PROPOSAL TO ESTABLISH A NEW UNDERGRADUATE DEGREE PROGRAM

This template is to be used only by programs that have received specific written approval from the Provost's office to proceed with internal proposal development and review. The proposal template should be completed in full and submitted to the University Provost's Office [mailto: curriculumplanning@asu.edu]. It must undergo all internal university review and approval steps including those at the unit, college and university levels. A program **may not** be implemented until the Provost's Office notifies the academic unit that the program may be offered.

College/School/Institute:	Herberger Institute for Design and the Arts
Department/Division/School:	School of Arts, Media and Engineering
Proposing faculty group (*if applicable*):	
Are two or more academic units collaborating on this program?	No, this is not a joint degree program

If "Yes", list all the additional college(s)/school(s)/institute(s) that will be involved in the development and resources for the degree program by offering courses, faculty or facilities. Please note: This question does not refer to official joint degree programs. Official joint degree programs are ones in which the degree is jointly conferred by two colleges. If the program is jointly conferred, please complete the Proposal to Establish a New Joint Undergraduate Degree Program.

Degree type:	BS-Bachelor of Science
If other; provide degree type title and proposed abbreviation:	
Name of degree program (major):	Digital Culture
Are any concentrations to be established under this degree program?	Yes, concentrations will be established.
Is a program fee required?	Yes, a program fee is required.
What is the first catalog year available for students to select on the undergraduate application for this this program?	2019-20

Delivery method and campus or location options: select all locations that apply

☐ Downtown Phoenix ☐ Polytechnic ☒ Tempe ☐ Thunderbird ☐ West ☐ Other: _____

☐ **Both** on-campus **and** ☐ ASU Online* - (check applicable campus(es) from options listed above)

☐ ASU Online only (all courses online and managed by ASU Online)

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.

Proposal Contact

Name:	Althea Pergakis	**Title:**	Education Coordinator
Phone number:	480-965-1010	**Email:**	althea.pergakis@asu.edu

DEAN APPROVAL(S)

This proposal has been approved by all necessary unit and College/School levels of review. I recommend implementation of the proposed organizational change.

College/School/Division Dean name: Steven J. Tepper

Signature: _____ **Date:** 3/21/2018

College/School/Division Dean name:
(if more than one college involved)

Signature: _____ **Date:** 0/ /20

Note: An electronic signature, an email from the dean or dean's designee, or a PDF of the signed signature page is acceptable.

1. Purpose and Nature of Program

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

The Bachelor of Science in Digital Culture recognizes the transformative role of digital technology in cultural practice, society, and day-to-day life. The degree emphasizes the strongest emerging trends in cultural media: systems and processes that integrate digital technology with the everyday physical human experience. The Bachelor of Science in Digital Culture is designed for students who have an interest and desire to undertake a more advanced study and practice with creating technical systems.

Bachelor of Science in Digital Culture students will have the opportunity to develop the technical skills to create and program media within a curriculum that emphasizes the cultural and social impacts of these new forms in areas as diverse as sustainability, health care, and adaptive learning.

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 BAMM 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	26
Core/required courses	36
Program specific electives	39
Additional requirements	6
Other; please explain	6
Total	**120**

C. Core/Required Courses

i. Total required and/or core course credit hours

36

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

AME 111: Introduction to Digital Culture (3)

AME 112: Computational Thinking for Digital Culture (3)

AME 130: Prototyping Dreams (3)

AME 210: Media Editing (3)

AME 230: Programming for the Media Arts (3)

CPI 111: Game Development 1 (3)

OR CSE 205: Object-Oriented Programming and Data Structures (CS) (3)

CPI 211: Game Development II OR

CSE 240: Introduction to Programming Languages (3)

Upper Division Media Processing Elective (3)

CPI 311: Game Engine Development OR
CPI 360: Decision Making and Problem Solving OR

CSE 310: Data Structures and Algorithms (3)

CSE 110: Principles of Programming (CS) (3)

MAT 210: Brief Calculus (3)

MAT 243: Discrete Mathematical Structures (3)

D. Program Specific Electives

i. Total required program elective credit hours

39

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

Upper Division Media Processing electives (12 credit hours) from:

CPI 310: Web-Based Information Management Systems (3)

CPI 321: Fundamentals of Game Art (3)

CPI 394: Special Topics (3)

CPI 411: Graphics for Games (3)

