## New Undergraduate Program (Majors, Minors, Sequences) Proposal Illinois State University - University Curriculum Committee

**Program Department** Arts Technology

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Title of New Program Sequence in Game Design

Submission Date <u>Tuesday, January 7, 2020</u>

Email ampaolu@ilstu.edu

Campus Address 5700 School Of Theatre

**Version** <u>3</u> **ID** <u>299</u>

Proposed Starting Catalog Year 2021-2022

## Associated Course Proposal(s):

Revise Course proposal ATK 201 titled Basic Skills in the Digital Arts

Revise Course proposal ATK 320 titled Programming Dynamic Media

New Course proposal ATK 351 titled Game Design I

New Course proposal ATK 352 titled Game Design II

New Course proposal ATK 353 titled Game Development

New Course proposal ATK 354 titled *User Experience Design for Games* 

New Course proposal ATK 355.01 titled Game Studio Capstone I

New Course proposal ATK 355.02 titled Game Studio Capstone II

New Course proposal ATK 356 titled Experimental Technologies for Games

New Course proposal ATK 357 titled Business of Games and Esports

New Course proposal ATK 358 titled *Analytics and User Studies for Games* New Course proposal ATK 359 titled *Games and Society* 

## 1. Proposed Action

New Major

New Minor

√ New Sequence

More than 50% of courses in this program are Distance Education

No Is this program an Integrated Bachelors/Masters degree program?

## Sequence Major

Creative Technologies

2. Provide *Undergraduate Catalog* copy for new program.

## MAJOR IN CREATIVE TECHNOLOGIES

The interdisciplinary Creative Technologies major emphasizes design and practice in the integration of digital technologies and the fine arts. In addition to foundational study across the fine arts, the major provides training and experiences across a range of creative/technical fields including video, sound, electronic music, music production, gaming, motion graphics, interactivity, AR/VR, UI/UX, mobile, web, and computer programming concepts.

Creative Technologies majors must complete one of the following sequences:

- 1. Sequence in Interdisciplinary Technologies blending multimedia, technology, and fine arts training aimed at creative professional environments and the entertainment industry, along with developing the aesthetics, artistry, and technical skills of individuals looking for a broad range of career options.
- 2. Sequence in Game Design building creative and technical capabilities with a focus on game design and production for students seeking careers in the game industry.

#### **Retention Requirements**

- 1. Sequence in Interdisciplinary Technologies Students will be allowed to continue in this sequence who have met and continue to maintain an overall cumulative GPA of 2.00.
- 2. Sequence in Game Design Students will be allowed to continue in this sequence who have met and continue to maintain an overall cumulative GPA of 2.50 and a cumulative GPA of 3.0 within the sequence. Students who leave the Sequence in Game Design may continue as a Creative Technologies major in Interdisciplinary Technologies if they have an overall cumulative GPA of 2.00.

## **Academic Requirements**

Major: Sequence in Game Design - (56 credit hours)

Fine Arts Core - Interdisciplinary foundational experience across music, art, and theatre

3 hours from either: ART 103, 104, or 109

2 hours from either: MUS 118, 121A10, or 126

3 hours from either: THE 110, 130, or 160

History Core - Historical context for deeper insight into contemporary creative practices

6 hours from either: ART 155, 156, 275, MUS 152, 275, THE 170, 171, 275A01, or 275A02

(must choose from 2 different schools)

Creative Technologies Core - Fundamental digital proficiencies

12 hours from: CTK 201, 240, 301, and 302

Game Core - Fundamental game industry proficiencies

18 hours from: CTK 351, 352, 353, 354, 355A01, and 355A02

Creative Technologies and Information Technology Electives - Further training across digital media and programming

12 hours from either: CTK 260, 303, 320, 330, 340, 345, 356, 357, 357, 359, 377, 380, 390, 398, IT 140, 164, or 168

(multiple enrollments allowed in CTK 380 with different topics)

