

Program Change Request

Date Submitted: 03/21/23 10:14 am

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

Last approved: 05/17/22 9:20 am

Last edit: 03/22/23 11:16 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. Assoc Provost-Graduate
5. Registrar-Programs

Approval Path

1. 03/23/23 1:44 pm
Kimberly Rule
(kcarisi): Approved for FRSC Chair

History

1. Nov 8, 2017 by clmig-jwehrheim
2. Jan 29, 2018 by rzachari
3. Jan 30, 2018 by rzachari
4. Mar 6, 2018 by rzachari
5. Mar 7, 2018 by pchampan
6. Dec 7, 2018 by Jennifer Bazaz Gettys (jbazaz)
7. Dec 5, 2019 by Jennifer Bazaz Gettys (jbazaz)
8. Feb 23, 2021 by jriemen
9. Feb 3, 2022 by Jennifer Bazaz

Gettys (jbazaz)
10. May 17, 2022 by
Tory Sarro (vsarro)

Name	Extension	Email
Kimberly Rule	5338	kcarisi

Effective Catalog: 2023-2024
Program Level: Graduate
Program Type: Master's
Degree Type: Master of Science
Title: Forensic Science, MS
Banner Title: Forensic Science, MS

Is this a retitling of Registrar/OAPI Use Only – SCHEV Status Approved

Registrar's Office Use Only – Program Start Term

Registrar/OAPI Use Only – SCHEV Letter

Registrar/OAPI Use Only – SACSCOC Status

Concentration(s):

	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 /
Academic Unit:** Forensic Science Program

**Jointly Owned
Program?** No

Justification

What: 1. Remove requiring two copies of transcripts.
2. Remove Domicile Form.
3. Modify wording for goals statement and International Student applicants.

Why: 1. Two copies of transcripts are no longer needed.
2. The Domicile Form is already part of the application.
3. Update the goals statement and International Student requirements for better clarity.

**Total Credits
Required:** Total credits: 36

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.
- **A current resume.**
- **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. aspirations, and proposed area of interest for your final research project. Forensic Biology and Forensic Chemistry concentration applicants must also include their proposed area of interest for their final research project.**
- **A copy Two copies** of official transcripts from each institution of higher education attended.

In addition to the general admission requirements, international students and students having earned international degrees should also refer to [Admission of International Students](#) and [International Application](#)

Procedures for additional requirements. Non-native English-speaking applicants are required to meet the university's English Language Proficiency Requirements.

~~A Virginia Domicile Classification Form. TOEFL scores are required of all international applicants who do not hold at least a bachelor's degree from an institution of higher education accredited by a Mason-recognized U.S. institutional accrediting agency or international equivalent. 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:~~

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 [Forensics Graduate Certificate](#) 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 [Virginia Department of Forensic Sciences](#) background check is required prior to gaining access to [FRSC 540](#) Advanced Forensic Chemistry, [FRSC 541](#) Forensic Chemistry Laboratory, [FRSC 560](#) Advanced Forensic DNA Sciences, and [FRSC 561](#) Forensic DNA Laboratory.

Course Notes

[FRSC 560](#) Advanced Forensic DNA Sciences 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 [FRSC 560](#) Advanced Forensic DNA Sciences and [FRSC 561](#) 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 [Admissions & Policies](#) 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.

Core Courses

15

FRSC 500	Introduction to Forensic Science
FRSC 510	Basic Crime Analysis
FRSC 511	Advanced Crime Scene Analysis
FRSC 530	Law and Forensic Science
FRSC 570	Trace and Physical Evidence Concepts

Research Project or Non-Research Project

8-9

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 [FRSC 610](#) (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 [FRSC 610](#). Students must then complete their written research project and present their research during an oral defense during the semester of registration in [FRSC 610](#) (4 credit) Forensic Research Project.

FRSC 600	Forensics Seminar
FRSC 601	Quantitative Methods for Forensic Scientists
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 [FRSC 699](#) (0 credits) Forensic Comprehensive Examination to demonstrate thorough comprehension of the curriculum and must select 8-9 credits of additional elective coursework.

[FRSC 699](#) Comprehensive Examination

Select 8-9 credits of additional FRSC elective courses

Electives

12-

13

Select 12-13 credits from the following courses to reach a total of 36 credits:

FRSC 512	Physical Evidence Laboratory
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 525	Molecular Biology
FRSC 526	Molecular Biology Laboratory
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 670	Forensic Genomics
FRSC 690	Capstone - Moot Court Expert Testimony
FRSC 790	Internship in Forensic Science (Credits: 1-6)

Total 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 [FRSC 560](#) Advanced Forensic DNA Sciences and [FRSC 561](#) 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.

