

1. Purpose and Nature of Program

Provide a brief program description. Include the distinctive features of the program that make it unique.

Computational Forensics encompasses many fields of physical, biological and social sciences. Specific forensics problems are investigated using statistics, computing, and mathematics, with the main goal of advancing the forensic knowledge and capabilities of the students. Computational forensics is the study and development of quantitative and computational methods to assist in the basic applied research in forensic science, establish or prove scientific basis of specific investigative procedures, and support forensic examiner casework. Through modeling, computer simulation, and computer-based analysis and recognition, it provides an in-depth understanding of the forensic discipline, evaluation of a particular scientific method basis, and systematic approach to forensic sciences by applying computer science techniques, applied mathematics and statistics.

2. Student Learning Outcomes and Assessment Methods

Assessment Plan

Attach a PDF copy of the assessment plan printed from the University Office of Evaluation and Educational Effectiveness assessment portal demonstrating UOEEE’s approval of your assessment plan for this program. Visit the assessment portal at <https://uoeee.asu.edu/assessment-portal> or contact uoeee@asu.edu with any questions.

3. Academic Curriculum and Requirements

A. Major Map

Attach a copy of the “proposed” major map for this degree program. If this program will be delivered online as well as in-person, attach a copy of both the major map and the online major map. Instructions on how to create a “proposed major map” in BAMB can be found in the Build a Major Map Training Guide.

B. Summary of Credit Hours Required for this Program

Total credit hours must be 120 and include first year composition, general studies, core/required courses, program specific electives, and any additional requirements (e.g., concentration credits).

Requirements	Credit Hours
First Year Composition	6
ASU 101 (or equivalent)	1
General Studies	21
Core/required courses	68
Program specific electives	12
Additional requirements	
Other; please explain (University electives)	12
Total	120

C. Core/Required Courses

i. Total required and/or core course credit hours

68

ii. List the prefix, number, name and credit hours for each required/core course for this program

- ACO 101 Introduction to Computer Science (CS) (3)
- ACO 102 Object-Oriented Programming (CS) (3)
- ACO 201 Data Structures and Algorithms (CS) (3)
- ACO 240 Introduction to Programming Languages (3)
- ACO 320 Database Systems (3)
- ACO 423 Data Science (3)
- FOR 105 Physical Evidence and the Crime Scene (SQ) (4)

FOR 106 Biology Behind the Crime Scene (SQ) (4)
FOR 350 Computer Forensics (3)
MAT 270 Calculus with Analytic Geometry I (MA) (4)
MAT 271 Calculus with Analytic Geometry II (MA) (4)
MAT 272 Calculus with Analytic Geometry III (MA) (4)
MAT 275 Modern Differential Equations (MA) (3)
MAT 300 Mathematical Structures (MA) (3) or MAT 243 Discrete Mathematical Structures (MA) (3)
MAT 343 Applied Linear Algebra (MA) (3)
MAT 350 Techniques and Applications of Applied Mathematics (3)
STP 280 Probability and Statistics for Researchers (CS) (3)
STP 281 Statistical Analysis for Researchers (3)
STP 310 Design and Analysis of Experiments (3)
STP 311 Regression and Time Series Analyses (3)
STP 450 Nonparametric Statistics (3)

D. Program Specific Electives**i. Total required program elective credit hours**

12

ii. List the prefix, number, name and credit hours for any program specific electives for this program

BIO 181 General Biology I (SQ) (4)
BIO 182 General Biology II (SG) (4)
CHM 113 General Chemistry I (SQ) (4)
CHM 116 General Chemistry II (SQ) (4)
CHM 233 General Organic Chemistry I (3) AND CHM 237 General Organic Chemistry Laboratory I (1)
CHM 234 General Organic Chemistry II (3) AND CHM 238 General Organic Chemistry Laboratory II (1)
FOR 286 Principles of Forensic Science (3) (requires BIO 182 & CHM 116)
FOR 402 Forensic Biology (3)
LSC 347 Fundamentals of Genetics (3) AND LSC 348 Fundamentals of Genetics Laboratory (1)
MAT 421 Applied Computational Methods (CS) (3)
MAT 450 Mathematical Models in Biology (3)
MAT 452 Introduction to Chaos and Nonlinear Dynamics (3)

E. Additional Program Requirements, if any:

List and describe any capstone experiences, milestone, and/or additional requirements.