CPI 421: 3-D Modeling and Texturing (3)

CPI 462: Design for Learning in Virtual Worlds (3)

CPI 494: Special Topics (3)

CSE 360: Introduction to Software Engineering (3)

CSE 394: Special Topics (3)

CSE 463: Introduction to Human Computer Interaction (3)

CSE 470: Computer Graphics (3)

CSE 494: Special Topics (3)

IAP 362: Games and Narratology (3)

IAP 462: Games and Play (3)

IEE 431: Engineering Administration (L) (3)

SER 431: Advanced Graphics (3)

Digital Culture Studies (24 credit hours; min 18 upper-division) from:

AME 194: Special Topics (3)

AME 220: Programming for the Web (3)

AME 244: Introduction to Interactive Environments (3)

AME 294: Special Topics (3)

AME 310: Media Literacies and Composition (3)

AME 330: Digital-Physical Systems (3)

AME 340: Compositional and Computational Principles for Media Arts (3)

AME 394: Special Topics (3)

AME 411: Advanced Interactive Sound (3)

AME 430: Mac Development for Media Arts (3)

AME 435: Mobile Development (3)

AME 444: Media Installations (3)

AME 470: Programming for Social and Interactive Media (3)

AME 494: Special Topics (3)

ANP 394: Digital Modeling and Fabrication (3)

ART 116: Introduction to Digital Media (3)

ART 206: Digital Photography I (3)

ART 217: Introduction to Computer Animation (3)

ART 218: 3D Tools (3)

ART 378: Digital Textiles (3)

ART 494: Topic: Visual Prototyping (3)

DCE 294: Topic: HybridAction:Physical Intelligence in Digital Culture (3)

FMP 240: Introduction to Animation for Film (3)

FMP 394: Topic: Non-Linear Editing for Film and Media (3)

IAP 103: Foundations I: Interdisciplinary Digital Media (3)

IAP 104: Foundations I: Fundamentals of Sound Art (3)

MDC 211: Introduction to Digital Sound (3)

MDC 311: Composing and Performing for Hybrid Ensembles (3)

Media Engineering (3 credit hours) from:

AME 410: Interactive Materials (3) OR AME 430: Mac Development for Media Arts (3) OR EEE 307: Signal Processing for Digital Culture (3)

E. Additional Program Requirements, if any:

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

Students must have an average GPA of 3.00 or better in the following classes after their first year in order to pass their first year milestone: AME 111, AME 112, AME 130, AME 210 and AME 230

Students must take a 6-credit capstone experience (AME 485: Digital Culture Capstone I and AME 486: Digital Culture Capstone II). AME 486: Digital Culture Capstone II can be replaced with AME 484: Internship for this requirement, with department permission. Students must have an overall GPA of 3.00 or better to graduate.

F. Concentrations

i. Are any concentrations to be established under this degree program? **Yes, concentrations will be established.**

ii. If yes, are concentrations required? Yes, concentrations will be required.

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)
Media Processing	120	See above list (section C) for detailed requirements	36	See above list (section D) for elective list	39	AME 485, Digital Culture I Capstone (3 cr.) AME 486 Digital Culture Capstone II (3 cr) OR AME 484 Internship (3 cr.)

4. New Course Development

A. Will a new course prefix (es) be required for this degree program? (Select One)
If yes, list prefix name(s) (i.e. ENG- English): No

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 Digital Culture (Media Processing) will be a desirable and a more technique focused alternative to the current concentration option of the Bachelor of Arts in Digital Culture (Media Processing). The program will attract students who are interested in new technology and media in an interdisciplinary format.

Currently, the unit offers the BA in Digital Culture (Media Processing), the most popular concentration in the degree with 61 students. The BS in Digital Culture is designed to replace the existing degree and fulfill student demand for a program that allows them to extend their technical abilities beyond the current technology and math core of the degree. (Prospective students, who are ready and able to explore the emerging trends in digital culture from the perspective of the advanced algorithms, processes, and

technologies that make these systems work, will be attracted to this degree with its enhanced math and programming core, over the existing BA in Digital Culture (Media Processing) since these students generally wish to pursue careers in a technical or science related field. Prospective students will be attracted to the Bachelor of Science in Digital Culture over a similar BA degree as the Bachelor of Science is typically understood to provide more in-depth training in technological and scientific field by employers in techno-centric industries such as CISCO, Google, Apple, Microsoft, Pixar, and Industrial Light and Magic. The degree will allow the program to better attract and retain these students.

