

**Program Name**  
Forensic Science

**Total Degree Units**  
15

**Anticipated First Term Valid**  
Fall 2026

**Career**  
Undergraduate

**Plan Type**  
Certificate

**Executive Summary (required)**

Please provide no more than 5 bullets/sentences that sum up the rationale, demand, and uniqueness of your proposed major.

We have partnered with local crime labs—both Tucson Police Department (TPD) and the Arizona Department of Public Safety (AZ DPS)—to identify the essential skills and educational preparation needed for a career in forensic laboratory science. The Directors of these labs have expressed a need for entry level candidates with substantial chemistry background (~30 units). This certificate will enhance the employability of students for forensic science positions by providing not only rigorous academic preparation in chemistry, but additional relevant training in legal and professional aspects of forensic science. The program is not limited to chemistry/biochemistry majors, so it presents a pathway for students majoring in other fields to get formal training in this area with minimal commitment (15 units). Given that many science and engineering degree plans require a substantial foundation in chemistry and math, the certificate is attainable by students in a variety of STEM programs.

**Plan Description (required)**

Work with Marketing to develop a description for the proposed program. Include the purpose, nature, and highlights of the curriculum, faculty expertise, emphases (if any), etc. Typically, 100-250 words.

The Certificate in Forensic Science provides students with the opportunity to gain expertise in the scientific and professional practices of forensic laboratory science. A strong foundation in chemistry is necessary, although the program is not limited to Chemistry majors. Core coursework focuses on the rigorous application of the scientific method and analytical principles in evidence examination, best practices for evidence analysis, and professional and legal aspects of the forensic science discipline. Elective course options allow students to tailor their forensic expertise according to their interests. This certificate will provide credentialed support for students seeking a career in this important field.

To support the proposed program, does the college envision sharing resources used by other programs, redeploing internal resources (consolidating existing certificates, disestablishing other certificates), etc.?

No

Summarize new resources required to offer the certificate (may include additional faculty, staff, equipment, facilities, etc.):

All of the courses associated with this program already exist except for CHEM 428 and 295F.

These new courses will be developed and taught by one or more of the following CBC faculty members:

- Dr. Jeff Salyards, Adjunct faculty member
- Dr. Dee Belle-Oudry, Career-track teaching faculty member
- Dr. Kate Vannoy, Tenure-track faculty member

Although teaching these classes does require some faculty FTE, it will not require hiring any additional faculty hires. Rather, teaching assignments will be shifted to cover the new courses.

**Degree Designation (Degree Offered in UAccess)**

Undergraduate Certificate

**Terminal Degree**

No

**Research Master's**

No

**Professional Master's**

No

**Stackable**

No

**Associated Plans for Stacking**

-

**Accelerated Program**

No

**Master's**

**Associated Plans for AMP**

-

# Program Contacts: Please provide the name and email address for each individual requested below

<b>Primary contact name</b> Dee Belle-Oudry	<b>Primary contact email address</b> dbelle@arizona.edu
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<b>Person who will serve in role of Director of Undergraduate Studies (DUS) for the certificate (This is not always the same as the DUS for affiliated programs or head of managing academic unit)</b> Dee Belle-Oudry	<b>Email address</b> dbelle@arizona.edu
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If known, list the members of the certificate oversight committee for this certificate. Note: undergraduate certificate oversight committees shall consist of a minimum of 3 members, 2 of which are faculty and at least one of the 2 is participating faculty in the certificate program. The oversight committee is responsible for 1) qualifications of participating faculty, 2) coordination of admissions recommendations with the Office of Admissions, and 3) curricular changes.

Jeff Salyards, PhD, MFS., mjs11@arizona.edu  
 Dee Belle-Oudry, PhD, dbelle@arizona.edu  
 Katrina Miranda, PhD, kmiranda@arizona.edu

<b>Name of Admissions contact</b> -	<b>Email address</b> -
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<b>Name of Graduate Program Coordinator</b> -	<b>Email address</b> -
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<b>Name of Director of Graduate Studies</b> -	<b>Email address</b> -
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<b>Name of Graduate College Degree Counselor</b> -	<b>Email address</b> -
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## Plan Administration

**Offering College**  
College of Science

Offering multiple offering list each one)	Department(s) (If offering departments,	Department Ownership	Percent	Is the Academic Owner the same as the Budget Owner?
Chemistry and Biochemistry		Chemistry and Biochemistry -	100%	Yes

**Budget Office Owner & Percent Ownership - CUSTOM**

-

**College Rationale: In consultation with proposing unit’s college-level administration, describe how the proposed academic program fits within the mix of programs currently offered by the college, and how it advances the overall mission of the college and university.**

This certificate offers an opportunity for students from a variety of majors to gain expertise in the field of forensic science. There are currently no programs in this area in the College of Science, yet there is certainly strong public (and student) interest in this field. This program will appeal to students in STEM fields requiring a solid chemistry foundation (3 semesters) who have an interest in learning more about forensic science.