N/A

F. Concentrations

- i. Are any concentrations to be established under this degree program? No, concentrations will not be established.
- ii. If yes, are concentrations required? (Select One)
- iii. List courses & additional requirements for the proposed concentration(s)

Concentration Name	Total credit hours	Core/Required Courses for Concentration (Prefix, # & Title)	Total Core credit hours	Program Specific Electives (include course name and prefix)	Total Elective credit hours	Additional Requirements (i.e. milestones, capstones)

4. New Course Development

A. Will a new course prefix (es) be required for this degree program? No

If yes, list prefix name(s) (i.e. ENG- English):

Note: A request for a New Prefix form must be completed for each new prefix required and submitted with this proposal: New prefix request form.

B. New Courses Required for Proposed Degree Program

List all new courses required for this program, including course prefix, number and course description.

N/A

Note: New course requests must be submitted electronically via Curriculum ChangeMaker and undergo all internal university review and approval steps including those at the unit, college, and university levels.

5. Program Need

Explain why the university needs to offer this program (include target audience and market).

The Bachelor of Science in computational forensics is multidisciplinary and encompasses physical, biological and social sciences with a focus on statistics and computation. Students investigate specific forensic problems using statistical, computing and mathematics, with the main goal of advancing forensic knowledge and capabilities. Students will study and develop quantitative and computational methods that assist basic and applied research efforts in forensic science, establish or prove scientific basis in investigative procedures, and support forensic examiner casework. Through modeling, computer simulations, and computer-based analysis and recognition, students will gain an in-depth understanding of the forensic science discipline, the scientific method, and the systematic approach to forensic science.

Market need: The Occupational Outlook Handbook (The Bureau of Labor Statistics, United States Department of Labor) lists forensic scientists growing "much faster than average" over the next eight years (through 2024). As market research, we have not identified any degree programs in computational forensics. However, articles by the National Institute of Standards and Technology together with a growing number of conferences and workshops (for example, <http://www.icpr2016.org/site/session/7th-international-workshop-on-computational-forensics-iwcf-2016/> and <https://www.samsi.info/programs-and-activities/research-related-courses/spring-2016-statistics-and-applied-mathematical-science-aspects-of-forensic-science-part-2/>) suggests that the field is growing rapidly and will soon have a strong need. With

ASU's reputation in the field, the presence of an already successful bachelor of science in forensic science, and comparatively low program cost, we believe this program would be popular and would further enhance ASU's visibility in this field.

6. Impact on Other Programs

List other academic units that might be impacted by the proposed program and describe the potential impact (e.g., how the implementation of this program might affect student headcount/enrollment, student recruitment, faculty participation, course content, etc. in other programs). Attach letters of collaboration/support from impacted programs.

None. We believe this degree will appeal to students already bound for programs within the School of Mathematical and Natural Sciences but have an interest in forensics together with strong quantitative skills.

7. Projected Enrollment

How many new students do you anticipate enrolling in this program each year for the next five years?

5-YEAR PROJECTED ANNUAL ENROLLMENT					
	1st Year	2nd Year (Yr 1 continuing + new entering)	3rd Year (Yr 1 & 2 continuing + new entering)	4th Year (Yrs 1, 2, 3 continuing + new entering)	5th Year (Yrs 1, 2, 3, 4 continuing + new entering)
Number of Students Majoring (Headcount)	15	25-30	50	70	90

8. Accreditation or Licensing Requirements

If applicable, provide the names of the external agencies for accreditation, professional licensing, etc. that guide your curriculum for this program, if any. Describe any requirements for accreditation or licensing.

None

9. Faculty & Staff

A. Current Faculty

List the name, rank, highest degree obtained, and area of specialization or expertise of all current faculty who will teach in the program, and estimate their level of involvement.

