

# **Degree Pathway**

### A.S. in Forensics leading to a B.S. in Forensic Science at the John Jay College of Criminal Justice

(Dual/Joint Degree Program) - Catalog Year 2021-22

The number of credits you take each year will determine when you graduate. To graduate on time, you are strongly encouraged to enroll in at least 30 credits toward your degree during the calendar year, including fall and spring semesters and winter and summer sessions This Degree Pathway is designed for students who place into **Developmental Mathematics**. Additional Degree Pathways are available for students who place into other levels of mathematics. Please see the degree website or your advisor for more information.

Courses in Bold Text are prerequisites for later courses or only offered in the Fall or Spring semester and should be taken where indicated in the sequence.

### Fall Semester #1 – Queensborough Community College

| Courses   | Credits    | Prerequisites and Corequisites <sup>1</sup>                        |
|---|------------|--|
| ENGL-101 English Composition I (ALP section)                              | 2          | Pre/corequisite: Must satisfy developmental requirement in English |
| (Required Core 1A - English Composition)                                  | 3          | or be co-enrolled in BE-102  |
| ENGL-99 Developing Competence in College Reading, Writing, & Study Skills | 0 (4 eq.)  | Corequisite: ENGL-101  |
| MA-119 College Algebra  | 2          | Pre/corequisite: Must satisfy developmental requirement in math or |
| (Required Core 1B: Mathematical and Quantitative Reasoning)               | 3          | be co-enrolled in MA-10 ALP  |
| MA-10 ALP Elementary Algebra  | 0 (2 eq.)  | Corequisite: MA-119  |
| MA-121 Trigonometry <sup>2</sup>  | 1          | Corequisite: MA-119  |
| One course from Flexible Core 2A, 2B, 2C, or 2D <sup>3</sup>              | 3          | Check individual courses for prerequisites and corequisites        |
| Total credits for the term  | 10 + 6 eq. |  |

### Spring Semester #1 – Queensborough Community College

| Courses   | Credits | Prerequisites and Corequisites <sup>1</sup>                  |
|---|---------|--|
| ENGL-102 English Composition II (Required Core 1A - English Composition)              | 3       | Prerequisite: ENGL-101 or placement                          |
| MA-440 Pre-Calculus Mathematics <sup>2</sup>  | 4       | Prerequisites: MA-119 and MA-121 (C or better)               |
| CH-151 General Chemistry I <sup>2</sup> (Required Core 1C – Life & Physical Sciences) | 4.5     | Prerequisite: MA-119 and MA-121 or placement                 |
| <b>BI-201 General Biology I</b> <sup>2</sup> (Flexible Core 2E – Scientific World)    | 4       | Prerequisite: Complete developmental requirements in English |
| Total credits for the term  | 15.5    |  |



## Summer Session #1 – Queensborough Community College

| Courses  | Credits | Prerequisites and Corequisites <sup>1</sup> |
|--|---------|---|
| CH-152 General Chemistry II <sup>2</sup> (Additional Flexible Core Course) | 4.5     | Prerequisite: CH-151                        |
| BI-202 General Biology II  | 4       | Prerequisite: BI-201                        |
| Total credits for the session  | 8.5     |   |

### Fall Semester #2 – Queensborough Community College

| Courses   | Credits | Prerequisites and Corequisites <sup>1</sup>          |
|---|---------|--|
| MA-441 Analytic Geometry and Calculus I <sup>2</sup> (Required Core 1B - Mathematical & Quantitative Reasoning) | 4       | Prerequisite: MA-440 (C or better)                   |
| CH-251 Organic Chemistry I  | 5       | Corequisite: CH-152, by permission of the department |
| PH-421 General Calculus Physics A   | 5       | Corequisite: MA-441                                  |
| Total credits for the term  | 14      |  |

## Spring Semester #2 – Queensborough Community College

| Courses  | Credits | Prerequisites and Corequisites <sup>1</sup>                 |
|--|---------|---|
| MA-442 Analytic Geometry and Calculus II                     | 4       | Prerequisite: MA-441 (C or better)                          |
| CH-252 Organic Chemistry II                                  | 5       | Prerequisite: CH-251  |
| PH-422 General Calculus Physics B                            | 5       | Prerequisite: PH-421 (C or better); Corequisite: MA-442     |
| One course from Flexible Core 2A, 2B, 2C, or 2D <sup>3</sup> | 3       | Check individual courses for prerequisites and corequisites |
| Total credits for the term                                   | 17      |   |

### Summer Session #2 – Queensborough Community College and John Jay College<sup>4</sup>

| Courses   | Credits | Prerequisites and Corequisites <sup>1</sup>                    |
|---|---------|--|
| One course from Flexible Core 2A, 2B, 2C, or 2D <sup>3</sup> (at QCC) | 3       | Check individual courses for prerequisites and corequisites    |
| CHE 220 Quantitative Analysis <sup>4</sup> (at JJCCJ)                 | 4       | Prerequisite: ENG 101 and CHE 104 (completed at QCC as CH-152) |
| Total credits for the session   | 7       |  |
| Total credits required for the A.S. degree                            | 68      |  |



#### Notes:

- 1. Prerequisites for a course must be passed before taking the course. Corequisites must be passed before taking the course or taken in the same term as the course.
- 2. Students are required to take particular courses in some areas of the Common Core that fulfill both general education and major requirements. If students do not take the required courses in the Common Core, they will have to take additional credits to complete their degree requirements.
- 3. Students must complete courses from three out of four Flexible Core categories 2A, 2B, 2C, and 2D. Whichever Flexible Core category is not fulfilled at QCC will be completed after transfer to John Jay. Students must take BI-201 for Category 2E and CH-151 for the One Additional Flexible Core Course.
- 4. Students must take CHE 220 Quantitative Analysis at John Jay College before beginning Fall semester of their Junior Year to be on track to complete the A.S./B.S. degree in four years. CHE 220 may be taken at John Jay as a summer course or by e-permit while at QCC.

