

# Application for Undergraduate Forensic Science Accreditation

| University/College: |  |  |  |
|---------------------|--|--|--|
| City, State:        |  |  |  |
| -                   |  |  |  |

| Institution Type: | Private: | Public: |
|-------------------|----------|---------|
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Part 1: Forensic Science Program Information:

| Program Name:                    |                                   |
|----------------------------------|-----------------------------------|
| Bachelor's Degree (degree type): | Forensic Science                  |
|                                  | Digital Forensics                 |
|                                  | Computer Science                  |
|                                  | Computer / Electrical Engineering |
|                                  | Information Systems               |
|                                  | Information Technology            |
|                                  | a Natural Science                 |
|                                  | Crime Scene Investigation         |

| Concentration/Track/Emphasis (if applicable): | Forensic Science          |
|---|---------------------------|
|   | Digital Forensics         |
|   | Criminalistics            |
|   | Biology                   |
|   | 🗆 Chemistry               |
|   | Digital Evidence          |
|   | Crime Scene Investigation |
|   |                           |

Please specify the Department, School, College, and/or Division that offers the program:

| Date Program Establ   | ished:      |  |  |
|-----------------------|-------------|--|--|
| Date of First Gradua  | te:         |  |  |
| Number of Enrolled    | Students:   |  |  |
| Number of Graduate    | es to Date: |  |  |
|                       |             |  |  |
| Program Director Info | ormation    |  |  |
| Program Director:     |             |  |  |
| Title:                |             |  |  |
| Mailing Address:      |             |  |  |
|                       |             |  |  |
|                       |             |  |  |
|                       |             |  |  |
| Telephone:            |             |  |  |
| E-mail:               |             |  |  |
| Program Web site:     |             |  |  |

### Part 2: Director and Faculty

List the names, degrees (level and discipline), and titles of the Program Director and all faculty who teach forensic science courses in the program. Do not list faculty who teach general education courses required by the institution or program. For each person listed, attach a curriculum vita (CV).

| Name       | Degree                   | Title             | Full/Part Time |
|------------|--------------------------|-------------------|----------------|
| John Smith | Degree<br>PhD, Chemistry | Director, Faculty | Full Time      |
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### Part 3: FEPAC Undergraduate Curriculum Worksheet

### 4.1 CURRICULUM

### 4.2 Forensic Science Professional Practice Topics

The following topics must be covered in the curriculum. Indicate course designation in the left column, and mark the topics covered in the pertinent courses.

| Course | Semester<br>Credit<br>Hours | Courtroom<br>Testimony | Introduction<br>to Law | Quality<br>Assurance | Ethics | Evidence,<br>Identification,<br>Collection,<br>Processing | Report<br>Writing &<br>Case Review | Cognitive<br>Bias &<br>Human<br>Factors |
|--------|-----------------------------|------------------------|------------------------|----------------------|--------|---|------------------------------------|---|
|        |                             |                        |                        |                      |        |   |                                    |   |
|        |                             |                        |                        |                      |        |   |                                    |   |
|        |                             |                        |                        |                      |        |   |                                    |   |
|        |                             |                        |                        |                      |        |   |                                    |   |
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|        |                             |                        |                        |                      |        |   |                                    |   |
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|        |                             |                        |                        |                      |        |   |                                    |   |
|        |                             |                        |                        |                      |        |   |                                    |   |

### **4.3 Forensic Science Courses**

The following Forensic Courses shall be covered in the curriculum:

**4.3.1a** Forensic Science Survey Coursework – All tracks shall have three semester hours for a survey of forensic science class designed to ensure students are exposed to the full breath of forensic science disciplines in a full-service crime laboratory.

|   | Course ID | Course Name | 3 Semester Hours |
|---|-----------|-------------|------------------|
| 1 |           |             |                  |

**4.3.1b** Forensic Science Coursework – Each track shall have at least six semester hours in forensic science coursework that introduce students to methods, instrumentation, and concepts that are commonly associated with the professional practice of forensic science.

|   | Course ID | Course Name | 6 Semester<br>Hours | Laboratory<br>Required |  |
|---|-----------|-------------|---------------------|------------------------|--|
| 1 |           |             |                     |                        |  |
| 2 |           |             |                     |                        |  |

NOTE: Courses that fulfill this total nine semester hour requirement can be used to cover the topics listed in Standard 4.2.1. However, these same courses may not be used to fulfill any of the 4.5 Specific Emphasis Track Curricular Requirements.

