic DNA Sciences	4
& <u>FRSC 561</u>	and Forensic DNA Laboratory	
FRSC 570	Trace and Physical Evidence Concepts	3
FRSC 600	Forensics Seminar	1
FRSC 610	Forensic Research Project	4

Code	Title	Credits
Electives		
Select 9 credits from	m the following courses:	9
FRSC 511	Advanced Crime Scene Analysis	
FRSC 512	Physical Evidence Laboratory	
FRSC 513	Forensic Photography	
FRSC 515	Selected Topics in Forensic Science	
FRSC 516	Forensic Drone Photography	
FRSC 517	Questioned Document Examination	
FRSC 518	Analytical Thinking Violent Crime Profiling	
FRSC 520	Toxicology	
FRSC 550	Issues in Forensic Anthropology	
FRSC 580	Facial Reconstruction	
FRSC 590	Medicolegal Death Investigation and Pathology	
FRSC 600	Forensics Seminar	
FRSC 620	Face and Biometric Pattern Analysis	
FRSC 630	Fingerprint Identification	
FRSC 640	Legal, Privacy and Ethical Issues in Identity Analysis	
FRSC 650	Identity Analysis Applications	
FRSC 690	Capstone - Moot Court Expert Testimony	
FRSC 790	Internship in Forensic Science (Credits: 1-6)	
Total Credits		36

Concentration in Forensic Chemistry Analysis (FRCA)

This concentration educates students for a career as a forensic chemistry laboratory analyst.

The successful passing of a Virginia Department of Forensic Sciences background check is required prior to gaining access to <u>FRSC 540</u> Advanced Forensic Chemistry and <u>FRSC 541</u> Forensic Chemistry Laboratory.

Course List

Code	Title	Credits
Core Courses		
FRSC 500	Introduction to Forensic Science	3
FRSC 510	Basic Crime Analysis	3
FRSC 512	Physical Evidence Laboratory	3
or <u>FRSC 630</u>	Fingerprint Identification	
FRSC 514	Survey of Forensic Chemistry, Biology, and DNA Analysis	3
FRSC 520	Toxicology	3
FRSC 530	Law and Forensic Science	3
FRSC 540	Advanced Forensic Chemistry	4
& <u>FRSC 541</u>	and Forensic Chemistry Laboratory	
FRSC 570	Trace and Physical Evidence Concepts	3

Code	Title	Credits
FRSC 600	Forensics Seminar	1
FRSC 610	Forensic Research Project	4
Electives		
Select 6 credits fro	om the following courses:	6
FRSC 511	Advanced Crime Scene Analysis	
FRSC 512	Physical Evidence Laboratory	
FRSC 513	Forensic Photography	
FRSC 515	Selected Topics in Forensic Science	
FRSC 516	Forensic Drone Photography	
FRSC 517	Questioned Document Examination	
FRSC 518	Analytical Thinking Violent Crime Profiling	
FRSC 550	Issues in Forensic Anthropology	
FRSC 580	Facial Reconstruction	
FRSC 590	Medicolegal Death Investigation and Pathology	
FRSC 600	Forensics Seminar	
FRSC 620	Face and Biometric Pattern Analysis	
FRSC 630	Fingerprint Identification	
FRSC 640	Legal, Privacy and Ethical Issues in Identity Analysis	
FRSC 650	Identity Analysis Applications	
FRSC 690	Capstone - Moot Court Expert Testimony	
FRSC 790	Internship in Forensic Science (Credits: 1-6)	
Total Credits		36

Concentration in Forensic/Biometric Identity Analysis (FRBI)

This concentration educates students for a career as an identity intelligence analyst.