# PROPOSED PROGRAM IN 2019-2020 FORMAT

2 MUS 126 Group Instruction In Voice

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Major (56 credit hours)
3 CTK 201 Basic Skills In The Digital Arts
3 CTK 240 Sound Design 1: Beginning Digital Audio
3 CTK 301 Web Design and Development
3 CTK 302 Computer Programming for Creatives
3 CTK 351 Game Design I
3 CTK 352 Game Design II (P: CTK 351)
3 CTK 353 Game Development (P: CTK 302)
3 CTK 354 User Experience Design for Games
3 CTK 355A01 Game Studio Capstone I (P: CTK 351, 352, 353, 354)
3 CTK 355A02 Game Studio Capstone II (P: CTK 355.02)
Take 1 (3 credit hours) of the following courses:
3 ART 103 Visual Thinking: 2-D Fundamentals
3 ART 104 Visual Thinking: Drawing Fundamentals
3 ART 109 Visual Thinking: 3-D Fundamentals
Take 1 (2 credit hours) of the following courses:
2 MUS 118 Beginning Guitar
2 MUS 121A10 Group Piano Non-Majors Level I

Take 1 (5 credit nours) of the following courses:
3 THE 110 Acting I
3 THE 130 Introduction to Costume
3 THE 160 Stagecraft
Take 2 (6 credit hours) of the following courses. Courses must be from two separate departments:
ART: 155, 156, 275
MUS: 152, 275
THE: 170, 171, 275A01, 275A02
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Take 12 credit hours of electives from the following list of courses:
CTK 260, 303, 320, 330, 340, 345, 356, 357, 358, 359, 377, *380, 390, 398, IT 140, 164, or 168
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*multiple enrollments allowed in CTK 380 with different topics

#### . Provide a description for the proposed program.

The Sequence in Game Design focuses on three pillars of making games:

- 1) Design Creating the look, feel, sound, and structure of games
- 2) Production Creating the content of games
- 3) Development Building functionality into games through programming and game engines

This 56-hour sequence shares a common Fine Arts Core, History Core, and Creative Technologies Core with the Sequence in Interdisciplinary Technologies. This provides both sequences with shared core values: interdisciplinary training through the integration of creative technologies and the fine arts.

Game Design differs from Interdisciplinary Technologies through:

- 1) The addition of an 18-hour game core
- 2) The subtraction of the Additional Fine Arts Study and the Career Workshop requirements
- 3) The reduction of the 19-hour Additional Creative Technologies Study requirement to a 12-hour Additional Creative Technologies and Information Technology Study requirement within which 4 new game courses and 3 pre-existing Information Technology courses are options

In short, the Game Sequence has 6-course Game Core, 4 additional new gaming courses and 3 pre-existing IT courses as electives, and less overall fine arts courses required. All 10 game classes referenced are new course proposals.

Game Core: Game Design 1 and 2 (351 and 352), Game Development (353), User Experience Design for Games (354), and Game Studio Capstones 1 and 2 (355A01 and 355A02).

Game Electives: Experimental Technologies for Games (356), Business of Games and ESports (357), Analytics and User Studies for Games (358), and Games and Society (359)

## 4. Provide a rationale of proposed program.

National demand for career-oriented game design and development programs has surged as annual gaming industry profits eclipse the combined profits of film, TV, and radio. College-bound students spend more time consuming video games than all other forms of entertainment media combined. Game design has been identified as having major enrollment potential and, through strategic planning within the Wonsook Kim College of Fine Arts, the proposed new major and minor in game design is targeting those college-bound students. This proposed new curriculum in game design is also in sync with the University's planning to house a varsity eSports team and much discussion is underway on how these two entities can enhance each other and provide mutually beneficial use of student, fiscal, and facilities resources. This is the time for ISU, through Creative Technologies, to develop a major game design initiative.

To build a robust game sequence that can fully produce games from design to finish requires students working together with skillsets spanning design, production, and development (programming). Nested within the fine arts, Creative Technologies attracts students who can design games and produce content for games, but will likely not be as strong at programming games. Based on discussions with the previous Director of the School of Information Technology, they have a population of majors with a strong interest in making games, who possess programming skills, and who want training in designing and producing content for games: hence the need for a minor as well.

Creating a curricular path via the minor to link Information Technology to Creative Technologies reinforces the development aspects of making games and pairs well with designing and producing content for games; paralleling real-world gaming industry practices. Limiting the minor to IT majors and other students who possess programming skills balances out the three pillars the Sequence in Game Design proposal is predicated around, as well as managing capacity issues that could result if the minor gets too big. Getting CT and IT students working together in classes is key.

From a career-oriented perspective, Creative Technologies majors in Game Design are headed towards design and production fields within the gaming industry, while also learning introlevel skills in development (game engines and programming). The minor, on the inverse, is specifically targeting students with programming backgrounds that could find careers as game developers and programmers. These students will add to their programming skills an understanding of design and production processes within the gaming industry. Students in either the major or minor will graduate with a formidable combination of skills to find jobs in the game industry.