### 4.4 Forensic Science Capstone Experience

**4.4.1** A minimum of three semester hours resulting in a capstone presentation, publication, or similar scholarly product. The requirement can be met in the following ways:

Capstone Course

Internships

Independent Research

|   | Course ID | Course Name | 3 Semester Hours |
|---|-----------|-------------|------------------|
| 1 |           |             |                  |

#### 4.5 SPECIFIC EMPHASIS TRACKS CURRICULAR REQUIREMENTS

Programs with no concentrations or tracks complete 4.6 Criminalistics. Programs with concentration, track, or emphasis in Biology complete 4.7 Programs with concentration, track, or emphasis in Chemistry complete 4.8 Programs with concentration, track, or emphasis in Digital Evidence complete 4.9 Programs in Crime Scene Investigation complete 4.10

#### 4.6 Criminalistics

**4.6.2 a) Biology:** At least two courses, which include the co-requisite laboratory, in biology for science majors (minimum 7 semester hours)

|   |           |             | 7 Semester | Laboratory |
|---|-----------|-------------|------------|------------|
|   | Course ID | Course Name | Hours      | Required   |
| 1 |           |             |            |            |
| 2 |           |             |            |            |

**4.6.2 b) Physics:** At least two courses which include co-requisite laboratory in physics for science majors (minimum 7 semester hours)

|   |           |             | 7 Semester | Laboratory |
|---|-----------|-------------|------------|------------|
|   | Course ID | Course Name | Hours      | Required   |
| 1 |           |             |            |            |
| 2 |           |             |            |            |

**4.6.2 c) Chemistry:** At least four courses which include co-requisite laboratory. Two courses in general chemistry (minimum 7 semester hours) and two courses in organic chemistry (minimum 7 semester hours)

|   |           |             | 14 Semester | Laboratory<br>Required |
|---|-----------|-------------|-------------|------------------------|
|   | Course ID | Course Name | Hours       | Required               |
| 1 |           |             |             |                        |
| 2 |           |             |             |                        |
| 3 |           |             |             |                        |
| 4 |           |             |             |                        |

**4.6.2 d) Mathematics:** One course in differential and integral calculus (minimum 3 semester hours) and one course in statistics (minimum 3 semester hours)

|    |           |             | 6 Semester | Laboratory |
|----|-----------|-------------|------------|------------|
|    | Course ID | Course Name | Hours      | Required   |
| 1  |           |             |            |            |
| 2. |           |             |            |            |

### 4.6.3 Specialized Science Courses

A minimum of 15 additional semester hours in more advanced coursework in chemistry or biology.

Courses shall be consistent with the degree program and meet the needs of students specializing in sub-disciplines of forensic science. Introductory level courses shall not be used to fulfill this requirement. At least two courses shall be semester-long, or equivalent, laboratory courses (minimum 7 semester hours)

|   |           |             | 15 Semester | Laboratory<br>Required |
|---|-----------|-------------|-------------|------------------------|
|   | Course ID | Course Name | Hours       | Required               |
| 1 |           |             |             |                        |
| 2 |           |             |             |                        |
| 3 |           |             |             |                        |
| 4 |           |             |             |                        |
| 5 |           |             |             |                        |

### **4.6.4 Forensic Science Courses**

A minimum of six additional semester hours in advanced, upper-level forensic science courses that provide greater depth in forensic science. Course shall include semester-long, or equivalent, accompanying laboratory component. Courses designed for the forensic science program that predominantly cover forensic-specific topics.

|   | Course ID | Course Name | 6 Semester<br>Hours | Laboratory<br>Required |
|---|-----------|-------------|---------------------|------------------------|
| 1 |           |             |                     |                        |
| 2 |           |             |                     |                        |

### 4.7 Biology

**4.7.2 a) Biology:** At least two courses, which include the co-requisite laboratory, in biology for science majors (minimum 7 semester hours))

|   |           |             | 7 Semester | Laboratory |
|---|-----------|-------------|------------|------------|
|   | Course ID | Course Name | Hours      | Required   |
| 1 |           |             |            |            |
| 2 |           |             |            |            |