Year 1	Year 2	Year 3
10	15	20

**What concrete evidence/data was used to arrive at the numbers?**

The numbers are based partly on numbers of students in similar programs at other universities. For example, the Certificate in Investigative Forensic Science at Sam Houston State University has 11 students enrolled in its first year. Since our program is not associated with a specific undergraduate degree, we expect it will appeal to students outside our department. As news of the program spreads we expect enrollment to increase in the second and third years.

Print On Transcript	Transcript Description	Transcript Indent (New)
Yes	Certificate in Forensic Science	-

Print On Diploma	Diploma Description	Diploma Indent (NEW)
Yes	Certificate in Forensic Science	-

**CIP Code (required)**

Refer to The National Center for Education Statistics to determine appropriate 6-digit CIP code

43.0406

**NSC Classification**

-

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<b>Program Length Type</b> Years	<b>Program Length in Years</b> 2	<b>If Program Length is not 2, 4, or 6 years, please explain:</b> certificate
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**SULA Special Program**  
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## Evidence of Market Demand

Please provide an estimate of the future state-wide and national demand for graduates of the proposed academic program. Please specify the source (e.g., Lightcast; Jobs EQ; US Department of Labor) of workforce demand data and detail the assumptions that underpin these projections. Curricular Affairs can provide a job posting/demand report (from O\*NET) by skills/keywords/CIP code of the proposed program; contact [curricular\\_affairs@list.arizona.edu](mailto:curricular_affairs@list.arizona.edu) to request the report if needed for your proposal. If job market data is unavailable or not applicable, please explain why and elaborate another justification for the proposed program.

We have partnered with local crime labs—both Tucson Police Department (TPD) and the Arizona Department of Public Safety (AZ DPS)—to identify the essential skills and educational preparation needed for a career in forensic laboratory science. They are supportive of this certificate program to enhance the career readiness of students interested in entering this field. (Please see the support letter provided by the TPD Chief of Police, Chad Kasmar). The Directors of these local crime labs have expressed a need for entry level candidates with substantial chemistry background (~30 units). The goal of this certificate is to enhance the employability of students for forensic science positions by providing not only rigorous academic preparation in chemistry, but additional relevant training in legal and professional aspects of forensic science.

Nationwide, the demand for forensic scientists is expected to remain high for the next decade: “About 2,900 openings for forensic science technicians are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire.” (Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Forensic Science Technicians, at <https://www.bls.gov/ooh/life-physical-and-social-science/forensic-science-technicians.htm> (visited October 21, 2025)).

Although we have not directly surveyed students in our programs, we have had several personal interactions with students who express interest and excitement about taking forensic science courses. Both Grand Canyon University (GCU) and Arizona State University (ASU) offer BS degrees in Forensic Science. The advantage of this certificate program is that it is less restrictive than a full degree plan; students can pursue a degree in any major and still complete the forensic certificate. This means they have a broader range of career opportunities if they decide not to continue in the forensic field. ASU offers undergraduate certificate programs in areas such human factors in forensic science, criminal investigations, and forensic psychology. Our certificate focuses more on the scientific facets of the field. It is designed for students who have an interest in laboratory science and how it is applied in forensic investigations.

According to the US Bureau of Labor Statistics, the job growth outlook for Forensic Science Technicians over the next nine years (through 2034) is 13%, much higher than the average of 3%. In recent conversations with the TPD lab staff we learned that they regularly have positions open for forensic analysts.

## Similar Programs Offered at Arizona Public Universities

Are there similar programs at the University of Arizona?

No

Are there similar programs at Arizona State University? Yes	List all similar programs at the same academic level currently offered at this institution BS Forensic Science	Number of Students 50	Accredited Yes
Are there similar programs at Northern Arizona University? Yes	List all similar programs at the same academic level currently offered at this institution BS Chemistry with Forensic emphasis	Number of Students 20	Accredited Yes

## Peer Comparison

Select three peers (if possible/applicable) for completing the comparison chart from ABOR-approved institutions, AAU members, and/or other relevant institutions recognized in the field.

Use Peer Comparison Chart from the Curricular Affairs website. The comparison programs are not required to have the same degree type and/or title as the proposed UA program. Information for the proposed UA program must be consistent throughout the proposal documents. Minors and Certificates may opt to include only 2 peer comparisons.

[Forensic certificate Peer Comparison\\_CA Approved.docx](#)

## Budget Projection

Complete and upload the budget projection form found [here](#).

Contact your department / college finance manager for more information.