- Erika Camacho, Associate Professor, Ph.D., Applied Math, 25%
- Joel Nishimura, Assistant Professor, Ph.D., Applied Math, 25%
- Karen Watanabe, Associate Professor, Ph.D., Applied Math, 25%
- Stephen Wirkus, Professor, Ph.D., Applied Math, 25%
- Jennifer Broatch, Assistant Professor, Ph.D., Statistics, 25%
- Michelle Mancenido, Assistant Professor, Ph.D., Statistics, 25%
- Anthony Falsetti, Professor of Practice, Ph.D., Forensic Science, 25%
- Kimberly Kobojek, Clinical Associate Professor, M.S., Forensic Science, 25%
- Sree Kanthaswamy, Associate Professor, Ph.D., Forensic Science, 25%
- Suzanne Dietrich, Professor, Ph.D., Applied Computing, 25%
- Yasin Silva, Associate Professor, Ph.D., Applied Computing, 25%
- Kuai Xu, Associate Professor, Ph.D., Applied Computing, 25%

B. New Faculty

Describe the new faculty hiring needed during the next three years to sustain the program. List the anticipated hiring schedule and financial sources for supporting the addition of these faculty members.

No new faculty will need to be hired as all the courses we need to teach already exist and are being taught.

C. Administration of the Program

Explain how the program will be administered for the purposes of admissions, advising, course offerings, etc. Discuss the available staff support.

This program will overlap with the BS Forensic Science, BS Applied Computing, BS Applied Mathematics, and BS Statistics and thus the support for those existing programs will make additional administration minimal.

10. Resources (necessary to launch and sustain the program)**A. Required Resources**

Describe any new resources required for this program's success, such as new support staff, new facilities, new library resources, new technology resources, etc.

None

B. Resource Acquisition

Explain how the resources to support this program will be obtained.

N/A

APPENDIX
OPERATIONAL INFORMATION FOR UNDERGRADUATE PROGRAMS
 (This information is used to populate the Degree Search/catalog website.)

1. Program Name (Major): Computational Forensics

2. Marketing Description (*Optional. 50 words maximum. The marketing description should not repeat content found in the program description*)

3. Program Description (*150 words maximum*)

The BS in computational forensics is a multidisciplinary degree program that encompasses areas of physical, biological and social sciences, with an additional focus on statistics and computation. Students investigate specific forensic problems using statistics, computing and mathematics, with the main goal of advancing their forensic science knowledge and capabilities. Students in the computational forensics program study and develop the quantitative and computational methods that assist basic and applied research efforts in forensic science, establish or prove scientific basis in investigative procedures, and support forensic examiner casework. Through modeling, computer simulations and computer-based analysis and recognition, students gain an in-depth understanding of the forensic science discipline, the scientific method and the systematic approach to forensic science.

4. Contact and Support Information

Building code and room number: (<i>Search ASU map</i>)	FAB 100
Program office telephone number: (<i>i.e. 480/965-2100</i>)	602/543-3000
Program Email Address:	MNSadvising@asu.edu
Program Website Address:	https://newcollege.asu.edu/computational-forensics

5. Delivery/Campus Information Options: On-campus only (ground courses and/or iCourses)

Note: Once students elect a campus or online option, students will not be able to move between the on-campus and the ASU Online options. Approval from the Office of the University Provost and Philip Regier (Executive Vice Provost and Dean) is required to offer programs through ASU Online. Please contact Ed Plus then complete the ASU Online Offering form in Curriculum ChangeMaker to begin this request.

6. Campus/Locations indicate all locations where this program will be offered.

Downtown Phoenix Polytechnic Tempe Thunderbird West Other: _____

7. Additional Program Description Information

A. Additional program fee required for this program? No
 B. Does this program have a second language requirement? No

8. Career Opportunities

Provide a brief description of career opportunities available for this degree program. (150 words maximum)

The demand for forensic scientists is increasing according to the U.S. Bureau of Labor Statistics. With computation and statistics driving many technological advances, this interdisciplinary degree prepares students for employment in a range of jobs or to continue on to advanced study of quantitative programs in graduate school.

9. Additional Freshman Admission Requirements

If applicable, list any freshman admission requirements that are higher than and/or in addition to the university minimum undergraduate admission requirements.

N/A

10. Additional Transfer Admission Requirements

If applicable, list any admission requirements for transfer students that are higher than and/or in addition to the university minimum undergraduate transfer admission requirements.

N/A

11. Change of Major Requirements

Standard change of major text is as follows: A current ASU student has no additional requirements for changing majors. Students should refer to <https://students.asu.edu/changingmajors> for information about how to change a major to this program.