Disestablishment of the BA in Digital Culture (Media Processing) is requested at the same time as the establishment of the new degree. All other concentrations will remain under the BA in Digital Culture.

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.

The School of Electrical, Computer and Energy Engineering and School of Computing, Informatics, and Decision Systems Engineering have partnered with the existing BA in Digital Culture (Media Processing) for several years. Since the BS in Digital Culture will replace the BA Digital Culture, we foresee minimal impact to these programs with the new BS in Digital Culture.

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)	90	110	125	150	175

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.

n/a

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.

We anticipate our students will work with as many AME faculty as possible toward the goals of providing a truly interdisciplinary program. All faculty listed will have extensive involvement with the degree.

Grisha Coleman, Associate Professor, MFA - specialization in movement, somatics and technology

Edward Finn, Associate Professor, PhD - specialization in futurism and fiction

Lauren Hayes, Assistant Professor, PhD - specialization in digital composition, performance and improvisation

Todd Ingalls, Research Professor, MM - specialization in interactive sonification and embodied interaction

Suren Jayasuriya, Assistant Professor, PhD - specialization in computational imaging and photography

Stacey Kuznetsov, Assistant Professor, PhD - specialization in human-computer interaction and citizen science

Byron Lahey, Clinical Assistant Professor, PhD - specialization in experiential media

Robert LiKamWa, Assistant Professor, PhD - specialization in mobile computing and vision systems

Stacey Moran Nocek, Lecturer, PhD - specialization in critical theory and technofeminism

Adam Nocek, Assistant Professor, PhD - specialization in philosophy of technology and science

Loren Olson, Clinical Associate Professor, BS - specialization in mobile development and animation

Garth Paine, Associate Professor, PhD - specialization in acoustic ecology and digital sound

Jessica Rajko, Assistant Professor, MFA - specialization in somatically informed dance and embodied technologies

Xin Wei Sha, Director and Professor, PhD - specialization in responsive environments

Kimberlee Swisher, Lecturer, MM - specialization in music technologies and K-12 education

David Tinapple, Associate Professor, MFA – specialization in interactive visual art and data visualization

Pavan Turaga, Associate Professor, PhD - specialization in computer vision

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.

An Assistant Professor of Urban Infrastructure was hired Fall 2018. The unit is seeking permission to hire an Asst. Professor of Expressive Mechatronics for Fall 2019. (Support was granted for Fall 2018, but the search went unfilled and the request is for a redefinition of the position to be funded through FTE growth and the Provost.)

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.

Admissions are administered by the Herberger Institute of Design and the Arts. Advising is provided through the Herberger Institute's Office of Student Success. Currently, two advisors in the Office of Student Success support Digital Culture students, however, all are cross-trained to provide academic advising as needed. As the program grows, more courses and faculty to support these classes, will be added. Staff support in the unit includes 2 education coordinators, who schedule courses, plan events, and track student needs. A technical staff member supports the concentration by managing shared resources including a computing and media lab, electronics workshop, fabrication lab, and shared equipment pool.

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.

Current resources are sufficient to support this new degree since resources will be reallocated from the existing BA in Digital Culture (Media Processing). As the program grows and expands, additional resources are expected to come from enrollment growth.

B. Resource Acquisition

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

Resources will be reallocated from the disestablished BA in Digital Culture (Media Processing).

ARIZONA STATE UNIVERSITY

PROPOSAL TO ESTABLISH A NEW UNDERGRADUATE DEGREE PROGRAM

APPENDIX
OPERATIONAL INFORMATION FOR UNDERGRADUATE PROGRAMS

(This information is used to populate the Degree Search/catalog website.)

1. **Program Name (Major):** BS in Digital Culture (Media Processing)

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

   Interested in exploring emerging trends in digital culture in an interdisciplinary format? Intrigued to learn the processes and technologies that make these systems work? The BS in digital culture provides an enhanced programming core to provide graduates the ability to work in a range of technological or scientific fields.

3. **Program Description** (150 words maximum)

   The BS program in digital culture with a concentration in media processing is for students wishing to specialize in media processing aspects of new media. This program seeks to understand the transformative role of digital technology in cultural practice, society and day-to-day life, emphasizing the strongest emerging trends in cultural media: systems and processes that integrate digital technology with the everyday physical human experience. Students in the Bachelor of Science program complement the knowledge acquired through digital culture coursework with a more advanced understanding of the programming, data structures, signals processing and system architecture aspects of new media.

