E-mail

# **Program Change Request**

Date Submitted: 02/03/25 2:53 pm

# Viewing: BS-GDEM : Bachelor of Science in

Carly Kocurek

# Game Design and Experiential Media

Last approved: 05/07/24 3:05 pm

## Last edit: 02/06/25 11:19 am

Changes proposed by: ckocurek

**Program Status** 

ckocurek@iit.edu

Requestor

Catalog Pages Using this Program <u>Bachelor of Science in Game Design and Experiential Media</u>

Active

Name

### In Workflow

- 1. LS Interdisciplinary Curriculum Committee Chair
- 2. Academic Affairs
- 3. Undergraduate Academic Affairs
- 4. LS Dean
- 5. Undergraduate Studies Committee Chair
- 6. Faculty Council Chair
- 7. Academic Affairs

## **Approval Path**

- 1. 02/03/25 2:54 pm Carly Kocurek (ckocurek): Approved for LS Interdisciplinary Curriculum Committee Chair
- 2. 02/06/25 11:19 am Ayesha Qamer (aqamer): Approved for Academic Affairs
- 3. 02/07/25 2:58 pm Joseph Gorzkowski (jgorzkow): Approved for Undergraduate Academic Affairs
- 4. 02/11/25 4:07 pm Jennifer deWinter (jdewinter): Approved for LS Dean

## History

**Origination Date** 2025-2-3 2024-4-9 Yes Is this an interdisciplinary program? Academic Unit Humanities College Lewis College of Science and Letters Contributing Academic Unit(s) Academic Units Information Technology & Mgmt Institute of Design **Program Title** Bachelor of Science in Game Design and Experiential Media Effective Academic Effective Term <u>2025</u> <del>2024</del> - <u>2026</u> Year 2025 Fall 2025

Undergraduate

https://catalognext.iit.edu/courseleaf/approve/

Academic Level

- 1. Dec 9, 2022 by Carly Kocurek (ckocurek)
- 2. Apr 10, 2023 by Zack Sullivan (zsulliv1)
- 3. Oct 13, 2023 by Carly Kocurek (ckocurek)
- 4. May 7, 2024 by Carly Kocurek (ckocurek)

If all courses in a subject in your department are required, please enter each subject followed by the number ranges in the "Quick Add" field in the pop up box when you click the green plus button below. For example: ARCH 100-499.

What courses will factor the major GPA?	
Program Type	Degree
Degree Type	Bachelor of Science (BS)
CIP Code 09.0702 - Digital Con	nmunication and Media/Multimedia.
Program Code	BS-GDEM
Program Attribute	
Total Program Credit Hours	120
Please provide a summary and rationale for the requested program revision. Updated LCHS 100 to	o GEM 100 for the major-specific ITP course.

## **Program Narrative and Justification**

#### BS-GDEM: Bachelor of Science in Game Design and Experiential Media

Narrative description of how the institution determined the need for the program. For example, describe what need this program will address and how the institution became aware of that need. If the program is replacing a current program(s), identify the current program(s) that is being replaced by the new program(s) and provide details describing the benefits of the new program(s). If the program will be offered in connection with, or in response to, an initative by a governmental entity, provide details of that initiative.

Game Design and Experiential Media (GEM) is an established academic and professional field. In 2021, the video game market in the U.S. alone totaled nearly 86 billion, showing strong growth even during the global pandemic and more than doubling in the past decade. Illinois is in the top 10 markets for game design job postings. Burning Glass analysis shows a strong need for creative, collaborative (more than 50% of postings), communication (more than 37% of postings), and problem solving (18% of postings) skills alongside technical proficiencies. Illinois Tech is uniquely situated to offer a program in this area given its role as the only technical university in Chicago, making the planned degree distinct from those offered by area schools like Columbia and DePaul. Particularly strong growth is projected for jobs in quality assurance, Unreal Engine development, prototyping, and level design. Given that most jobs in this field require a bachelor's degree, a B.S. is an ideal degree for this field. Additionally, this is a degree well suited to articulation with local CC curricula and should well serve students who have completed an A.A. or A.S. degree and wish to continue towards a B.S. Burning Glass projects a growth of 9.3% in the number of game design jobs over the next decade, 97% of advertised positions in game and interactive design require a bachelor's degree. Current starting salaries average \$77,879 for those with 2 or fewer years of experience, increasing to \$89,630 for those with 3-5 years of experience, and then \$99,021 for those with 6 or more years of experience, indicating strong earnings potential for graduates. Game and Interactive Media Design is also a recognized academic discipline. WPI established the first degree in this area (under the name Interactive Media and Game Design) in 2005.

