Program Change Request

Date Submitted: 10/10/18 11:09 am

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

Last approved: 03/07/18 9:59 pm

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Changes proposed by: jbazaz

Catalog Pages Using this Program

Forensic Science, MS

In Workflow

1. **SC Curriculum Committee**
2. SC Associate Dean
3. SC CAT Editor
4. Assoc Provost-Graduate
5. Registrar-Programs

History

1. Nov 8, 2017 by clmig-jwehrheim
2. Jan 29, 2018 by Rebekah Zacharias (rzachari)
3. Jan 30, 2018 by Rebekah Zacharias (rzachari)
4. Mar 6, 2018 by Rebekah Zacharias (rzachari)
5. Mar 7, 2018 by Priyanka Champaneri (pchampan)

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

Yes

Requestor:

Name	Extension	Email
Emily Rancourt	35234	erancour@gmu.edu

Effective Catalog: 2019-2020

Program Level: Graduate

Program Type: Master's

Degree Type: Master of Science

Title:

	Forensic Science, MS
Registrar/OAPI Use Only – SCHEV Status	Approved
Registrar's Office Use Only – Program Start Term	
Registrar/OAPI Use Only – SCHEV Letter	

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

INTO Major(s):

Registrar/IRR Use Only – Concentration CIP Code	
College/School:	College of Science
Department / Academic Unit:	Forensic Science Program
Jointly Owned Program?	No

Justification

Our goal with these changes is to make our "Application Requirements" more specific so that students can find all of the details in the catalog. We also wanted to include some clarification to the "Degree Requirements" (and remove the wording from the Concentration in Crime Scene Investigation that was improperly added). In order to minimize the number of substitution/waiver forms that need to be processed by the registrar, we are increasing the students' elective options in all four concentrations.

It has also recently come to our attention that some students do not have the pre-requisite knowledge needed to successfully become a DNA Analyst. Therefore, we have added an addendum to the "Degree Requirements" for the Concentration in Forensic Biology Analysis to

inform students what courses they should have taken at the undergraduate level in order to be competitive in the field.

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.**
- **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** ~~Applicants should submit a completed George Mason University Admissions Application , three letters of recommendation, two~~ copies of official transcripts from each institution of higher **education attended.** ~~learning attended, a current resume, a Virginia Domicile Classification form, and an official report of TOEFL scores (foreign nationals only).~~
- **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 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** ~~to FRSC 541 Forensic Chemistry Laboratory and~~ FRSC 561 Forensic DNA Laboratory.

Course Notes

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

~~Course Notes FRSC 560 Advanced Forensic DNA Sciences~~

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 560 Advanced Forensic DNA Sciences.~~

FRSC 540 Advanced Forensic Chemistry and FRSC 541 Forensic Chemistry Laboratory

~~FRSC 540 Advanced Forensic Chemistry~~

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.

Course List

Code	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
FRSC 600	Forensics Seminar	1
FRSC 610	Forensic Research Project	4
Electives		
Select 16 credits from the following courses:		16
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	

Code	Title	Credits
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

~~**The successful passing of a Virginia Department of Forensic Sciences background check is required prior to gaining access to FRSC 541 Forensic Chemistry Laboratory and FRSC 561 Forensic DNA Laboratory.**~~ **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.** ~~to 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.**

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 FRSC 630	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
& FRSC 561	and Forensic DNA Laboratory	
FRSC 570	Trace and Physical Evidence Concepts	3
FRSC 600	Forensics Seminar	1
FRSC 610	Forensic Research Project	4
Electives		

Code	Title	Credits
Select 9 credits from 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 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)	
~~BIOL 574~~	~~Population Genetics~~	
~~CHEM 563~~	~~General Biochemistry I~~	
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 .** ~~to FRSC 541 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 FRSC 630	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
& FRSC 541	and Forensic Chemistry Laboratory	

Code	Title	Credits
FRSC 570	Trace and Physical Evidence Concepts	3
FRSC 600	Forensics Seminar	1
FRSC 610	Forensic Research Project	4
Electives		
Select 6 credits from 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 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)	
~~CHEM 563~~	~~General Biochemistry I~~	
~~CHEM 564~~	~~General Biochemistry II~~	
~~CHEM 624~~	~~Principles of Chemical Separation~~	
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 600	Forensics Seminar	1
FRSC 610	Forensic Research Project	4
FRSC 620	Face and Biometric Pattern Analysis	3
FRSC 630	Fingerprint Identification	3

Code	Title	Credits
FRSC 640	Legal, Privacy and Ethical Issues in Identity Analysis	3
FRSC 650	Identity Analysis Applications	1
AIT 678	National Security Challenges	3
Electives		
Select 6 credits from 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 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 690	Capstone - Moot Court Expert Testimony	
FRSC 790	Internship in Forensic Science (Credits: 1-6)	
Total Credits		36

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 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

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 program? No

Does this program cover material which crosses into another department?

No

Additional Attachments MSForensics.pdf

SCHEV Proposal

Executive Summary

Reviewer Comments

Additional Comments

FRSC 516 Forensic Drone Photography was added as an elective to all four M.S. concentrations.

Key: 193