Course List

Code	Title	Credits
Core Courses		
FRSC 500	Introduction to Forensic Science	3
FRSC 510	Basic Crime Analysis	3
FRSC 514	Survey of Forensic Chemistry, Biology, and DNA Analysis	3
FRSC 530	Law and Forensic Science	3
FRSC 620	Face and Biometric Pattern Analysis	3
FRSC 630	Fingerprint Identification	3
FRSC 640	Legal, Privacy and Ethical Issues in Identity Analysis	3
FRSC 650	Identity Analysis Applications	3
AIT 678	National Security Challenges	3
Research Project or	Non-Research Project	5
Research Project	Option	

Code Title Credits

The Research Project Option is designed for students planning to pursue a doctoral degree or a career involving research in the field of forensic science or other related disciplines. The research project is based on laboratory research that must be preapproved by the advisory committee, which is appointed during the first semester of registration in <u>FRSC 610</u> (1 credit) Forensic Research Project. Students are responsible for selecting research advisors who can commit as an advisor during the semesters that the student indicates that they will be conducting their research and enrolled in <u>FRSC 610</u>. Students must then complete their written research project and present their research during an oral defense during the semester of registration in <u>FRSC 610</u> (3 credit) Forensic Research Project.

FRSC 600 Forensics Seminar

FRSC 610 Forensic Research Project

Non-Research Project Option

Students selecting this option are not required to complete a laboratory-based research project. Instead, they must successfully pass <u>FRSC 699</u> (0 credits) Forensic Comprehensive Examination to demonstrate thorough comprehension of the curriculum and must select 5 credits of additional elective coursework.

FRSC 699 Comprehensive Examination Select 5 credits of additional FRSC elective courses

Electives

Select 6 credits from th	e following courses:	6
Select 4 credits from th	e following courses:	4
FRSC 511	Advanced Crime Scene Analysis	
FRSC 512	Physical Evidence Laboratory	
FRSC 513	Forensic Photography	
FRSC 515	Selected Topics in Forensic Science	
FRSC 516	Forensic Drone Photography	
FRSC 517	Questioned Document Examination	
FRSC 518	Analytical Thinking Violent Crime Profiling	
FRSC 520	Toxicology	
FRSC 550	Issues in Forensic Anthropology	
FRSC 570	Trace and Physical Evidence Concepts	
FRSC 580	Facial Reconstruction	
FRSC 590	Medicolegal Death Investigation and Pathology	
FRSC 600	Forensics Seminar	
FRSC 690	Capstone - Moot Court Expert Testimony	
FRSC 790	Internship in Forensic Science (Credits: 1-6)	
Total Credits		36

Retroactive
Requirements
Updates:

Plan of Study:

Additional Program Information

This information is required by the Office of Accreditation and Program Integrity.

Courses offered via distance (if applicable):

What is the

Face-to-Face Only

primary delivery format for the program?

Does any portion of this program occur off-campus?

Yes

Off-campus details:

The following courses are taught off site:

- 1. FRSC 520, 3 credits
- 2. FRSC 540, 3 credits
- 3. FRSC 541, 1 credit
- 4. FRSC 560, 3 credits
- 5. FRSC 561, 1 credit
- 6. FRSC 590, 3 credits

Are you working with a vendor / other collaborators to offer your program?

Yes

Please explain:

The off site courses are taught at the Virginia Department of Forensic Science Laboratory.

Related

Departments

Could this program prepare students for any type of professional licensure, in Virginia or elsewhere?

No

Are you adding or removing a licensure component?

No

Additional SCHEV & SACSCOC Information

Are you changing the total number of credits required for this program? Are you changing the delivery format in any way (e.g adding an online option)? Are you adding/removing a licensure option which was approved by SCHEV? Will any portion of this program be offered at an off-campus location? Are you adding significant new content areas to the program? Will this program change affect any specialized accreditation? **Green Leaf Program Designation** Is this a Green Leaf No program? Does this program cover material which crosses into another department? No Additional MSForensics.pdf **Attachments SCHEV Proposal Executive** Summary Reviewer Comments **Additional** Comments Is this course required of all students in this degree program?

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Key: 193