Today, there are programs in all 50 states in the U.S., including advanced graduate degree programs, with prominent programs including those at the University of Southern California, New York University, and Rochester Institute of Technology.

Professional and academic organizations in the field often overlap, as exemplified by Foundations of Digital Games (FDG) and Digital Games Research Association (DiGRA). The International Game Developers Association (IGDA) is the largest professional organization, and Illinois Tech students have recently established a student chapter—the only campus chapter in the Chicago area at this time.

Game and Interactive Media Design is a field that Illinois Tech students already demonstrate significant interest in. The humanities department has offered a minor in Game Studies and Design for several years. While the number of students completing the minor has been relatively small (likely due to difficulties with course scheduling), interest in the required courses has been substantial; HUM 371 Fundamentals of Game Design, for example, has had a waitlist every time it has been offered, and HIST 373 History of Video Games generally fills 60 to 80 seats depending on the size of the class. Students have expressed strong interest in additional educational opportunities related to game design, and there's an increase in related activity on campus, including the gamebIITes exhibit of student games, the IPRO Game Lab, the Illinois Tech eSports program, and student clubs dedicated to games ranging from chess to Warhammer. Students have also formed an Illinois Tech chapter of the IGDA.

The proposed program addresses this existing student interest and will appeal to students https://catalognext.iit.edu/courseleaf/approve/

#### BS-GDEM: Bachelor of Science in Game Design and Experiential Media

who may currently choose other technical universities over Illinois Tech; currently, we are one of a very few technical universities that does not have a program in this area. The proposed degree is to be housed in the Humanities Department as a collaboration between Humanities, ID, ITM, and Lewis College. Administrative responsibility for the degree will use a shared model detailed in section 8 of this proposal.

Narrative description of how the program was designed to meet local market needs, or for an online program, regional or national market needs. For example, indicate if Bureau of Labor Statistics data or State labor data systems information was used, and/or if State, regional, or local workforce agencies were consulted. Include how the course content, program length, academic level, admission requirements, and prerequisites were decided; including information received from potential employers about course content; and information regarding the target students and employers.

Game Design and Experiential Media (GEM) is an established academic and professional field. In 2021, the video game market in the U.S. alone totaled nearly 86 billion, showing strong growth even during the global pandemic and more than doubling in the past decade. Illinois is in the top 10 markets for game design job postings. Burning Glass analysis shows a strong need for creative, collaborative (more than 50% of postings), communication (more than 37% of postings), and problem solving (18% of postings) skills alongside technical proficiencies. Illinois Tech is uniquely situated to offer a program in this area given its role as the only technical university in Chicago, making the planned degree distinct from those offered by area schools like Columbia and DePaul. Particularly strong growth is projected for jobs in quality assurance, Unreal Engine development, prototyping, and level design. Given that most jobs in this field require a bachelor's degree, a B.S. is an ideal degree for this field. Additionally, this is a degree well suited to articulation with local CC curricula and should well serve students who have completed an A.A. or A.S. degree and wish to continue towards a B.S.

Burning Glass projects a growth of 9.3% in the number of game design jobs over the next decade. 97% of advertised positions in game and interactive design require a bachelor's degree. Current starting salaries average \$77,879 for those with 2 or fewer years of experience, increasing to \$89,630 for those with 3-5 years of experience, and then \$99,021 for those with 6 or more years of experience, indicating strong earnings potential for graduates.

The committee solicited reviews from field leaders including both professionals in the games industry and leaders of similar academic programs; this feedback was incorporated into the degree plan.

#### BS-GDEM: Bachelor of Science in Game Design and Experiential Media

Narrative description of any wage analysis the institution may have performed, including any consideration of Bureau of Labor Statistics wage data related to the new program.

GEM is an established academic and professional field. In 2021, the video game market in the U.S. alone totaled nearly 86 billion, showing strong growth even during the global pandemic and more than doubling in the past decade.

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Narrative description of how the program was reviewed or approved by, or developed in conjunction with, one or more of the following: a) business advisory committees; b) program integrity boards; c) public or private oversight or regulatory agencies (not including the state licensing/authorization agency and accrediting agency); and d) businesses that would likely employ graduates of the program. For example, describe the steps taken to develop the program, identify when and with whom discussions were held, provide relevant details of any proposals or correspondence generated, and/or describe any process used to evaluate the program.