If applicable, list any additional requirements for students who may change their major into this program.

None

12. Keywords

List all keywords used to search for this program (limit 10). Keywords should be specific to the proposed program.

computation, forensic science, applied math, applied mathematics, mathematics, statistics, computing, quantitative science

13. Advising Committee Code

List the existing advising committee code to be associated with this degree.

UGNCMS

Note: If a new advising committee needs to be created, please complete the following form: [Proposal to create an undergraduate advising committee](#)

14. First Required Math Course

List the first math course required in the major map.

MAT 270 Calculus with Analytic Geometry I

15. WUE Eligible

Has a request been submitted to the Provost by the Dean to consider this degree program as eligible for WUE?

Yes

Note: No action will be taken during the implementation process with regards to WUE until approval is received from the Provost.

16. Math Intensity

a. List the highest math course required on the major map. (This will not appear on Degree Search.)

MAT 343 Applied Linear Algebra

b. What is the math intensity as indicated by the highest math required on the major map? Math intensity categorization can be found here: <https://catalog.asu.edu/mathintensity>

Substantial

17. ONET Codes

Identify ONET/SOC codes that should be displayed on Degree Search. ONET/SOC codes can be found at: <http://www.onetonline.org/crosswalk/SOC/>. Alternate titles displayed on Degree Search may vary and can be found at: <https://catalog.asu.edu/alternate-career-titles>.

19-4092.00	.....	15-2041.01	.....
15-2099.00	.....	43-9111.00	.....
15-1132.00	.....	15-1111.00	.....
15-2091.00	.....	11-3021.00	.....
15-2041.00	.....		.....

18. Area(s) of Interest

A. Select **one (1)** primary area of interest from the list below that applies to this program.

- | | |
|---|--|
| <input type="checkbox"/> Architecture & Construction | <input type="checkbox"/> Health & Wellness |
| <input type="checkbox"/> Arts | <input type="checkbox"/> Humanities |
| <input type="checkbox"/> Business | <input type="checkbox"/> Interdisciplinary Studies |
| <input type="checkbox"/> Communications & Media | <input type="checkbox"/> Law, Justice, & Public Service |
| <input checked="" type="checkbox"/> Computing & Mathematics | <input type="checkbox"/> STEM |
| <input type="checkbox"/> Education & Teaching | <input type="checkbox"/> Science |
| <input type="checkbox"/> Engineering & Technology | <input type="checkbox"/> Social and Behavioral Sciences |
| <input type="checkbox"/> Entrepreneurship | <input type="checkbox"/> Sustainability |
| <input type="checkbox"/> Exploratory | |




B. Select **one (1)** secondary area of interest from the list below that applies to this program.





- | | |
|--|--|
| <input type="checkbox"/> Architecture & Construction | <input type="checkbox"/> Health & Wellness |
| <input type="checkbox"/> Arts | <input type="checkbox"/> Humanities |
| <input type="checkbox"/> Business | <input type="checkbox"/> Interdisciplinary Studies |
| <input type="checkbox"/> Communications & Media | <input type="checkbox"/> Law, Justice, & Public Service |
| <input type="checkbox"/> Computing & Mathematics | <input type="checkbox"/> STEM |
| <input type="checkbox"/> Education & Teaching | <input checked="" type="checkbox"/> Science |
| <input type="checkbox"/> Engineering & Technology | <input type="checkbox"/> Social and Behavioral Sciences |
| <input type="checkbox"/> Entrepreneurship | <input type="checkbox"/> Sustainability |
| <input type="checkbox"/> Exploratory | |




2018 - 2019 Major Map



Computational Forensics, (Proposed)

School/College:
FKGTWNT

Term 1 0 - 15 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 ACO 101: Introduction to Computer Science (CS)	3	C	<ul style="list-style-type: none"> • An SAT, ACT, Accuplacer, IELTS, or TOEFL score determines placement into first-year composition courses. • Mathematics Placement Assessment score determines placement in mathematics course. • ASU 101 or college-specific equivalent First-Year Seminar required of all freshman students. NEW 101 satisfies this requirement. • IAS 300 (3 credit hours) is required for all transfer students in place of NEW 101. • Select your career interest area and play me3@ASU.
 MAT 270: Calculus with Analytic Geometry I (MA)	4	C	
ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition	3	C	
FOR 105: Physical Evidence and the Crime Scene (SQ)	4	C	
NEW 101: The ASU New College Experience	1		
Term hours subtotal:	15		