[Budget\\_projection\\_Forensic\\_certificate.xlsx](#), [Budget explanation-forensic certificate.docx](#)

## Campus

**Campus**

<b>Campus</b> University of Arizona - Main	<b>Sub Plan Required</b> No						
<b>Locations</b>							
<table border="1"> <tr> <td><b>Location</b> Tucson</td> <td></td> <td></td> </tr> <tr> <td><b>First Admit Term</b> -</td> <td><b>Last Admit Term</b> -</td> <td><b>Teach Out Term</b> -</td> </tr> </table>		<b>Location</b> Tucson			<b>First Admit Term</b> -	<b>Last Admit Term</b> -	<b>Teach Out Term</b> -
<b>Location</b> Tucson							
<b>First Admit Term</b> -	<b>Last Admit Term</b> -	<b>Teach Out Term</b> -					

## Learning Outcomes (Required three minimum)

<b>Name</b> Comprehend, describe, and apply the appropriate tools and scientific practices to identify, collect, and examine crime scene evidence.	<b>Tags</b> -
<b>Concepts</b> Professional practices in the collection, handling, and scientific analysis of forensic evidence. Laboratory methods commonly used in forensic analysis.	<b>Assessment</b> Exam in CHEM 328 (direct) and student exit survey (indirect)
<b>Measures</b> Instructor grading of exam in CHEM 328 (direct) and review of responses on the student exit survey (indirect)	<b>Competencies</b> Select, describe, and defend choice of suitable methods for analyzing forensic evidence.

<b>Name</b>	
Apply scientific reasoning and data analysis principles to perform forensic methods and evaluate the validity and limitations of results.	<b>Tags</b> -
<b>Concepts</b>	
Interpreting experimental results and evaluating their validity using rigorous scientific and mathematical principles.	<b>Assessment</b> Exam in CHEM 328 (direct) and student exit survey (indirect)
<b>Measures</b>	
Instructor grading of exam in CHEM 328 (direct) and review of responses on student exit survey (indirect)	<b>Competencies</b> Evaluate and explain the meaning and validity of results from a forensic experiment. Statistical evaluation of results. Reporting and defending results in an unbiased manner.

<b>Name</b>	
Synthesize scientific results, judicial requirements, and stakeholder needs to produce reports and testimony that are both rigorous and accessible.	<b>Tags</b> -
<b>Concepts</b>	
Proper documentation of casework. Compiling reports that constitute legal documentation. Communicating science topics with non-experts.	<b>Assessment</b> Written assignment in CHEM 328 (direct) and student exit survey (indirect)
<b>Measures</b>	
Instructor grading of written case report assignment (direct) and review of responses on student exit survey (indirect)	<b>Competencies</b> Effectively write case report. Explain scientific concepts to a lay person. Reporting and defending results in an unbiased manner.

## Program Requirements

Total units required to complete degree

-

Upper-division units required to complete degree

-

**Foundation courses: Second language**

-

**General education requirements: 32 units**

**Pre-admission expectations (i.e. academic training to be completed prior to admission)**

There is no application for admission, but there are prerequisite courses required for the core coursework. These include one year of general chemistry with labs and one semester of organic chemistry.

**Graduate non-degree status units permitted?      If yes, list how many**

No

-

**List any special requirements to declare or gain access to this major (completion of specific coursework, minimum GPA, interview, application, etc.)**

-

<b>Major units required (includes core and required electives; excludes supporting coursework)</b>	<b>Upper-division units required in the major</b>	<b>Residency units to be completed in the major</b>
-	-	-

<b>Minimum total units required</b>	<b>Minimum upper-division units required</b>	<b>Total transfer units that may apply to minor</b>
-	-	-

<b>Minimum total units required</b>	<b>Minimum upper division units</b>	<b>Total transfer units that may apply to the certificate</b>
15	11	5

**List any special requirements to declare/admission to this minor (completion of specific coursework, minimum GPA, interview, application, etc.)**

-

**Required supporting coursework**

Courses that do not count towards major units and major GPA, but are required for the major. Courses listed must include prefix, number, units, and title. Include any limits/restrictions needed (house number limit, etc.). Provide course use form from home department for courses not owned by your department

-

**Major requirements**

List all major requirements including core and electives. If applicable, list the emphasis requirements for each proposed emphasis\*. Courses listed count towards major units and major GPA. Mark new coursework (New). Include any limits/restrictions needed (house number limit, etc.). Provide course use form from home department for courses not owned by your department.

-

**Major requirements**

List all major requirements including core and electives/selectives. If applicable, list the emphasis requirements for each proposed emphasis\*. Thesis and non thesis options should be listed as separate emphases. Courses listed must include course prefix, number, units, and title. Mark new coursework (New). Include any limits/restrictions needed (house number limit, etc.). Provide course use form from home department for courses not owned by your department.

-

**Minor requirements**

List all required minor requirements including core and electives. Courses listed must include course prefix, number, units, and title. Mark new coursework (New). Include any limits/restrictions needed (house number limit, etc.). Provide course use form from home department for courses not owned by your department.

**Certificate requirements**

List all certificate requirements including core and electives. Courses listed must include **course prefix, number, units, and title**. Mark new coursework (New). Include any limits/restrictions needed. Provide course use form from home department for courses not owned by your department.