An initial program was developed by a program committee convened by ITM faculty member Jeremy Hajek. This committee consisted of Hajek, ITM faculty member James Papademas, and Humanities faculty member Carly Kocurek. Input was also sought from ID interim dean Anijo Matthew.

After completing the initial program development, the committee solicited reviews from field leaders including both professionals in the games industry and leaders of similar academic programs; this feedback was incorporated into the degree plan.

#### **Admission Entry Details**

What are	the enrollm	ent estimates?			
Year 1	10	Year 2	20	Year 3	40
Attach A Program		GAIM Proposal 45202	<u>2.docx</u>		
Justificat					
Docume					

## **Academic Information**

#### Advising

Since quality advising is a key component of good retention, graduation, and career placement, how will students be mentored? What student professional organizations will be formed? How will the department work with the Career Services office to develop industry connections?

• Program Committee (faculty). Responsible for the content of curriculum. Runs program assessment. Updates curriculum based on assessment results. Supports professional development activities for students on campus and works with related student organizations to help support the campus ecosystem for GEM. This committee should have a minimum of 3 members with at least one drawn from each of HUM, ID, and ITM. Committee will report on program to the chairs of HUM, ID, and ITM and the dean of Lewis College.

• Program Adviser (staff). Responsible for front-line advising of students to ensure students understand degree requirements and take the necessary courses. Points students to other resources, including program committee members, when they need specialized or additional support. Tracks majors through graduation.

#### **Program Resources**

Which program resources are necessary to offer this program?

#### **Proposed Catalog Entry**

Admission

Requirements

Illinois Tech requires a four-year bachelor's degree\* conferred with a minimum cumulative undergraduate grade-point average of 3.0/4.0 (or its equivalent) from an accredited institution for regular admission. GEM has no additional admission requirements.

**Course Requirements** 

## **Required Courses**

Course Requiren	nent	(36)
<u>GEM 100</u>	Game Design and Experiential Media Intro to the Professions	3
<u>HUM 371</u>	Fundamentals of Game Design	3
<u>HUM 372</u>	Interactive Storytelling	3

<u>HIST 373</u>	History of Video Games	3
<u>HUM 374</u>	Game Design Level 2	3
<u>COM 424</u>	Document Design	3
<u>ITM 311</u>	Introduction to Software Development	3
<u>ITMO 356</u>	Introduction to Open Source Operating Systems	3
ITMD 361	Fundamentals of Web Development	3
ITMD 362	Human-Computer Interaction and Web Design	3
<u>HUM 400</u>	Game and Interactive Media Design Capstone 1	3
<u>HUM 401</u>	Game and Interactive Media Design Capstone 2	3
Ethics Requirement		(3)
Select one course fro	om the following	3
PHIL 374	Ethics in Computer Science	3
<u>PHIL 381</u>	Artificial Intelligence, Philosophy and Ethics	3
Graphics Requireme	nt	(6)
Select 2 courses from adviser approval.	n the following; select Columbia partnership classes also applicable based on	6
<u>EG 225</u>	Engineering Graphics for Non-Engineers	3
<u>EG 325</u>	Advanced Engineering Graphics for Non-Engineers	3
<u>EG 425</u>	Computer Graphics for Non-Engineers	3
Technical Electives		(15)
Select 4 courses from	n the following	<del>12</del>
Select 5 courses from	n the following	<u>15</u>
<u>COM 421</u>	Technical Communication	3
<u>COM 425</u>	Editing	3
<u>HUM 352</u>	Gender and Technological Change	3
<u>HUM 375</u>	Practical Magic: Designing Entertainment Experiences.	3
<u>HUM 380</u>	Topics in Humanities	3
<u>ID 410</u>	Introduction to Design Processes	3
<u>IDN 506</u>	Research Planning and Execution	1.5
IDX 560	Introduction to Design Thinking	3
<u>ITMD 455</u>	Open-Source Intelligent Device Applications	3
<u>ITMD 455</u> ITMT 492	Open-Source Intelligent Device Applications Introduction to Smart Technologies	3