**4.7.2 b) Physics:** At least two courses which include co-requisite laboratory in physics for science majors (minimum 7 semester hours)

|   |           |             | 7 Semester | Laboratory |
|---|-----------|-------------|------------|------------|
|   | Course ID | Course Name | Hours      | Required   |
| 1 |           |             |            |            |
| 2 |           |             |            |            |

# **4.7.2 c) Chemistry:** At least four courses which include co-requisite laboratory. Two courses in general chemistry (minimum 7 semester hours) and two courses in organic chemistry (minimum 7 semester hours)

|   | Course ID | Course Name | 14 Semester<br>Hours | Laboratory<br>Required |
|---|-----------|-------------|----------------------|------------------------|
| 1 |           |             |                      |                        |
| 2 |           |             |                      |                        |
| 3 |           |             |                      |                        |
| 4 |           |             |                      |                        |

**4.7.2 d)** Mathematics: At least one course in differential and integral calculus (minimum 3 semester hours) and at least one course in statistics (minimum 3 semester hours)

|   |           |             | 6 Semester | Laboratory |
|---|-----------|-------------|------------|------------|
|   | Course ID | Course Name | Hours      | Required   |
| 1 |           |             |            |            |
| 2 |           |             |            |            |

### 4.7.3 Specialized Science Courses

A minimum of 15 additional house in more advanced coursework in chemistry or biology. These courses shall meet current FBI QAS requirements. Introductory level courses may not be used to fulfill this requirement. At least two classes shall include a semester-long, or equivalent, laboratory component (minimum 7 hours)

|   |           |             | 15 Semester | Laboratory<br>Required |
|---|-----------|-------------|-------------|------------------------|
|   | Course ID | Course Name | Hours       | Required               |
| 1 |           |             |             |                        |
| 2 |           |             |             |                        |
| 3 |           |             |             |                        |
| 4 |           |             |             |                        |
| 5 |           |             |             |                        |

### 4.7.4 Forensic Science Capstone Experience

A minimum of six additional semester hours in advanced, upper-level forensic science courses that provide greater depth in forensic science. Courses shall include a semester-long laboratory component. Courses designed for the forensic science program that predominantly cover forensic-specific topics.

|   |           |             | 6 Semester | Laboratory |
|---|-----------|-------------|------------|------------|
|   | Course ID | Course Name | Hours      | Required   |
| 1 |           |             |            |            |
| 2 |           |             |            |            |

### 4.8 Chemistry

**4.8.2 a) Biology:** At least two courses which include a semester-long, or equivalent, laboratory component for biology forensic science majors. (minimum 7 semester hours)

|   |           |             | 7 Semester | Laboratory |
|---|-----------|-------------|------------|------------|
|   | Course ID | Course Name | Hours      | Required   |
| 1 |           |             |            |            |
| 2 |           |             |            |            |

**4.8.2 b) Physics:** At least two courses which include a semester-long, or equivalent, laboratory in physics for science majors (minimum 7 semester hours)

|   |           |             | 7 Semester | Laboratory |
|---|-----------|-------------|------------|------------|
|   | Course ID | Course Name | Hours      | Required   |
| 1 |           |             |            |            |
| 2 |           |             |            |            |

# **4.8.2 c) Chemistry:** At least four courses which include semester-long, or equivalent, laboratory. Two courses in general chemistry (minimum 7 semester hours) and two courses in organic chemistry (minimum 7 semester hours)

|   | Course ID | Course Name | 14 Semester<br>Hours | Laboratory<br>Required |
|---|-----------|-------------|----------------------|------------------------|
| 1 |           |             |                      | -                      |
| 2 |           |             |                      |                        |
| 3 |           |             |                      |                        |
| 4 |           |             |                      |                        |

**4.8.2 d) Mathematics:** At least one course in differential and integral calculus (minimum 3 semester hours) and at least one course in statistics (minimum 3 semester hours)

|   |           |             | 6 Semester | Laboratory |
|---|-----------|-------------|------------|------------|
|   | Course ID | Course Name | Hours      | Required   |
| 1 |           |             |            |            |
| 2 |           |             |            |            |