**Complete 9 units of core coursework:**

- CHEM 328 (3) Scientific Fundamentals of Forensic Science
- CHEM 295F (1) **(New)** Professional Practice Topics in Forensic Science
- CHEM 227 (3) Analytical Chemistry
- CHEM 330L (2) **(New)** Measurements Laboratory

OR

CHEM 326 (2) Analytical Chemistry Laboratory (last offering Fall 2025)

**Complete at least 6 units from options below:**

- ANTH 365 (3) Introduction to Forensic Anthropology
- PA 332 (3) Survey of Forensic Science
- PCOL 451 (3) Introduction to Forensic Toxicology
- CHEM 493 (1-3) Internship in Forensic Lab
- CHEM 428 (3) **(New)** Forensic Chemistry
- MCB 442 (3) Human Genetics: Sex, Crime, and Disease

**Research methods, data analysis, and methodology requirements?** If yes, provide description

No

**Internship, practicum, applied course requirements** If yes, provide description

No

**Senior thesis or senior project required** If yes, provide description

No

**Master thesis or dissertation required?** If yes, provide description

No

**Is substitution of required or elective courses permitted at advisor's discretion?** If yes, provide description

No

**May units earned for the certificate be applied to affiliated graduate programs?**

*Note: There is no University maximum on the number of units from a certificate program that may also apply toward a UA degree program, subject to time limitations for degree programs.*

**If yes, list how many**

-

**Minor: Optional or Required?**

-

**Can students earning a second degree or major use the second degree/major to satisfy the required minor for this major?**

No

**Minor requirements**

-

**Minimum total units required for minor**

-

**Any restrictions on multiple use of courses?**

No

**If yes, provide description**

-

**Additional requirements (provide description and/or attach file)**

Course Use Collaboration Form\_Forensic Certificate\_ackh

Course Use Collaboration Form\_Forensic Certificate ehl

Re\_Forensic certificate--request to use MCB 442

PA\_332\_Chris\_Wilson

## Admissions (Applicable to Undergraduate Majors and Certificates only)

**Add to undergraduate admissions application?**

No

**Add to Next Steps Center for orientation major changes?**

No

**Admit Type**

First-Year, Transfer,  
Readmission

**Admissions Criteria**

General UA admissions

**If selective criteria, please elaborate**

-

## Emphases/Subplans (Applicable to Majors only)

No Specializations

# Subplan Campus & Locations (Applicable to Majors only)

Subplan Campuses

-

## Dependencies

## Instructional Modality

Select all that apply

In Person

## New Administrative Use

Short Title

FORSCCRTU

Online campus

No

Status

Active

Display Plan in Public Catalog

No

Catalog Short Description

-

Catalog Display Name

-

Field Of Study

-

HEGIS Code

-

Plan Type (Admin)

-

First Term Valid

-

Learning Outcomes UA - CUSTOM

-

Catalog Image

-

### Catalog Display Notifications

-

### Allow Integration Sync To SIS

Yes

## Additional Information

If necessary, provide any additional information that has not already been captured in the proposal (i.e., preliminary proposal (majors only), ABOR request form, etc.) It could also include the course use/collaboration form, addendum explaining/supporting the budget projection, other helpful information you did not already include in the proposal but that CA and faculty governance committees should be aware of. Please upload your ABOR request form here.

U of A\_College of Science\_Letter of Support



**BUDGET PROJECTION FORM**

**Name of Proposed Program or Unit: Certificate in Forensic Science**

Budget Contact Person: Dee Belle-Oudry	Projected		
	1st Year 20 26 - 2027 __	2nd Year 2027-2028	3rd Year 2028-2029
<b>METRICS</b>			
Net increase in annual college enrollment UG	5	10	15
Net increase in college SCH UG	50	90	110
Net increase in annual college enrollment Grad			
Net increase in college SCH Grad			
Number of enrollments being charged a Program Fee			
New Sponsored Activity (MTDC)			
Number of Faculty FTE	0.5	0.5	0.5
<b>FUNDING SOURCES</b>			
<b>Continuing Sources</b>			
UG Revenue	30,000	54,000	66,000
Grad Revenue	NA	NA	NA
Program Fee Revenue (net of revenue sharing)	NA	NA	NA
F and A Revenues	NA	NA	NA
Reallocation from existing College funds (attach description)	NA	NA	NA
Other Items (attach description)	NA	NA	NA
<b>Total Continuing</b>	<b>\$ 30,000</b>	<b>\$ 54,000</b>	<b>\$ 66,000</b>
<b>One-time Sources</b>			
College fund balances	NA	NA	NA
Institutional Strategic Investment	NA	NA	NA
Gift Funding	NA	NA	NA
Other Items (attach description)	NA	NA	NA
<b>Total One-time</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL SOURCES</b>	<b>\$ 30,000</b>	<b>\$ 54,000</b>	<b>\$ 66,000</b>
<b>EXPENDITURE ITEMS</b>			
<b>Continuing Expenditures</b>			
Faculty	24,000	24,000	24,000
Other Personnel (advisors, program directors, etc.)	NA	NA	NA
Employee Related Expense	7,680	7,680	7,680
Graduate Assistantships	NA	NA	NA
Other Graduate Aid	NA	NA	NA
Operations (materials, supplies, phones, etc.)	NA	NA	NA
Additional Space Cost	NA	NA	NA
Other Items (attach description)	NA	NA	NA
<b>Total Continuing</b>	<b>\$ 31,680</b>	<b>\$ 31,680</b>	<b>\$ 31,680</b>
<b>One-time Expenditures</b>			
Construction or Renovation	NA	NA	NA
Start-up Equipment	NA	NA	NA
Replace Equipment	NA	NA	NA
Library Resources	NA	NA	NA
Other Items (attach description)	NA	NA	NA
<b>Total One-time</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL EXPENDITURES</b>	<b>\$ 31,680</b>	<b>\$ 31,680</b>	<b>\$ 31,680</b>
<b>Net Projected Fiscal Effect</b>	<b>\$ (1,680)</b>	<b>\$ 22,320</b>	<b>\$ 34,320</b>