4. **Contact and Support Information**

Building code and room number: *(Search ASU map)*	STAUF B217
Program office telephone number: (*i.e. 480/965-2100*)	480/965-9438
Program Email Address:	digitalculture@asu.edu
Program Website Address:	https://digitalculture.asu.edu

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? Yes
   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)
   Career opportunities include positions in the following fields: graphic design, design, audio, visual media, computer science, technology, technical writing, creative writing and comparative literature.
   Digital Culture alumni have obtained careers as: graphic designers, 3D modelers, special effects artists, visual media artists, programmers, engineers, software specialists with Apple, Microsoft, CISCO, Industrial Light and Sound, PIXAR, and other techno-centric companies.

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.

Students must have a 3.00 GPA to transfer into the digital culture program.

12. Global Opportunities

With over 250 programs in more than 65 countries (ranging from one week to one year), study abroad is possible for all ASU students wishing to gain global skills and knowledge in preparation for a 21st-century career. Students earn ASU credit for completed courses, while staying on track for graduation, and may apply financial aid and scholarships toward program costs. https://mystudyabroad.asu.edu/

Additionally, The School of Arts, Media and Engineering also offers a summer study abroad to the Netherlands. Interested parties (regardless of major) should explore the program Design and Society in the Nethlerlands: Visualizing the Invisible on the study abroad website. http://links.asu.edu/VisualizingtheInvisible

13. Keywords

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

digital media, digital culture, computing, art, media arts, interactive systems, computer science, engineering, technology, electronic arts

14. Advising Committee Code

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

UGHI01

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

15. First Required Math Course

List the first math course required in the major map.

MAT 210

16. WUE Eligible

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

No

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

17. Math Intensity

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

MAT 243

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

18. 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.

15-1111.00	.....	15-1131.00	.....
15-1132.00	.....	15-1133.00	.....
15-1199.09	.....	15-1199.11	.....
27-1014.00	.....	27-1019.00	.....
27-3099.00	.....	27-4011.00	.....

19. Area(s) of Interest

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

- ☐ **Architecture & Construction**
- ☒ **Arts**
- ☐ **Business**
- ☐ **Communications & Media**
- ☐ **Computing & Mathematics**
- ☐ **Education & Teaching**
- ☐ **Engineering & Technology**
- ☐ **Entrepreneurship**
- ☐ **Exploratory**
- ☐ **Health & Wellness**
- ☐ **Humanities**
- ☐ **Interdisciplinary Studies**
- ☐ **Law, Justice, & Public Service**
- ☐ **STEM**
- ☐ **Science**
- ☐ **Social and Behavioral Sciences**
- ☐ **Sustainability**

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

- ☐ **Architecture & Construction**
- ☐ **Arts**
- ☐ **Business**
- ☐ **Communications & Media**
- ☐ **Computing & Mathematics**
- ☐ **Education & Teaching**
- ☒ **Engineering & Technology**
- ☐ **Entrepreneurship**
- ☐ **Exploratory**
- ☐ **Health & Wellness**
- ☐ **Humanities**
- ☐ **Interdisciplinary Studies**
- ☐ **Law, Justice, & Public Service**
- ☐ **STEM**
- ☐ **Science**
- ☐ **Social and Behavioral Sciences**
- ☐ **Sustainability**

2019 - 2020 Major Map

Digital Culture (Media Processing), (Proposed)

School/College:
WSFDMJI

Term 1 0 - 16 Credit Hours Critical course signified by	Hours	Minimum Grade	Notes
AME 111: Introduction to Digital Culture (CS)	3	C	• 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. Digital Culture students complete AME 101 to fulfill this requirement.
AME 101: ASU Digital Culture Experience	1	C	
Complete 2 courses: AME 112: Computational Thinking for Digital Culture OR AME 130: Prototyping Dreams (L) OR AME 210: Media Editing OR AME 230: Programming for the Media Arts (CS)	6	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	
MAT 210: Brief Calculus (MA)	3	C	
Maintain 3.00 GPA in Major Courses.			
Minimum 2.50 GPA ASU Cumulative.			
Term hours subtotal:	16		