<u>ITMD 441</u>	Web Application Foundations	3
STEM Module		(16)
Select 16 credit h	ours from the following <sup>1</sup>	16
Choose 5-6 cre	edit hours of Mathematics	
Choose 10-11	credit hours of Natural Science or Engineering	
Interprofessional	Projects (IPRO)	(6)
<u>See Illinois Tech C</u>	<u>Core Curriculum, section E</u>	6
Humanities and S	Social Science Requirements	(21)
<u>See Illinois Tech C</u>	Core Curriculum, sections B and C	21
Free Electives		(17)
Select 17 credit h	ours of free electives	17
Total Credit Hour	S	120

Computer Science Core Curriculum is fulfilled in course requirements

Sample Curriculum/Program Requirements

# Bachelor of Science in Game Design and Experiential Media Curriculum

			Year 1
Semester 1	Credit	Semester 2	Credit
	Hours		Hours
<u>GEM 100</u>	3	<u>ITM 311</u>	3
<u>ITMO 356</u>	3	<u>HUM 371</u>	3
MATH	<del>3</del>	GRAPHICS CLUSTER	3
HUM/SS	<del>3</del>	SCIENCE	<del>5</del>
GRAPHICS CLUSTER <sup>1</sup>	3	SCIENCE ELECTIVE	<u>4</u>
MATH ELECTIVE	<u>3</u>	FREE ELECTIVE	<u>3</u>
HUMANITIES 200-LEVEL COURSE	<u>3</u>		
	15		16
			Year 2
Semester 1	Credit	Semester 2	Credit
	Hours		Hours
<u>HIST 373</u>	3	<u>COM 424</u>	3
ITMD 361	3	<u>HUM 372</u>	3
MATH	<del>3</del>	ITMD 362	3
FREE ELECTIVE	<del>3</del>	SCIENCE	<del>5</del>
HUM/SS	<del>3</del>	ETHICS REQUIREMENT <sup>2</sup>	3

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MATH ELECTIVE	<u>3</u>	SCIENCE ELECTIVE	<u>3</u>
SCIENCE ELECTIVE			
SOCIAL SCIENCES ELECTIVE	<u>3</u> <u>3</u>		
	15		15
			Year 3
Semester 1	Credit	Semester 2	Credit
	Hours		Hours
IPRO	<del>3</del>	IPRO	<del>3</del>
HUM/SS	<del>3</del>	HUM/SS	<del>3</del>
TECHNICAL ELECTIVE	3	<u>HUM 374</u>	3
IPRO ELECTIVE I	<u>3</u>	TECHNICAL ELECTIVE	3
HUMANITIES ELECTIVE (300+)	<u>3</u>	IPRO ELECTIVE II	<u>3</u>
FREE ELECTIVE	3	SOCIAL SCIENCES ELECTIVE (300+)	<u>3</u> 3
FREE ELECTIVE	2	FREE ELECTIVE	3
	14		15
			Year 4
Semester 1	Credit	Semester 2	Credit
	Hours		Hours
<u>HUM 400</u>	3	<u>HUM 401</u>	3
TECHNICAL ELECTIVE	<u>3</u>	TECHNICAL ELECTIVE	3
TECHNICAL ELECTIVE	3	HUM/SS	<del>3</del>
HUM/SS	<del>3</del>	HUM/SS	<del>3</del>
<del>ID 410</del>	<del>3</del>	HUMANITIES ELECTIVE (300+)	<u>3</u>
HUMANITIES OR SOCIAL SCIENCES ELECTIVE	3	SOCIAL SCIENCES ELECTIVE (300+)	<u>3</u> <u>3</u>
FREE ELECTIVE	3	FREE ELECTIVE	3
	15		15

Total Credit Hours: 120

See GEM Graphics Cluster list for possible courses 2 See degree requirements for course options

Specialization Requirements

I

#### **Program Outcomes and Assessment Process**

What are your learning objectives in this program? Please list each learning objective in the boxes below:

*Note: These should be the same as described in your assessment plan at the bottom of this form.* 

Upload your assessment plan here:

## **Undergraduate Program Requirements**

What courses will factor the major GPA?

## Undergraduate Degree Requirements

Minimum credit 120 hours

Specialization required?