All students must complete two (2) WI designated classes to fulfill degree requirements.

### The following courses must be completed after transfer to John Jay College to earn the B.S. in Forensic Science

### Fall Semester #3 – John Jay College

| Courses  | Credits | Prerequisites <sup>1</sup> and Corequisites                     |
|--|---------|---|
| CHE 302 Physical Chemistry 2   | 3       | Prerequisites: ENG 201, CHE 104, PHY 203, PHY 204, and MAT 241  |
|  |         | Prerequisites: ENG 201, CHE 104, CHE 201, CHE 202, CHE 220, PHY |
| CHE 320 Instrumental Analysis 1  |         | 204, MAT 242  |
|  |         | Corequisite: CHE 302  |
| MAT 301 Probability & Mathematical Statistics 1                                | 3       | Prerequisites: MAT 241 and ENG 201                              |
| One College Option General Education Course from the "Struggle for Justice &   | 3       | 3 Check individual courses for prerequisites and corequisites   |
| Equality in the U.S." category or the "Justice in Global Perspective" category |         |   |
| LAW 202 Law and Evidence   | 3       | ENG 101 and sophomore standing or above                         |
| Total credits for the term   | 16      |   |



### Spring Semester #3 – John Jay College

| Courses   | Credits | Prerequisites <sup>1</sup> and Corequisites                         |
|---|---------|---|
| CHE 315 Biochemistry  | 4       | Prerequisites: ENG 201, BIO 104, CHE 202, PHY 204 OR PHY 102, and   |
| CHE 313 Biochemistry  | 4       | MAT 241   |
|   |         | Prerequisites: ENG 201, CHE 104, CHE 201, CHE 202, CHE 220, PHY     |
| CHE 321 Instrumental Analysis 2   |         | 204, and MAT 242  |
|   |         | Corequisite: CHE 302  |
| FOC 242 As later dusting to Calculation for Fournesis Calculations (C)  | 3       | Prerequisites for FOS 313: ENG 201, CHE 201, CHE 202                |
| FOS 313 An Introduction to Criminalistics for Forensic Science Majors (C) or TOX 313 Toxicology of Environmental and Industrial Agents (T) or |         | Prerequisites for TOX 313: ENG 201, CHE 201, CHE 202                |
| BIO 315 Genetics (M) <sup>2</sup>   |         | Prerequisites for BIO 315: ENG 201, BIO 103 (or BIO 101 & BIO 102), |
|   |         | BIO 104, MAT 301 or STA 250, or permission of the instructor        |
| Free Elective   | 3       | Check individual courses for prerequisites and corequisites         |
| Total credits for the term  | 14      |   |

### Fall Semester #4 – John Jay College

| Courses   | Credits | Prerequisites <sup>1</sup> and Corequisites   |
|---|---------|---|
| FOS 401 Forensic Science Laboratory Internship OR FOS 402 Undergraduate Research Internship                                   | 3       | ENG 201, senior standing, and majoring in Forensic Science  |
| FOS 415 Forensic Science Laboratory I (C) or TOX 415 Forensic Pharmacology (T), or BIO 412 Molecular Biology (M) <sup>2</sup> | 4       | Prerequisites for FOS 415: ENG 201, CHE 104, CHE 201, CHE 202, CHE 315, CHE 320, CHE 321, PHY 203, PHY 204, and FOS 313 Prerequisites for TOX 415: ENG 201, CHE 315, CHE 320, CHE 321, and TOX 313 Prerequisites for BIO 412: ENG 201, BIO 315, CHE 315 |
| Free Elective   | 3       | Check individual courses for prerequisites and corequisites   |
| Free Elective   | 3       | Check individual courses for prerequisites and corequisites   |
| Total credits for the term  | 13      |   |



### Spring Semester #4 – John Jay College

| Courses   | Credits | Prerequisites <sup>1</sup> and Corequisites                        |
|---|---------|--|
|   |         | Prerequisites for FOS 416: ENG 201, CHE 104, CHE 201, CHE 202, CHE |
| FOS 416 Forensic Science Laboratory II (C) or                           |         | 315, CHE 320, CHE 321, PHY 203, PHY 204, and FOS 313               |
| TOX 416 Analytical Toxicology (T) or                                    | 4       | Prerequisites for TOX 416: ENG 201, CHE 315, CHE 320, CHE 321, and |
| BIO 413 Forensic DNA Analysis and Interpretation (M) <sup>2</sup>       |         | TOX 415  |
|   |         | Prerequisites for BIO 413: BIO 412, ENG 201                        |
| One College Option General Education Course from the "Learning from the | 2       | Check individual courses for prerequisites and corequisites        |
| Past" category  | 3       | Check individual courses for prefequisites and corequisites        |
| Free Elective   | 3       | Check individual courses for prerequisites and corequisites        |
| Free Elective   | 3       | Check individual courses for prerequisites and corequisites        |
| Total credits for the term  | 13      |  |
| Total credits required for the B.S. degree                              | 60³     |  |

### Notes:

- 1. Many of the prerequisites for courses required to be taken at John Jay were taken at QCC.
- 2. Students choose one of three tracks: Criminalistics (C), Toxicology (T), or Molecular Biology (M).
- 3. Includes CHE 220 taken during Summer Session #2