### 4.8.3 Specialized Science Courses

A minimum of 15 additional house in more advanced coursework in chemistry or biology. These classes shall be consistent with the degree program and meet the needs of students specializing in chemistry sub-disciplines of forensic science. Introductory level courses may not be used to fulfill this requirement. At least two classes shall include laboratory training (minimum 7 hours)

|   |           |             | 15 Semester | Laboratory<br>Required |
|---|-----------|-------------|-------------|------------------------|
|   | Course ID | Course Name | Hours       | Required               |
| 1 |           |             |             |                        |
| 2 |           |             |             |                        |
| 3 |           |             |             |                        |
| 4 |           |             |             |                        |
| 5 |           |             |             |                        |

### **4.8.4 Forensic Science Courses**

A minimum of six additional semester hours in advanced, upper-level forensic science courses that provide greater depth in forensic science. Courses shall include a semester-long laboratory component. Courses designed for the forensic science program that predominantly cover forensic-specific topics.

|   |           |             | 6 Semester | Laboratory |
|---|-----------|-------------|------------|------------|
|   | Course ID | Course Name | Hours      | Required   |
| 1 |           |             |            |            |
| 2 |           |             |            |            |

### 4.9 Digital Evidence

# **4.9.2 a) Mathematics:** At least two courses that include any combination of the following 3 semester hours courses:

| Busin | less Calculus | Business Statistics | Discrete Mathematics |                  |  |
|-------|---------------|---------------------|----------------------|------------------|--|
| Calcu | llus I        | Statistics I        |                      |                  |  |
| Calcu | llus II       | Statistics II       |                      |                  |  |
|       | Course ID     | Course Name         |                      | 6 Semester Hours |  |
| 1     |               |                     |                      |                  |  |
| 2     |               |                     |                      |                  |  |

**4.9.2 b) Sciences:** at least two courses that include co-requisite laboratory from the following list (minimum 7 semester hours): A Physical Science

### General Chemistry I

General Biology I

|   | Course ID | Course Name | 7 Semester<br>Hours | Laboratory<br>Required |
|---|-----------|-------------|---------------------|------------------------|
| 1 |           |             |                     |                        |
| 2 |           |             |                     |                        |

### 4.9.3 Computer Science/Information Systems Courses

A minimum of 12 semester hours which include the following courses and topics:

**4.9.3 a)** At least one 3-semester hour course in computer programs (examples of acceptable languages include Java, Python, C+, Ruby, etc.).

|   |           |             | 3 Semester | Laboratory |
|---|-----------|-------------|------------|------------|
|   | Course ID | Course Name | Hours      | Required   |
| 1 |           |             |            |            |
| 2 |           |             |            |            |

4.9.3 b) At least 6 semester hours in courses that cover the following topics:

Computer organization and structure

File systems and operating systems

Computer networking

Information assurance/network security

Data structure/database design

Web or mobile application design and development

Hardware structures

|   |           |             | 6 Semester | Laboratory |
|---|-----------|-------------|------------|------------|
|   | Course ID | Course Name | Hours      | Required   |
| 1 |           |             |            |            |
| 2 |           |             |            |            |
| 3 |           |             |            |            |
| 4 |           |             |            |            |

### 4.9.4 Specialized Digital Forensic Science Courses

A minimum of 6 additional semester hours in digital forensic science course work that covers the following topics: Acquisition of data Exploitation of mobile devices

Network / "live" forensic analysis Legal/digital evidence interface (e.g., search warranty)

|   |           |             | 6 Semester | Laboratory |
|---|-----------|-------------|------------|------------|
|   | Course ID | Course Name | Hours      | Required   |
| 1 |           |             |            |            |
| 2 |           |             |            |            |
| 3 |           |             |            |            |
| 4 |           |             |            |            |

### 4.10 Crime Scene Investigation

### 4.10.2 Natural Science Courses

4.10.2 a) Mathematics: At least one 3 semester hours course in statistics.

|   | Course ID | Course Name | 3 Semester<br>Hours | Laboratory<br>Required |
|---|-----------|-------------|---------------------|------------------------|
| 1 |           |             |                     |                        |

**4.10.2 b) Sciences:** At least two courses which include laboratory from the following (minimum 7 semester hours): Physical Science