# 5. Describe the expected effects of the proposed program on existing campus programs (if applicable).

6.	Provide a sample four year plan of study demonstrating that a student could realistically complete the program requirements in a specific number of semesters.

First Year Fall Semester (15 credit hours)
ENG 101 or COM 110 (General Education course) (3)
CTK 201 (3)
ART 103 or ART 104 or ART 109 (3)
Fine Arts History Electives (3)
General Education course (3)
Spring Semester (14 credit hours) ENG 101 or COM 110 (General Education course) (3)
CTK 240 (3)
MUS 118 or MUS 121A10 or MUS 126 (2)
Fine Arts History Electives (3)
General Education course (3)
Second Year
Fall Semester (15 credit hours)
CTK 301 (3)
CTK 351 (3)
THE 110 or THE 130 or THE 160 (3)
General Education course (3)
General Education course (3)
Spring Semester (15 credit hours)
CTK 302 (3)
CTK 352 (3) Creative Technology Electives (3)
General Education course (3)
General Education course (3)
Third Year Fall Semester (15 credit hours) Creative Technology Electives (3)
CTK 353 (3)
B.S. SMT or B.A. language course (3)
General Education course (3)
General Education course (3)
Spring Semester (15 credit hours) Creative Technology Electives (3)
CTK 354 (3)
University-Wide Elective (3)
General Education course (3)
General Education course (3)
Fourth Year Fall Semester (15 credit hours)
CTK 355A01 (3)
Creative Technology Electives (3)
University-Wide Elective (3)
Senior level University-Wide Elective (3)
General Education course (3)
Spring Semester (16 credit hours)
CTK 355A02 (3) Senior level University-Wide Elective (3)

 Senior level University-Wide Elective (3)
 Senior level University-Wide Elective (3)
Senior level University-Wide Elective (4)

# 7. Describe the expected curricular changes required, including new courses. If proposals for new courses have also been submitted, please reference those related proposals here:

- 1. The old Arts Technology program had ART/MUS/THD tracks. These tracks will be dissolved and instead, sequences in Interdisciplinary Technologies and Game Design will be created
- 2. The new game sequence will have 5 sections: Fine Arts Core, History Core, Creative Technologies Core, Game Core, Additional Creative Technologies and Information Technologies Study.
- 3. Total hours in the Game Design sequence will require less total hours in the fine arts and more total hours required in Creative Technologies courses, as compared to the undergraduate major in Arts Technology.

The 10 game courses referenced are new course proposals:

Game Core: Game Design 1 and 2 (351 and 352), Game Development (353), User Experience Design for Games (354), and Game Studio Capstones 1 and 2 (355A01 and 355A02).

Game Electives: Experimental Technologies for Games (356), Business of Games and ESports (357), Analytics and User Studies for Games (358), and Games and Society (359)

#### 8. Anticipated funding needs and source of funds.

IMPORTANT: The following anticipated funding estimates link both the proposed game design major AND minor together with an assessment of their COMBINED expected costs. Please review in the context of both new program proposals.

#### Is the unit's current operating budget adequate to support the program when fully implemented?

Yes. The current operating budget for Creative Technologies is adequate to support the first two years of the game design major and minor, as it already has the equipment, faculty, and space to begin teaching this new curriculum. As enrollment increases and the program develops, equipment and facilities needs will increase. The Wonsook College of Fine Arts dean, school directors, associate dean, assistant dean, and director of CFA-IT are currently working collaboratively to determine which WK CFA spaces and resources can be shared to accommodate future growth. They are also considering future shared TT requests since several WK CFA TT faculty already teach across disciplines (Art/Creative Technologies, Music/Creative Technologies, and Theatre/Creative Technologies).

By year five, the need for an annual operating budget for Creative Technologies and Game Design (together) will be \$50,000. It is anticipated that the current Creative Technologies budget of \$30,000 plus support from the dean's operating budget will assist us in meeting the projected budgetary need as we grow.

With ISU's reimplementation of ERIP (RERIP), Creative Technologies also anticipates an increase in funding through that fiscal mechanism. During the original 4-year ERIP program, Creative Technologies grew from 58 to 136 majors (F13-S18). During ERIP's final year Creative Technologies was awarded \$45,000 in incentive funding. The Program is currently over 150 majors, and will likely have 300-400 total majors due to demand for the new Game Design sequence, thus qualifying Creative Technologies for additional RERIP funding.