## Budget explanation: Forensic Science Certificate

### **Metrics**

#### Net increase in annual college enrollment UG

These numbers represent the estimated number of students with majors OUTSIDE the College of Science who will enroll in the certificate program. Students in majors such as Chemical Engineering, Biomedical Engineering, Physiology, Medicine, Nutritional Sciences, Veterinary Science, and Pharmaceutical Science are required to take at least one semester of organic chemistry. We expect that some of these students will choose this certificate as it requires only 15 additional units. Moreover, some of these units can be used to satisfy requirements in their own degree plans or for a minor in chemistry. For example, CHEM 227 and CHEM 330L will count toward a minor in chemistry. This will appeal to Chemical Engineering majors who often choose a chemistry minor.

#### Net increase in college SCH UG

We have already seen several students enroll in the Spring 2026 CHEM 328 class from outside the College of Science. These include physiology, chemical engineering, pharmaceutical sciences, and criminal justice majors. At last count, this course has added 18 SCH to the college. The appeal of forensic science is widespread, as demonstrated by the popularity of television shows such as Forensic Files. We expect the SCH numbers to continue to grow as more students hear about the CHEM 328 course, as we roll out additional forensic science courses (CHEM 295F, 428), and as the new certificate becomes available next year.

#### Number of Faculty FTE

Despite the 0.5 faculty FTE in this budget table, the overall cost to the Department/College should not increase. Some of the courses in the program (CHEM 227, 330L) are already offered as part of the chemistry undergraduate degree. The only new courses will be CHEM 295F (1 unit) and CHEM 428 (3 units). These new courses will be developed and taught by one or more of the following faculty members as part of their regular teaching assignments:

- **Dr. Jeff Salyards**, Adjunct faculty member in CBC with a long career in Forensic Science. He has the vital forensic expertise needed to teach both

CHEM 328 and CHEM 295F (Professional Practices). He will also co-teach CHEM 428 (Forensic Chemistry) with Dr. Belle-Oudry.

- **Dr. Dee Belle-Oudry**, Career-track teaching faculty member, has taught the Instrumental Analysis Lab and Analytical Chemistry Lab courses in CBC for many years. She is developing the new CHEM 330L Measurements Lab (a core course in this certificate as well as the new CHEM BS curriculum). She has participated in faculty workshops on forensic science and volunteered in the Tucson Police Department Crime Lab. She will co-teach CHEM 428 (Forensic Chemistry) with Dr. Salyards.
- **Dr. Kate Vannoy**, Tenure-track faculty member joining CBC in Fall 2026. Dr. Vannoy has a PhD in analytical chemistry and prior experience as a Forensic Scientist. She is qualified to teach any of the CHEM classes in this program if needed.

We do not anticipate extra costs associated with these teaching assignments. CBC has recently revised its undergraduate degree programs and eliminated several of our old course offerings, which will free up faculty to teach these new courses. Additionally, existing courses from other departments can be used to satisfy certificate requirements.

### ***Funding Sources***

The only funding source applicable is UG revenue.

#### UG Revenue

This was calculated based on a \$600 per SCH tuition rate, using the Net increase in college SCH values in the Metrics table.

### ***Expenditure Items***

#### Faculty

Although we are technically “shifting” faculty assignments and not hiring new faculty to teach these courses, we calculated what a 0.5 FTE would cost based on an adjunct faculty member teaching one course per semester (\$12,000 per course, or \$24,000 per year). ERE rate set at 32%.