**General Chemistry** 

General Biology

|   |           |             | 7 Semester | Laboratory |
|---|-----------|-------------|------------|------------|
|   | Course ID | Course Name | Hours      | Required   |
| 1 |           |             |            |            |
| 2 |           |             |            |            |

### 4.10.3 Crime Scene Courses

A minimum of 9 semester hours of coursework shall include the following topics: NOTE: multiple courses may be used for each topic.

|        |             |                 | a)  | b)  | c)  | d)                                   | e)                                      | f)                               | g)                          | h)                 | i)                 | j)                    | k)                         | I)                        | m)   |
|--------|-------------|-----------------|---|---|---|--------------------------------------|---|----------------------------------|-----------------------------|--------------------|--------------------|-----------------------|----------------------------|---------------------------|--|
| Course | Course Name | Credit<br>Hours | Crime scene interface w/ forensic disciplines | Legal /crime scene interface (e.g., search<br>warrants) | History and theory of crime scene investigation | Crime scene investigation literature | Nature and properties of evidence types | Latent prints / Pattern evidence | Bloodstain pattern analysis | Crime Scene Safety | Crime scene search | Crime scene equipment | Crime scene interpretation | Crime scene documentation | Crime scene evidence photography & videography |
|        |             |                 |   |   |   |                                      |   |                                  |                             |                    |                    |                       |                            |                           |  |
|        |             |                 |   |   |   |                                      |   |                                  |                             |                    |                    |                       |                            |                           |  |
|        |             |                 |   |   |   |                                      |   |                                  |                             |                    |                    |                       |                            |                           |  |
|        |             |                 |   |   |   |                                      |   |                                  |                             |                    |                    |                       |                            |                           |  |
|        |             |                 |   |   |   |                                      |   |                                  |                             |                    |                    |                       |                            |                           |  |
|        |             |                 |   |   |   |                                      |   |                                  |                             |                    |                    |                       |                            |                           |  |
|        |             |                 |   |   |   |                                      |   |                                  |                             |                    |                    |                       |                            |                           |  |
|        |             |                 |   |   |   |                                      |   |                                  |                             |                    |                    |                       |                            |                           |  |
|        |             |                 |   |   |   |                                      |   |                                  |                             |                    |                    |                       |                            |                           |  |
|        |             |                 |   |   |   |                                      |   |                                  |                             |                    |                    |                       |                            |                           |  |

### 4.10.4 Specialized Crime Scene Courses

A minimum of 15 additional semester hours in advanced, upper-level forensic science courses in forensic applications of crime scene investigation. At least 3 courses shall include accompanying laboratory components or significant hands-on experience

|   |           |             | 7 Semester | Laboratory<br>Required |
|---|-----------|-------------|------------|------------------------|
|   | Course ID | Course Name | Hours      | Required               |
| 1 |           |             |            |                        |
| 2 |           |             |            |                        |
| 3 |           |             |            |                        |
| 4 |           |             |            |                        |
| 5 |           |             |            |                        |

### Part 4: Notification

In addition to the Program Director listed on page one of this application, the following individuals will be copied on correspondence and FEPAC decisions related to this program:

| Name | Title | Email |
|------|-------|-------|
|      |       |       |
|      |       |       |
|      |       |       |

## Part 5: Authorization to Apply for Accreditation

The applicant institution's Chief Executive Officer or Authorized/Designated Administrator authorizes the forensic science program's application for accreditation by the Forensic Science Educational Programs Accreditation Commission (FEPAC).

| Name:      |  |       |  |  |  |  |  |
|------------|--|-------|--|--|--|--|--|
|            | Institution's Chief Executive Officer or Authorized/Designated Administrator |       |  |  |  |  |  |
| Title:     |  |       |  |  |  |  |  |
| Signature: |  | Date: |  |  |  |  |  |
|            | e-signature is acceptable  |       |  |  |  |  |  |

An application fee of \$1,500 is required with the submission of the Institutional Application Packet (FEPAC Form 5.1). Both are due to the AAFS Office on or before March 1. Checks may be made payable to the American Academy of Forensic Sciences. Credit card payment (Visa, MasterCard, American Express) is also acceptable. If paying with a credit card, please Heather Jefferson provide appropriate information and send to hjefferson@aafs.org.

If FEPAC determines that the institution is eligible for accreditation, an additional fee of \$2,000 is required with the submission of the Self-Study Report.