Science for Forensics, A.S.

HEGIS: 5619.00

PROGRAM CODE: 34472

PROGRAM DIRECTOR: Dr. John Mikalopas

DEPARTMENT: PHYSICAL SCIENCES

The Science for Forensics AS degree is a jointly registered dual enrollment degree program with John Jay College of Criminal Justice and prepares students for transfer to their baccalaureate program. Scientific foundation and technical training are provided through courses in chemistry, physics, biology and mathematics, that focus on understanding fundamental laws, theories, and ideas, their application toward data analysis, and support of quantitative reasoning, scientific writing, and research.

The curriculum presented here applies to students who started the major in Fall 2025 or Spring 2026. If you enrolled as a matriculant prior to that, please see the *College Catalog* for the year you started the major as a matriculant for the curriculum requirements that apply to you.

Consultation with the Program Advisor is required.

Degree Maps:

<u>Degree Map for Science for Forensics, A.S. - MAT 9010 or MAT 980 or MAT 900 Placement</u> <u>Degree Map for Science for Forensics, A.S. - MAT 1500 Placement - Calculus I</u>

Your Degree Map contains the suggested term-by-term course sequence for your academic path towards graduation.

To ensure successful and timely completion of your degree, it is recommended that you meet with your academic advisor to discuss your unique map.

Please note some courses may only be offered once an academic year.

Program Learning Outcomes:

Upon successful completion of the Science of Forensics degree program requirements, graduates will:

- 1. be able to understand the fundamental laws, theories, and ideas of Physics (and related Mathematics and Physical Sciences)
- 2. be able to evaluate and express empirical evidence supporting the fundamental laws, theories, and ideas of Physics (and related Mathematics and Physical Sciences)
- 3. be able to apply the fundamental laws, theories, and ideas of Physics (and related Mathematics and Physical Sciences) to analyze problems or questions
- 4. be able use the tools and methods of Physics (and related Mathematics and Physical Sciences) to gather, analyze, and interpret data

- 5. be able to express themselves effectively in written exams and laboratory reports using the terminology, notations, and symbols of Physics (and related Mathematics and Physical Sciences)
- 6. be able to understand the basic principles of Physics (and related Mathematics and Physical Sciences) underlying technological developments, scientific discovery, and matters of public policy and concern

College Requirements:

English and Math proficient as determined by the CUNY Proficiency Index, unless otherwise exempt, or successful completion of any required developmental course(s).

Civic Engagement Experiences:

One (1) Civic Engagement experience satisfied by Civic Engagement Certified or Civic Engagement Component course or approved outside activity.

Writing Intensive Requirement:

One (1) Writing Intensive Course in any discipline is required.

Required Core (4 Courses, 13 Credits):

When Required Core Courses are specified for a category, they are required for the major

- ENG 1200 Composition I 3 Credit(s)
- ENG 2400 Composition II 3 Credit(s)
- Mathematical & Quantitative Reasoning Course *
 - MAT 9010 Introduction to Mathematics with College Algebra 3 Credit(s) or
 - MAT 9B0 College Algebra for STEM Majors 3 Credit(s) or
 - MAT 900 College Algebra 3 Credit(s) or
 - MAT 1400 Analytic Geometry and Pre-Calculus Mathematics 3 Credit(s) or
 - MAT 1500 Calculus I 3 Credit(s)
- Life & Physical Sciences Course *
 - BIO 1300 General Biology I 4 Credit(s)

Flexible Core (6 Courses, 20 Credits):

When Flexible Core Courses are specified for a category, they are required for the major

One course from each Group A to D (Group E is satisfied by the courses shown). **No more than two courses can be selected from the same discipline**

A. World Cultures and Global Issues Designated Course

- B. U.S. Experience in its Diversity Designated Course
- C. Creative Expression Designated Course
- D. Individual and Society Designated Course
- E. Scientific World Designated Course*
 - BIO 1400 General Biology II 4 Credit(s)
 - CHM 1100 General Chemistry I 4 Credit(s)

Major Requirements (6 Courses, 25 Credits):

A cumulative grade point average of 2.50 or above, which includes BIO 1300, BIO 1400, and CHM 1100 as well as the following Physical Science courses, is required:

Additional Physical Sciences Requirements (5 Courses, 22 Credits)

- CHM 1200 General Chemistry II 4 Credit(s)
- CHM 3100 Organic Chemistry I 5 Credit(s)
- CHM 3200 Organic Chemistry II 5 Credit(s)
- PHY 1300 Advanced General Physics I 4 Credit(s)
- PHY 1400 Advanced General Physics II 4 Credit(s)

Additional Mathematics Requirement (1 Course, 3 Credits)

Select **one (1)** additional course beyond the Mathematical and Quantitative Reasoning (MQR) course from the following:

- MAT 1000 College Trigonometry 3 Credit(s) ^
- MAT 1400 Analytic Geometry and Pre-Calculus Mathematics 3 Credit(s) (Recommended)
- MAT 1500 Calculus I 3 Credit(s) (Recommended)
- MAT 1600 Calculus II 3 Credit(s) (Recommended)

Electives:

2 credits sufficient to meet required total of 60 credits

Completion of MAT 1600 Calculus II is HIGHLY recommended

Notes:

- ^ Depending on Math placement, students may be required to select MAT 1000
- * This program has a waiver to require particular courses in the Common Core, otherwise more than the minimum credits for the degree may be necessary.

Total Credits: 60