Term 2 16 - 31 Credit Hours Critical course signified by	Hours	Minimum Grade	Notes
Complete 2 courses: AME 112: Computational Thinking for Digital Culture OR AME 130: Prototyping Dreams (L) OR AME 210: Media Editing OR AME 230: Programming for the Media Arts (CS)	6	C	• All Digital Culture majors must have a minimum 3.00 Digital Culture GPA at the end of Term 2 to continue in the program. If a student's Digital Culture GPA is below a 3.00, the student will be placed on a probationary status for one term. If the student is not successful in raising their Digital Culture GPA to a 3.00 after the probationary term, the student will not be able to continue in the Digital Culture program. • Join a student club or professional organization.
CSE 110: Principles of Programming (CS)	3	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	
Social-Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C)	3		
Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Milestone: GPA First-Year Review			
Term hours subtotal:	15		

Term 3 31 - 47 Credit Hours Critical course signified by	Hours	Minimum Grade	Notes
CPI 111: Game Development I (CS) OR CSE 205: Object-Oriented Programming and Data Structures (CS)	3	C	• Build your skills.
Digital Culture Studies	3	C	
Humanities, Arts and Design (HU) AND Global Awareness (G)	3		
Natural Science - Quantitative (SQ) (PHY 101 recommended)	4		
Social-Behavioral Sciences (SB)	3		
Complete Mathematics (MA) requirement.			
Complete First-Year Composition requirement.			
Term hours subtotal:	16		

		Minimum	

Term 4 47 - 62 Credit Hours Critical course signified by	Hours	Grade	Notes
Digital Culture Studies	3	C	• Look into Study Abroad options.
CPI 211: Game Development II OR CSE 240: Introduction to Programming Languages	3	C	
MAT 243: Discrete Mathematical Structures	3	C	
Humanities, Arts and Design (HU) AND Historical Awareness (H)	3		
Elective	3		
Term hours subtotal:	15		

Term 5 62 - 78 Credit Hours Necessary course signified by	Hours	Minimum Grade	Notes
Complete 2 courses: Upper Division Digital Culture Studies	6	C	• Keep good documentation of all your projects.
CPI 360: Decision Making and Problem Solving OR CSE 310: Data Structures and Algorithms OR CPI 311: Game Engine Development	3	C	
Upper Division Media Processing Elective	3	C	
Natural Science - Quantitative (SQ) OR Natural Science - General (SG)	4		
Term hours subtotal:	16		

Term 6 78 - 93 Credit Hours Necessary course signified by	Hours	Minimum Grade	Notes
Complete 2 courses: Upper Division Digital Culture Studies	6	C	• Build a digital portfolio. • Explore an internship. Any internship approved for AME 484 Internship credit will automatically fulfill AME 486 Capstone II.
Complete 2 courses: Upper Division Media Processing Elective	6	C	
Upper Division Literacy and Critical Inquiry (L)	3		
Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).			
Term hours subtotal:	15		

Term 7 93 - 108 Credit Hours Necessary course signified by	Hours	Minimum Grade	Notes
AME 485: Digital Culture Capstone I	3	C	• All Digital Culture majors must have a minimum 3.00 Digital Culture GPA to meet graduation requirements. If you are not meeting this GPA requirement, please see your advisor. • Gather professional references.
Upper Division Digital Culture Studies	3	C	
Upper Division Media Engineering	3	C	
Upper Division Media Processing Elective	3	C	
Upper Division Humanities, Arts and Design (HU) OR Upper Division Social-Behavioral Sciences (SB)	3		
Term hours subtotal:	15		

Term 8 108 - 120 Credit Hours Necessary course signified by	Hours	Minimum Grade	Notes
AME 486: Digital Culture Capstone II OR AME 484: Internship	3	C	• Start applying for full-time career opportunities.
Upper Division Digital Culture Studies	3	C	
Upper Division Media Processing Elective	3	C	
Elective	3		
Term hours subtotal:	12		