Term 2 15 - 29 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 ACO 102: Object-Oriented Programming (CS)	3	C	
 MAT 271: Calculus with Analytic Geometry II (MA)	4	C	
ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition	3	C	
FOR 106: Biology Behind the Crime Scene (SQ)	4	C	
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:	14		

Term 3 29 - 45 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 MAT 272: Calculus with Analytic Geometry III (MA)	4	C	<ul style="list-style-type: none"> • Develop your research skills.
ACO 201: Data Structures and Algorithms (CS)	3	C	
STP 280: Probability and Statistics for Researchers (CS)	3	C	
Humanities, Arts and Design (HU)	3		
Social-Behavioral Sciences (SB) AND Global Awareness (G)	3		
 Complete First-Year Composition requirement. Complete Mathematics (MA) requirement.			
Term hours subtotal:	16		

Term 4 45 - 60 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 MAT 275: Modern Differential Equations (MA)	3	C	<ul style="list-style-type: none"> • Explore an internship, ASU study abroad, or an IGLE international experience.
ACO 240: Introduction to Programming Languages	3	C	
STP 281: Statistical Analysis for Researchers	3	C	
Literacy and Critical Inquiry (L)	3		

Social-Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C) 3

Term hours subtotal: 15

Term 5 60 - 75 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
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★ MAT 243: Discrete Mathematical Structures OR MAT 300: Mathematical Structures (L)	3	C
MAT 343: Applied Linear Algebra	3	C
STP 310: Design and Analysis of Experiments	3	C
STP 311: Regression and Time Series Analyses	3	C
Upper Division Literacy and Critical Inquiry (L) OR IAS 300: Adult Career Development (L or SB)	3	

Term hours subtotal: 15

- IAS 300 (3 credit hours) is required for all transfer students.
- Develop your professional online presence

Term 6 75 - 90 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
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★ MAT 350: Techniques and Applications of Applied Mathematics	3	C
STP 450: Nonparametric Statistics	3	C
Computational Forensics Elective	3-4	C
Complete 2 courses: Upper Division Elective	6	

Term hours subtotal: 15-16

- Use Handshake to research employment opportunities

★ Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).

Term 7 90 - 105 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
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★ ACO 320: Database Systems	3	C
Computational Forensics Elective	3-4	C
Humanities, Arts and Design (HU) AND Historical Awareness (H)	3	
Upper Division Humanities, Arts and Design (HU) OR Upper Division Social-Behavioral Sciences (SB)	3	
Upper Division Elective	3	

Term hours subtotal: 15-16

Term 8 105 - 120 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
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★ FOR 350: Computer Forensics	3	C
ACO 423: Data Science	3	C
Computational Forensics Elective	3-4	C
Complete 2 courses: Upper Division Elective OR ACO 484: Internship OR FOR 484: Internship OR MAT 484: Internship OR STP 484: Internship	6	

Term hours subtotal: 15-16

Hide Course List(s)/Track Group(s)

Computational Forensics Elective

BIO 181: General Biology I (SQ)

BIO 182: General Biology II (SG)

CHM 113: General Chemistry I (SQ)

CHM 116: General Chemistry II (SQ)

CHM 233: General Organic Chemistry I AND
CHM 237: General Organic Chemistry
Laboratory I

CHM 234: General Organic Chemistry II
AND CHM 238: General Organic Chemistry
Laboratory II

FOR 286: Principles of Forensic Science

FOR 402: Forensic Biology

LSC 347: Fundamentals of Genetics AND
LSC 348: Fundamentals of Genetics
Laboratory

MAT 421: Applied Computational Methods
(CS)

MAT 450: Mathematical Models in Biology

MAT 452: Introduction to Chaos and
Nonlinear Dynamics

Total Hours: 120

Upper Division Hours: 45 minimum

Major GPA: 2.00 minimum

Cumulative GPA: 2.00 minimum

Total hrs at ASU: 30 minimum

Hrs Resident Credit for

Academic Recognition: 56 minimum

Total Community College Hrs: 64 maximum

Total College Residency Hrs: 12 minimum

General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Arts and Design (HU)
- Social-Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed on the major map are current for the 2018 - 2019 academic year.