**New Academic Program  
PEER COMPARISON**

Program name, degree, and institution	Proposed UA Program Certificate in Forensic Science	Peer 1 Certificate in Forensic Science Florida International University	Peer 2 Certificate in Investigative Forensic Science Sam Houston State University
Program Description	<p>The Certificate in Forensic Science provides students with the opportunity to gain expertise in the scientific and professional practices of forensic laboratory science. A strong foundation in chemistry is necessary, although the program is not limited to Chemistry majors. Core coursework focuses on the rigorous application of the scientific method and analytical principles in evidence examination, best practices for evidence analysis, and professional and legal aspects of the forensic science discipline. Elective course options allow students to tailor their forensic expertise according to their interests. This certificate will provide credentialed support for</p>	<p>The Undergraduate Certificate in Forensic Science seeks to educate students who wish to pursue a laboratory career in the forensic sciences. The field is interdisciplinary and requires significant academic and laboratory training in the natural sciences. This program provides in-depth coursework and hands-on training to facilitate successful entry into a forensic laboratory position. The certificate is available to current Bachelor of Science (BS) and Bachelor of Arts (BA) students and others who have already earned a BS or BA in chemistry, biological sciences, or a natural science. For more information, visit the College of Arts, Sciences, and Education website.</p>	<p>This 15 credit hour certificate program builds upon the current undergraduate offerings, comprising five required classes tailored for students aspiring to pursue careers in investigative forensic sciences (crime scene investigator, medical death investigator, criminal investigators, evidence technician, law enforcement, etc.). The undergraduate certificate is a freestanding credential that can be earned as a stand-alone certificate or awarded on the way toward a bachelor's degree.</p>

	students seeking a career in this important field.		
Target Careers from Market Data Report	Forensic scientist	Forensic scientist	Forensic scientist
Emphases? (Yes/No) List, if applicable. <u>For majors only.</u>	No	No	No
Minimum # of units required	15	19	15
Special requirements to gain admission to program? (i.e. pre-requisites, GPA, application, etc.)	There is no application for admission, but there are prerequisite courses required for the core coursework. These include one year of general chemistry with labs and one semester of organic chemistry.	The prerequisites for admission into the Forensic Science Certificate Program are as follows: -- <b>One (1) calculus course,</b> -- <b>One (1) statistics course,</b> -- <b>One (1) general biology course with lab,</b> -- <b>Two (2) physics courses with labs,</b> -- <b>Two (2) general chemistry courses with labs,</b> -- <b>Two (2) organic chemistry courses with labs,</b> -- <b>One (1) analytical chemistry course with lab,</b> -- <b>One (1) biochemistry course.</b>	No
Internship, practicum, or applied/experiential requirements? If yes, describe.	CHEM 493 (1-3) Internship in Forensic Lab is an elective option	CHS4591 - Forensic Science Internship <b>OR</b> CHS6946 - Graduate Forensic Internship	None
Additional requirements	None	The program is coupled to either the ACS-certified FIU BS in Chemistry or the FIU BS in Biological Sciences degrees. This certificate is accredited by the <a href="#">Forensic Science Education Programs Accreditation Commission (FEPAC)</a> provided that it is accompanied by a BS in Chemistry or Biological Sciences from FIU.	

		<p>A non-accredited Certificate is also available to FIU BA students and other persons in the community who have already earned a BS or BA in chemistry, biological sciences or a natural science from another institution and who have completed the required prerequisites. Students in this category must submit their transcripts for evaluation to confirm that their course preparation is equivalent to that of the relevant FIU BS major and that all requirements and policies that are applicable to admissions to the University for a certificate program are met. Please note that Criminal Justice is not an acceptable undergraduate major for acceptance into the Certificate program.</p>	
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Additional questions:

1. How does the proposed program align with peer programs? Briefly summarize the similarities between the proposed program and peers, which could include curriculum, overall themes, faculty expertise, intended audience, etc.

Florida International University has an undergraduate certificate in forensic science with a similar curricular emphasis. Their program had 7 students enrolled in 2023, with 10 students in the process of completing prerequisites for the program. Sam Houston State University offers a certificate in investigative forensic science.<sup>1</sup> Their program is new and currently has 11 students. We expect similar enrollments in our program based on the similarity in the curricula and the number of units.

2. How does the proposed program stand out or differ from peer programs? Briefly summarize the differences between the proposed program and peers, which could include curriculum, overall themes, faculty expertise, intended audience, etc.

The FIU certificate program has more requirements and is coupled to chemistry or biology degrees. Our certificate will be open to students in any major who have the necessary chemistry background. Given that many science and engineering degree plans require a

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<sup>1</sup> <https://catalog.shsu.edu/undergraduate/colleges-academic-departments/criminal-justice/forensic-science/investigative-forensic-science-certificate/#text>

substantial foundation in chemistry and math, the certificate is attainable by students in a variety of STEM programs.

The Certificate in Investigative Forensic Science at Sam Houston State University is offered fully online. According to their certificate overview, the coursework in that program is “tailored for students aspiring to pursue careers in investigative forensic sciences (crime scene investigator, medical death investigator, criminal investigators, evidence technician, law enforcement, etc.)” Our program delves further into laboratory methods and scientific aspects of evidence analysis. It is designed for students who want to become laboratory forensic scientists.

3. How do these differences make this program more applicable to the target student population and/or a better fit for the University of Arizona?