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

Digital Culture Studies
AME 194: Special Topics
AME 220: Programming for the Web
AME 244: Introduction to Interactive Environments
AME 294: Special Topics
AME 310: Media Literacies and Composition
AME 330: Digital-Physical Systems
AME 340: Compositional and Computational Principles for Media Arts
AME 394: Special Topics
AME 411: Advanced Interactive Sound
AME 430: Mac Development for Media Arts
AME 435: Mobile Development
AME 444: Media Installations
AME 470: Programming for Social and Interactive Media
AME 494: Special Topics
ANP 394: Digital Modeling and Fabrication
ART 116: Introduction to Digital Media
ART 206: Digital Photography I
ART 217: Introduction to Computer Animation
ART 218: 3D Tools
ART 378: Digital Textiles
ART 494: Visual Prototyping
DCE 294: HybridAction:PhysicalIntelligenceinDigitalCulture
FMP 240: Introduction to Animation for Film
FMP 394: Non-Linear Editing for Film and Media
IAP 103: Foundations I: Interdisciplinary Digital Media
IAP 104: Foundations I: Fundamentals of Sound Art
MDC 211: Introduction to Digital Sound
MDC 311: Composing and Performing for Hybrid Ensembles

Media Processing Electives
CPI 310: Web-Based Information Management Systems
CPI 321: Fundamentals of Game Art
CPI 394: Special Topics
CPI 411: Graphics for Games
CPI 421: 3-D Modeling and Texturing
CPI 462: Design for Learning in Virtual Worlds
CPI 494: Special Topics
CSE 360: Introduction to Software Engineering
CSE 394: Special Topics
CSE 463: Introduction to Human Computer Interaction
CSE 470: Computer Graphics
CSE 494: Special Topics
IAP 362: Games and Narratology
IAP 462: Games and Play
IEE 431: Engineering Administration (L)
SER 431: Advanced Graphics

Media Engineering
AME 410: Interactive Materials
AME 430: Mac Development for Media Arts
EEE 307: Signal Processing for Digital Culture

Total Hours: 120

General University Requirements Legend

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

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 2019 - 2020 academic year.

University Office of Evaluation and Educational Effectiveness
Academic Program Assessment Plan

02-12-2019

BS in Digital Culture (Media Processing)

Status:UOEEE Provisional Approval

Comments:UOEEE Provisional Approval.

Element Outcome Measure Description

Outcome	1		Graduates will be able to demonstrate a working understanding of the role of digital media in human culture, through the research and application of learned theories.
Plan_1GenEd	1		Creative Thinking;Global, Historical, Cultural Awareness;Information Literacy;Problem Solving;Teamwork and Collaboration;
Plan_2Concepts	1		Students will utilize iterative design methods, knowledge of experiential media, and problem solving via computational thinking.
Plan_3Competencies	1		Students will design experiential media systems, and demonstrate technical proficiency in related programming environments
Measure	1	1	Demo/mini showcase performance in Capstones I & II
PC	1	1	70% or better of assessed Digital Culture students will receive a C or better on the demonstrations of project at the midpoint of the semester, based on faculty rubric.
Measure	1	2	Final showcase performance in Capstones I & II
PC	1	2	80% or better of assessed Digital Culture students will receive a C or better on the demonstrations of project at the end of the semester, based on faculty rubric.

Outcome	2		Graduates will possess a hands on, collaborative exploration of media arts applications for enhancing evolving human experience, communication and generation of knowledge.
Plan_1GenEd	2		Creative Thinking;Global, Historical, Cultural Awareness;Information Literacy;Language and Literacy;Problem Solving;Teamwork and Collaboration;Verbal Communication;Written Communication;
Plan_2Concepts	2		Students will demonstrate foundational knowledge in iterative design methods, knowledge of experiential media, and problem solving via computational thinking.
Plan_3Competencies	2		Students will demonstrate basic technical proficiency in related programming environments and conceptualize theory.
Measure	2	1	Final project in AME 111: Intro to Digital Culture
PC	2	1	70% or better of assessed Digital Culture students will receive a C or better on the final project of AME 111: Intro to Digital Culture, based on faculty rubric.
Measure	2	2	Surveys of of upper-division instructors
PC	2	2	80% Instructors of Upper Division AME classes will respond that students were "well prepared" or better when entering their classes on a survey.