Academic Program Assessment Plan

BS in Computational Forensics*Status:UOEEE Provisional Approval*

Comments:

Element Outcome Measure Description

Outcome	1		(Statistics) Design and implement robust statistical studies based on forensic science problems and data.
Measure	1	1	Students' ability to design and analyze efficient scientific experiments will be assessed by STP 310, Design/Analysis of Experiments.
PC	1	1	The measure will be met if at least 70% of students earn a C or better on the final exam in STP 310.
Measure	1	2	Students' ability to formulate and test statistical hypotheses and provide valid and robust recommendations will be assessed by the final grade in STP 281, Statistical Analysis for Researchers.
PC	1	2	The measure will be met if at least 70% of students earn a C or better on the fin
Measure	1	3	Students' ability to formulate and validate robust predictive models will be assessed by STP 311, Regression and Time Series Analysis.
PC	1	3	The measure will be met if at least 70% of students earn a C or better on the fin
Outcome	2		(Applied Computing) Implement a computing solution for data-driven problems in the forensic sciences.
Measure	2	1	Students' ability to program in several paradigms to solve problems by applying known computing algorithms and approaches will be assessed by ACO 240, Introduction to Progra
PC	2	1	The measure will be met if at least 70% of students earn a C or better on the fin
Measure	2	2	Students' ability to visualize big data sets, implement predictive machine learning models, and draw conclusions from data will be assessed in ACO 423, Data Science.
PC	2	2	The measure will be met if at least 70% of students earn a C or better on the fin
Measure	2	3	Students' ability to design, store, query, and exchange persistent data will be assessed by ACO 320, Database Systems.
PC	2	3	The measure will be met if at least 70% of students earn a C or better on the fin

Element Outcome Measure Description

Outcome	3		(Forensic Science) Demonstrate sufficient knowledge of the current best practices of forensic science, including computing sciences. Best practices are defined as the procedures by which forensic scientists self-evaluate, establish best practices for the laboratory and the individual and assist the courts, and the details of the training required for full certification a
Measure	3	1	The student's ability to demonstrate sufficient knowledge of the current best practices of forensic science will be assessed by FOR 286, Principles of Forensic Science.
PC	3	1	The measure will be met if at 70% of the students earn a C or better on the final
Measure	3	2	The student's ability to demonstrate sufficient knowledge in the current best practices of computing forensic science in FOR 350 Computer Science for Forensic Science.
PC	3	2	The measure will be met if at 70 % of the students earn a C or better on the final exam in FOR 350.
Outcome	4		(Math) Graduates of the Computational Forensics degree will be able to use mathematical techniques to understand digital images.
Measure	4	1	Students' ability to understand and address image processing will be assessed in MAT 350, Techniques/Applications of Applied Math.
PC	4	1	The measure will be met if 70% or more of students will score a 70% or higher on the midterm exam of MAT 350.
Measure	4	2	Students' ability to analyze to formulate the mathematics of digital signal processing will also be assessed in MAT 350.
PC	4	2	The measure will be met if 70% or more of the students will have completed one or more MAT 350 homework assignments on the mathematics of digital signal processing at a level of satisfactory or better.
Measure	4	3	Students' ability to characterize and identify linear independence of vectors and elements will also be assessed in MAT 350.
PC	4	3	The measure will be met if 70% or more of students will have completed one or more homework assignments on linear independence at a level of satisfactory or better in MAT 350.

If you have questions, please e-mail assessment@asu.edu or call UOEEE at (480) 965-9790.

May 9, 2018

To: Todd Sandrin, Dean and Professor
New College of Interdisciplinary Arts and Sciences

From: Lara Ferry, Director and Professor
School of Mathematics and Natural Sciences

Subject: BS Computational Forensics

Attached please find the Proposal to Establish the BS Computational Forensics. This interdisciplinary proposal is a joint effort between faculties within the School of Mathematics and Natural Sciences.

This proposal was approved by the New College Undergraduate Curriculum Committee. Please approve this proposal and forward it for further approvals.