Core Courses

30

FRSC 500	Introduction to Forensic Science
FRSC 510	Basic Crime Analysis
FRSC 512	Physical Evidence Laboratory

or FRSC 630	Fingerprint Identification
FRSC 514	Survey of Forensic Chemistry, Biology, and DNA Analysis
FRSC 530	Law and Forensic Science
FRSC 560	Advanced Forensic DNA Sciences
& FRSC 561	and Forensic DNA Laboratory
FRSC 570	Trace and Physical Evidence Concepts
FRSC 600	Forensics Seminar
FRSC 601	Quantitative Methods for Forensic Scientists
FRSC 610	Forensic Research Project

Electives

6

Select 6 credits from the following courses:

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 525	Molecular Biology
FRSC 526	Molecular Biology Laboratory
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 670	Forensic Genomics
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 [FRSC 540](#) Advanced Forensic Chemistry and [FRSC 541](#) Forensic Chemistry Laboratory.

Core Courses

33

FRSC 500	Introduction to Forensic Science
FRSC 510	Basic Crime Analysis

FRSC 512	Physical Evidence Laboratory
or FRSC 630	Fingerprint Identification
FRSC 514	Survey of Forensic Chemistry, Biology, and DNA Analysis
FRSC 520	Toxicology
FRSC 530	Law and Forensic Science
FRSC 540	Advanced Forensic Chemistry
& FRSC 541	and Forensic Chemistry Laboratory
FRSC 570	Trace and Physical Evidence Concepts
FRSC 600	Forensics Seminar
FRSC 601	Quantitative Methods for Forensic Scientists
FRSC 610	Forensic Research Project

Electives

3

Select 3 credits from the following courses:

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 525	Molecular Biology
FRSC 526	Molecular Biology Laboratory
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 670	Forensic Genomics
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.

Core Courses

24

FRSC 500	Introduction to Forensic Science
FRSC 510	Basic Crime Analysis
FRSC 514	Survey of Forensic Chemistry, Biology, and DNA Analysis

FRSC 530	Law and Forensic Science
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

Research Project or Non-Research Project

8-

9

Research Project Option

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FRSC 600	Forensics Seminar
FRSC 601	Quantitative Methods for Forensic Scientists
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 [FRSC 699](#) (0 credits) Forensic Comprehensive Examination to demonstrate thorough comprehension of the curriculum and must select 8-9 credits of additional elective coursework.

FRSC 699	Comprehensive Examination
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Select 8-9 credits of additional FRSC elective courses

Electives

3-

4

Select 3-4 credits from the following courses to reach a total of 36 credits:

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 525	Molecular Biology
FRSC 526	Molecular Biology Laboratory
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 670	Forensic Genomics
FRSC 690	Capstone - Moot Court Expert Testimony
FRSC 790	Internship in Forensic Science (Credits: 1-6)
AIT 678	National Security Challenges

Total Credits

36

Retroactive Requirements

Updates:

We are also requesting a Retroactive Requirement Update for catalog year 2020-2021 and 2021-2022 with changes denoted in green in the attached so that the University Catalog will correctly require only 36 credits for the CSI and Forensic Biometric Identity Analysis Concentrations when a student selects the Comprehensive Exam option.

We've also added elective courses to all concentrations that are being approved in the program modification above.

Additional Details:

- Research Project or Thesis section 5-6 credits and the Electives section 15-16 (Crime Scene Investigation and Forensic Biometric Identity Analysis concentrations only).
- Also, adding FRSC 525, 526, and 670 into the electives list for all 4 concentrations as retro for the same catalog years.
- For catalogs 2020-2021 and 2021-2022

Plan of Study:

Program Outcomes

Additional Program Information

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

Courses offered via distance (if applicable):

What is the primary delivery format for the program?
Face-to-Face Only

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

Is this change a simple retitling of an existing program, with no other changes, to any existing program content, curriculum requirements, etc?

No

Does this change represent a repackaging of content in an existing approved degree/certificate program at the same instructional level (i.e., baccalaureate, master's, or doctoral)?

No

Percentage of total credits containing new course content. ("New course content" is defined by SACSCOC as content that is not currently included in an existing approved degree/certificate program at the same instructional level. Do not exclude gen ed credits in calculations for undergraduate programs.)

0%-24%

Does this change include the addition of a distance education or face-to-face method of delivery for this program?

No

Does this change include the addition of a course/credit-based competency-based education delivery option?

No

Will any additional equipment/facilities be needed?

No

Will any additional faculty be required?

No

Will any additional financial resources be needed?

No

Additional library/learning resources needed?

No

OAPI Use Only – Determination of SACSCOC Impact

Comments or Notes

Green Leaf Program Designation

Is this a Green Leaf program? No

List sustainability-
Sustainability-related needs:
List sustainability-

Does this program cover material which crosses into another department?

No

Additional Attachments

[Retroactive PAF- Master of Science Forensic Science 8-11-2021.pdf](#)

SCHEV Proposal

Executive Summary

Reviewer Comments

Additional Comments

Is this course required of all students in this degree program?

%wi_required.eshtml%

Attached

Key: 193