Element	Outcome	Measure	Description
Outcome	3		Students will integrate knowledge from computer science and engineering practice into media arts applications
Plan_1GenEd	3		Creative Thinking;Critical Thinking;Inquiry and Analysis;Problem Solving;Quantitative Reasoning/Literacy;
Plan_2Concepts	3		Computer Science or Engineering principles
Plan_3Competencies	3		Students will demonstrate knowledge gained from their classes in the Fulton Schools of Engineering, with foundations in Computer Science or Engineering (electrical, computer, or systems) disciplines.
Measure	3	1	Final project of AME 230: Programming for Media Arts
PC	3	1	80% or better of assessed Digital Culture students will receive a C or better on final project, based on faculty rubric.
Measure	3	2	Student surveys of Digital Culture (Media Processing) students
PC	3	2	80% of Digital Culture (Media Processing) students will have positive responses when surveyed about their concentration classes' usefulness.

If you have questions, please e-mail assessment@asu.edu or call UOEEE at (480) 727-1731.

Subject: FW: letter of support
Date: Tuesday, November 20, 2018 at 9:24:40 AM Mountain Standard Time
From: Louis Mendoza
To: Althea Pergakis

Althea,

Our faculty have reviewed this request and we our supportive of adding these courses to the BS in Digital Culture with an emphasis in Media Processing major map.

Louis

--
Dr. Louis Mendoza, Director
School of Humanities, Arts, and Cultural Studies
New College of Interdisciplinary Arts and Sciences
4701 W. Thunderbird Rd., FAB N201
Glendale, AZ 85306-4908
P.O. Box 37100, MC 2151, Phoenix AZ 85069-7100
Arizona State University
Office: 602-543-6242
https://newcollege.asu.edu/humanities-arts-cultural-studies-degree-programs
https://louismendoza.academia.edu/

From: Althea Pergakis
Sent: Monday, November 19, 2018 3:12:50 PM
To: Louis Mendoza
Cc: Kayla Elizondo-Nunez
Subject: letter of support

Dr Mendoza,

We are proposing a new BS in Digital Culture with an emphasis in Media Processing. We were hoping to include your IAP 362 and IAP 462 on our major map. Would you support that?

Thanks!
Althea Pergakis

Education Coordinator
School of Arts, Media and Engineering + Digital Culture
Herberger Institute for Design and the Arts | Fulton Schools of Engineering
Arizona State University
PH: 480.965.1010 | F: 480.965.0961
artsmediaengineering.net
Pronouns: she/her
Schedule a meeting: calendly.com/aepergakis

Subject: RE: impact statement for BS Digital Culture
Date: Thursday, August 2, 2018 at 10:42:16 AM Mountain Standard Time
From: Kyle Squires
To: Xin Wei Sha
CC: Kathryn Maxwell, Althea Pergakis, sxw asu, Annette Bowers, James Collofello

Hi Xin Wei,

Thanks very much for the background. The change from BA to BS will not have any impact on us. The students will continue to take the same classes in FSE. Good luck!

-- Kyle

From: Xin Wei Sha
Sent: Tuesday, July 31, 2018 7:56 PM
To: Kyle Squires <squires@asu.edu>
Cc: Kathryn Maxwell <K.Maxwell@asu.edu>; Althea Pergakis <Althea.Pergakis@asu.edu>; sxw asu <sxwasu@gmail.com>
Subject: Re: impact statement for BS Digital Culture

Hi Kyle,

Would you mind getting the appropriate impact statement for BS Digital Culture to our program staff? Let me recap and loop in the relevant folks on HIDA side so we're on the same page.

The BS in Digital Culture (Media Processing) is merely a re-prefixing of the BA Digital Culture (Media Processing) to reflect its math/science content, and a signal to students the math/science/engineering inflection of this existing program.

There are no course changes between the BA in Digital Culture and the proposed BS, with the exception of an additional math requirement and some more explicit paths.

AME's Digital Culture program, in particular its Media Processing concentration complements other undergrad engineering programs, widening the funnel for students to take courses in FSE (primarily CS, EE), to prepare for STEM-oriented work in a broad range of sociocultural, expressive, creative, experiential, critical and speculative design applications. Conversely it also serves to broaden and deepen opportunities and impact for students in engineering disciplines as they advance in their working lives. We know from talking with some (recruiting) managers in Intel, Google as well as smaller technology firms as well as in "application" industries like games, communications and entertainment that they seek students with engineering chops plus the sort of sociocultural and experiential-design skills and sensibility that our Digital Culture program offers.