There is a clear need for qualified laboratory forensic scientists, particularly in Southern Arizona. The US Bureau of Labor and Statistics predicts a 13% growth in forensic science technician positions in the next 10 years. At the Tucson Crime Lab (and similar labs in the area) nearly half of employees have less than five years of experience. The training program for forensic scientists takes 12-18 months to complete. Therefore, these labs invest a great deal of time and resources training new hires. They therefore want to ensure that this investment pays off; that is, the employees continue employment in their laboratory. This certificate program will result in graduates who 1) are more knowledgeable about what a forensic scientist does, and 2) are better prepared for the specific job functions when they are hired. This will be of great benefit to both the students and employers.



Chad Kasmar  
Police Chief

November 25, 2025

Dr. Greg Heileman  
Vice Provost for Academic Affairs  
Curricular Affairs  
Academic Administration West  
819 E. 1<sup>st</sup> St.  
Tucson, AZ 85719

Dear Dr. Heileman:

I am writing on behalf of the Tucson Police Department to express our support for the University of Arizona College of Science as it proposes to launch its new undergraduate Forensic Science Certificate program.

As the Chief of Police of a 33<sup>rd</sup> largest city in the United States and a police department which encompasses a standalone forensic division and a crime laboratory which play a critical role in the criminal justice system, I can attest to the growing demand for highly skilled forensic professionals who are well educated in both scientific methodology and legal requirements of the criminal justice system.

The evolving landscape of forensic science demands a workforce that is not only technically proficient, but also ethically grounded, and prepared to operate within the complex framework of our criminal justice system. A rigorous academic program that integrates natural and applied sciences with legal education is vital to preparing the next generation of forensic scientists and crime scene investigators.

The University of Arizona is well positioned to make a meaningful impact in this space. With its academic excellence, research capabilities, and commitment to interdisciplinary learning, the College of Science's new program in forensic science is poised to become a valuable pipeline for developing talent that can meet the critical staffing needs of crime laboratories, law enforcement agencies, and the broader legal community, especially here in Tucson.

As someone who has worked firsthand with forensic professionals at every level—from entry-level analysts to tenured expert witnesses, I can attest to the importance of programs like this in shaping competent, credible, and forward-thinking forensic science practitioners. The Tucson Police Department and the Crime Laboratory are looking



Chad Kasmar  
Police Chief

forward to potential opportunities for collaboration, whether through student internships, joint research, or professional development initiatives.

We commend and support the University of Arizona for recognizing the need for advanced forensic education and for taking proactive steps to address workforce gaps in this field.

Please consider this letter an expression of our full support for the program's development.

Sincerely,

A handwritten signature in blue ink that reads "Chad Kasmar".

Chad Kasmar  
Chief of Police

CK:JR



## Course Use/Collaboration/Concern Form

Please use this form to notify other colleges that your proposed new program intends to use course(s) under their ownership; has identified potential avenues for interdisciplinary collaboration; and/or wants to hear their concerns about the creation of this program.

*Note: Requesting college should provide this request to leadership in unit who owns courses. Responding unit should respond within 10 business days from receipt. Lack of response after the 10 business days is presumed approval.*

### FOR REQUESTING COLLEGE:

- I. **Initiating College:** Science; Chemistry & Biochemistry
- II. **Representative(s) making the request:** Dee Belle-Oudry, CBC Department
- III. **Planned proposed program:** Certificate in Forensic Science
- IV. **Planned program start date:** 8/15/2026
- V. **Courses planned to be included, belonging to college / departments:**

PA 332, Survey of Forensic Science, belonging to Public Administration/Govt & Public Policy, College of Social & Behavioral Sciences  
 PCOL 451, Introduction to Forensic Toxicology, belonging to Pharmacology and Toxicology/College of Pharmacy  
 ANTH 365, Introduction to Forensic Anthropology, belonging to Anthropology/School of Anthropology  
 MCB 442, Human Genetics: Sex, Crime, and Disease, belonging to Molecular and Cellular Biology/College of Science

### FOR REVIEWING COLLEGE:

- |              |          |   |                             |   |
|--------------|----------|---|-----------------------------|---|
| 1. Course #1 | PA 332   | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Conditionally <input type="checkbox"/> : Under what conditions? |
| 2. Course #2 | PCOL 451 | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Conditionally <input type="checkbox"/> : Under what conditions? |
| 3. Course #3 | ANTH 365 | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Conditionally <input type="checkbox"/> : Under what conditions? |
| 4. Course #4 | MCB 442  | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Conditionally <input type="checkbox"/> : Under what conditions? |
| 5. Course #5 |          | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Conditionally <input type="checkbox"/> : Under what conditions? |

### VI. Parameters of Use (add rows as necessary):

Undergraduate/Graduate



### Course Use/Collaboration/Concern Form

Course #	Units	Description of use (i.e., gen ed, major core, emphasis, elective/selective)
PA 332	3	Elective
PCOL 451	3	Elective
ANTH 365	3	Elective
MCB 442	3	Elective

VII. **Expected Yearly Enrollment (add rows as necessary):**

Course #	Units	Exp Enrollment for Yr 1	Exp Enrollment for Yr 2	Exp Enrollment for Yr 3
PA 332	3	3-5	5-8	8-12
PCOL 451	3	2-5	3-6	5-8
ANTH 365	3	1-3	1-4	1-4
MCB 442	3	3-5	3-10	5-12