## What impact will the new program have on faculty assignments in the department? Will current faculty be adequate to provide instruction for the new program?

The current number and expertise of faculty are adequate to teach the Creative Technologies curriculum. The game design major and minor will require new/additional NTT and TT hires as the program grows and develops. FY21 TT requests will include shared positions in Art/Creative Technologies and Theatre/Creative Technologies positions. The WK CFA leadership team supports these requests.

# Will additional faculty need to be hired, either for the proposed program or for courses faculty of the new program would otherwise have taught?

To meet anticipated demand and growth, we will need an additional full-time tenure track hire in game design starting Fall 2021 and a second full-time tenure track hire starting Fall 2022. Those two new hires, plus our recent tenure track hire in game design, plus our current faculty supporting shared portions of the proposed new game curriculum, should result in adequate instructional capacity to add 200 new majors and 45 minors to the college. We are estimating each new hire at \$70,000. The Dean has indicated that hiring additional faculty for the new Game Design sequence will be a college priority. The Game Design sequence is a strategic college growth initiative. WK CFA will be using the annual budget and planning process to keep new hire requests in this area prioritized until capacity is reached.

## Will current staff be adequate to implement and maintain the new program?

No

Yes. As the enrollment grows, the WK CFA will redistribute advisees as needed to current advisors in the Schools of Theatre and Dance and Art. The budget staff in the dean's office will continue to facilitate the Creative Technologies budget processes.

#### Are the unit's current facilities adequate to support the program when fully implemented?

prerequisites for other courses required by the major?

Creative Technologies is taught in its own spaces, as well as those shared with Music, Art, and Theatre and Dance. Additional space will be needed as the program grows. Future space renovation for Creative Technologies will be a college priority and will be facilitated by the annual budget request process and through foundation dollars. Creative Technologies plans to meet future space needs, along with funding for these spaces, through a combination of RERIP, annual Provost Enhancement and Academic Enhancement Fund requests, partnering with eSports gaming facilities, partnering with DIGGs/XR@ISU facilities, and partnering with the Wonsook Kim School of Art and CFAIT. Because the Game Design sequence is a strategic college growth initiative, we will be using the annual budget and planning process to keep PE and AEF requests for this area prioritized until facilities needs are met.

9.		No	Does this program count for teacher education?
10.		No	Is this an Interdisciplinary Studies program?
11.	The fo	ollowing	questions must be answered.
	Yes	Have yo	ou confirmed that Milner Library has sufficient resources for the proposed program?
	No	Are mo	re than 120 hours required to complete a degree with this major?
	No	Beyond	General Education, does the major require more than 66 semester hours?
	Yes	Does th	is sequence (if in a major) require more than 55 semester hours of major courses?

Does this program stipulate specific general education courses offered in the major department/school as a part of the major requirements only if such courses serve as

- No Is the proposed program intended to be longer than four years (as indicated by the plan of study)?

ŀ	Have letter(s) of concurrence from affected departments/schools been obtained?
A	departments/school is affected if it has a program with significant overlap or if it teaches a required or elective course in the program

Routing and action summa	ary for New Program:	
1. Arts Technology Departmen	nt Curriculum Committee Chair	
Aaron Paolucci (website)	Aaron Paolucci	10/21/2019 2:28:17 PM
Signature	Print	Date
2. Arts Technology Departmen	nt Chair/School Director	
Aaron Paolucci (website)	Aaron Paolucci	10/21/2019 2:28:49 PM
Signature	Print	Date
3. College of Fine Arts College  Aaron Paolucci (website)  Signature	Aaron Paolucci Print	1/7/2020 10:33:46 AM Date
4. College of Fine Arts College		
Jean Miller (website)	Jean Miller	1/7/2020 12:49:55 PM
Signature	Print	Date
5. University Curriculum Con	nmittee Chair	
Lance Lippert (website)	Lance Lippert	2/7/2020 1:09:40 PM

## Comments

Yes

Comments from Version 1 from Janet Tulley (College Curriculum Committee Chair):

10/29/2019 CCC: Find/Replace course number decimals with 'A' throughout proposal.

section 4.

Change to 'sync' from 'synch'; Change 'vocational'to career prep.;

Remove the dash from 'time-consuming'.

Comments from Version 2 from Janet Tulley (College Curriculum Committee Chair):

1/7/2020 - Add new FIF