Thanks,
Xin Wei

From: Althea Pergakis <Althea.Pergakis@asu.edu>

Date: Monday, April 9, 2018 at 11:58 AM
To: Xin Wei Sha <Xinwei.Sha@asu.edu>
Cc: Xin Wei Sha <sxwasu@gmail.com>
Subject: Re: impact statement for BS Digital Culture

…

In addition to their core experiences in experiential digital media, BS Digital Culture (Media Processing) students will also take 27 credits in the Fulton Schools of Engineering in one of three tracks: Computer Science, Game Design or Electrical Engineering. All Digital Culture students must have up through MAT 210: Brief Calculus, though MP concentration students must also take MAT 274: Discrete Math Structures and optionally may take MAT 274: Elementary Differential Equations as well. We also recommend (though do not require) PHY 101 to fill a general studies science requirement for all students.

Within the concentration's Computer Science track, students are required to take CSE 110: Principles of Programming in Java, CSE 205: Object-Oriented Programming and Data Structures, CSE 240: Introduction to Programming Languages, CSE 310: Data Structures and Algorithms, and 15 credits of restricted Computer Science electives.

Within the concentration's Game Design track, students are required to take CPI 111: Game Design I, CPI 211: Game Design II, CPI 311: Game Engine Development, CPI 360: Decision Making and Problem Solving, CPI 411: Graphics for Games and 12 credits of restricted Game Design electives.

Within the concentration's Electrical Engineering track, students are required to take EEE 120: Digital Design Fundamentals, EEE 201: Circuits I, EEE 230: Computer Organization and Assembly Languages, EEE 350: Random Signal Analysis and 12 credits of restricted Electrical Engineering electives.

For our own classes, students choose from a variety of experiential digital media options – we have students take a blend of object-oriented programming, sound synthesis, physical computing, technological philosophy, and embodied making – to explore not only what technology is, but what it will be, and what that means for
…[society and culture in the coming decades]…

Thanks!
Althea Pergakis

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Pronouns: she/her

Schedule a meeting: calendly.com/aepergakis

From: Althea Pergakis <Althea.Pergakis@asu.edu>
Date: Monday, April 9, 2018 at 11:16 AM
To: Xin Wei Sha <Xinwei.Sha@asu.edu>
Cc: Xin Wei Sha <sxwasu@gmail.com>
Subject: Re: impact statement for BS Digital Culture

Xin Wei,
There's no course changes between the BA in Digital Culture and the proposed BS, with the exception of an additional math requirement and some more explicit paths through. We foresee impact to the various Schools of Engineering to be minimal, but the new delineation of BS will more accurately depict the current workload.

Thanks!
Althea Pergakis

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Schedule a meeting: calendly.com/aepergakis

Begin forwarded message:
From: Kyle Squires <squires@asu.edu>
Date: April 8, 2018 at 12:37:24 PM MST
To: Xin Wei Sha <Xinwei.Sha@asu.edu>
Cc: Althea Pergakis <Althea.Pergakis@asu.edu>
Subject: RE: impact statement for BS Digital Culture
Hi Xin Wei,

Thanks for the note. What are the implications of the proposed name change for the degree program, i.e., course requirements, career pathways, etc? That context will help in general and especially towards informing conversations about how to increase the linkage between our programs where there might be opportunities for greater coordination. Thanks,

-- Kyle

From: Xin Wei Sha
Sent: Friday, April 6, 2018 8:40 AM
To: Kyle Squires <squires@asu.edu>

Cc: Althea Pergakis <Althea.Pergakis@asu.edu>
Subject: impact statement for BS Digital Culture

Hi Kyle,

(1)
Would you mind responding to the impact statement re. AME's proposal to rename its BA Digital Culture / Media Processing to BS Digital Culture?

Basically, this reflects the technical content and mathematical expectations in our Media Processing curriculum and make it easier for us to line up Digital Culture next to the engineering and sciences.

(2)
If you like, let me know when FSE sends a delegation to China. I'd be happy to help expand the funnel, so to speak.

Thanks,
Xin Wei

cc. I copy Althea Pergakis, our DC Coordinator, who's shepherding this name change.

Sha Xin Wei • Professor and Director • School of Arts, Media and Engineering + Synthesis
Herberger Institute for Design and the Arts + Fulton Schools of Engineering • ASU
Fellow: ASU-Santa Fe Center for Biosocial Complex Systems
Affiliate Professor: Future of Innovation in Society; Computer Science; English
Associate Editor: AI & Society Journal
skype: shaxinwei • mobile: +1-650-815-9962
Founding Director, Topological Media Lab