VIII. **Opportunities for Interdisciplinary Collaboration (leave blank if none):**

IX. **Concerns about Proposed Program (leave blank if none):**

X. **Representative(s) reviewing request:** Who is representative reviewing the request? (Should be Associate Dean / Dean)

Signature: \_\_\_\_\_

Date: \_\_10/29/25\_\_



## Course Use/Collaboration/Concern Form

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- |              |          |                              |                             |   |
|--------------|----------|------------------------------|-----------------------------|---|
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| 3. Course #3 | ANTH 365 | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Conditionally <input type="checkbox"/> : Under what conditions? |
| 4. Course #4 | MCB 442  | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Conditionally <input type="checkbox"/> : Under what conditions? |
| 5. Course #5 |          | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Conditionally <input type="checkbox"/> : Under what conditions? |

- VI. **Parameters of Use (add rows as necessary):**

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## Course Use/Collaboration/Concern Form

Please use this form to notify other colleges that your proposed new program intends to use course(s) under their ownership; has identified potential avenues for interdisciplinary collaboration; and/or wants to hear their concerns about the creation of this program.

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### FOR REVIEWING COLLEGE:

- |              |          |   |                             |   |
|--------------|----------|---|-----------------------------|---|
| 1. Course #1 | PA 332   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Conditionally <input type="checkbox"/> : Under what conditions? |
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| 3. Course #3 | ANTH 365 | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Conditionally <input type="checkbox"/> : Under what conditions? |
| 4. Course #4 | MCB 442  | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Conditionally <input type="checkbox"/> : Under what conditions? |
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### Course Use/Collaboration/Concern Form

Course #	Units	Description of use (i.e., gen ed, major core, emphasis, elective/selective)
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**VII. Expected Yearly Enrollment (add rows as necessary):**

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MCB 442	3	3-5	3-10	5-12

**VIII. Opportunities for Interdisciplinary Collaboration (leave blank if none):**

**IX. Concerns about Proposed Program (leave blank if none):**

**X. Representative(s) reviewing request: Who is representative reviewing the request? (Should be Associate Dean / Dean)**

Signature:  Date: 10/27/25

**From:** [Gutenkunst, Ryan N - \(rgutenk\)](#)  
**To:** [Belle-Oudry, Deirdre A - \(dbelle\)](#)  
**Cc:** [Rezende, Lisa F - \(Irezende\)](#); [Elfring, Lisa K - \(elfring\)](#); [Sutphin, George L - \(sutphin\)](#); [Salyards, Michael Jeffery - \(mjs11\)](#)  
**Subject:** Re: Forensic certificate--request to use MCB 442  
**Date:** Thursday, October 23, 2025 3:31:47 PM

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Hello Dee,

We're happy to have MCB 442 used. My understanding of that form is that you don't need it for us, since you're also in CoS. But maybe you need separate forms for the courses from the other colleges. If you think you need it from College of Science, you should route it to Rebecca Gomez and tell her that I approved.

Best,  
Ryan

On Oct 22, 2025, at 4:42 PM, Belle-Oudry, Deirdre A - (dbelle)  
<[dbelle@arizona.edu](mailto:dbelle@arizona.edu)> wrote:

Hello Lisa, Lisa, George, and Ryan,

CBC is proposing a new undergraduate certificate program in forensic science. Jeff (copied here) and I discussed this with some of you last semester but hadn't fleshed out the details yet.

The proposal is attached here so I won't describe it in detail. But in general, it is 15 units. 9 units are course work in the CHEM department, and 6 units are electives that the student can choose.

**We would like to include your course, MCB 442, as one of the elective options.** This course would be a great fit and probably a very popular option for students in the program.

I've attached a "Course Use/Collaboration/Concern Form". If you agree to allow us to include this course in the certificate program, we will need this filled out (check mark), signed, and returned to me. I'm not sure why but the form requires an Associate Dean or Dean signature. If you would prefer I send this to that person separately, just let me know who I should send it to.

We'd be happy to meet if you want to discuss this further.

Best  
Dee

Dee Belle-Oudry

Associate Dept Head for Academic Affairs

<image001.png>

*Confidentiality Notice: This electronic message transmission, including any attachment(s), may contain confidential, proprietary, or privileged information. Please be advised that any inappropriate disclosure, copying, distribution, or use of the contents of this information is strictly prohibited. If you have received this transmission in error, please destroy all copies of the message and contact the sender immediately.*

<Forensic certificate proposal\_final.docx><Course Use Collaboration Form\_Forensic Certificate.docx>

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Ryan Gutenkunst

Professor and Department Head, Molecular and Cellular Biology, University of Arizona

<http://gutengroup.arizona.edu>, (520) 626-0569, LSS 444A, Signal:@RyanGutenkunst.42

Compete in the Genomic History Inference Strategies Tournament!

<https://gutengroup.arizona.edu/ghist>