No

Minor required? No

#### **Proposed General Curriculum**

List Major Course Requirements Courses required for all students

Course Requirement		(36)
<u>GEM 100</u>	Game Design and Experiential Media Intro to the Professions	3
<u>HUM 371</u>	Fundamentals of Game Design	3
<u>HUM 372</u>	Interactive Storytelling	3

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<u>HIST 373</u>	History of Video Games	3	
<u>HUM 374</u>	Game Design Level 2	3	
<u>COM 424</u>	Document Design	3	
ITM 311	Introduction to Software Development	3	
<u>ITMO 356</u>	Introduction to Open Source Operating Systems	3	
ITMD 361	Fundamentals of Web Development	3	
ITMD 362	Human-Computer Interaction and Web Design	3	
<u>HUM 400</u>	Game and Interactive Media Design Capstone 1	3	
<u>HUM 401</u>	Game and Interactive Media Design Capstone 2	3	
Ethics Requiremen	nt	(3)	3
Choose 1 from the	following		
<u>PHIL 374</u>	Ethics in Computer Science	3	
<u>PHIL 381</u>	Artificial Intelligence, Philosophy and Ethics	3	
Graphics Requiren	nent	(6)	6
Choose 2 from the	following		
<u>EG 225</u>	Engineering Graphics for Non-Engineers	3	
<u>EG 325</u>	Advanced Engineering Graphics for Non-Engineers	3	
<u>EG 425</u>	Computer Graphics for Non-Engineers	3	
Technical Electives	;	(12)	12
Choose 5 from the	following		
<u>COM 421</u>	Technical Communication	3	
<u>COM 425</u>	Editing	3	
<u>HUM 352</u>	Gender and Technological Change	3	
<u>HUM 375</u>	Practical Magic: Designing Entertainment Experiences.	3	
<u>HUM 380</u>	Topics in Humanities	3	
<u>ID 410</u>	Introduction to Design Processes	3	
IDN 506	Research Planning and Execution	1.5	
IDX 560	Introduction to Design Thinking	3	
ITMD 445	Web Real-Time Communication	3	
ITMD 413	Open Source Programming	3	
ITMD 441	Web Application Foundations	3	

## See Illinois Tech Core Curriculum, section D 5

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List Mathematics Requirements		
List Science Requirements		
See Illinois Tech Core C	<u>urriculum, section D</u>	
Some students may ful	fill part of this requirement with graphics cluster	
List Computer Science Requirements Fulfilled by degree requ	uirements.	
List Humanities and Social Sciences Requirements	urriculum, sections B and C	
List Interprofessional Project (IPRO) Requirements <u>See Illinois Tech Core C</u> 6 hours List Technical Elective Course Options Technical electives. Any		
<u>COM 421</u>	Technical Communication	3
<u>COM 425</u>	Editing	3
<u>HUM 352</u>	Gender and Technological Change	3
<u>HUM 375</u>	Practical Magic: Designing Entertainment Experiences.	3
<u>ID 410</u>	Introduction to Design Processes	<u>3</u>
<u>IDN 506</u>	Research Planning and Execution	1.5
<u>IDX 560</u>	Introduction to Design Thinking	3
<u>ITMD 455</u>	Open-Source Intelligent Device Applications	3
ITMD 413	Open Source Programming	3
<u>ITMD 441</u>	Web Application Foundations	3
<u>ITMD 455</u>	Open-Source Intelligent Device Applications	3
<u>ITMT 492</u>	Introduction to Smart Technologies	3

List Free Elective	
Credit Hours (if	
applicable)	

17

Semester-bysemester plan of study for the

degree program

Semester 1 <u>GEM 100</u> <u>ITMO 356</u> GRAPHICS CLUSTER <sup>See GEM Graphics Cluster list for possible courses MATH ELECTIVE HUMANITIES 200-LEVEL COURSE</sup>	Credit Hours 3 3 3 3 3 3 15
Semester 1 <u>HIST 373</u> I <u>TMD 361</u> MATH ELECTIVE SCIENCE ELECTIVE SOCIAL SCIENCES ELECTIVE	Credit Hours 3 3 3 3 3 3 15
Semester 1 TECHNICAL ELECTIVE IPRO ELECTIVE I HUMANITIES ELECTIVE (300+) FREE ELECTIVE FREE ELECTIVE	Credit Hours 3 3 3 3 2 14
Semester 1 <u>HUM 400</u> <u>ID 410</u> TECHNICAL ELECTIVE HUMANITIES OR SOCIAL SCIENCES ELECTIVE FREE ELECTIVE Total Credit Hours: 120	Credit Hours 3 3 3 3 3 3 15

Semester 2	Year 1 Credit	
	Hours	
<u>ITM 311</u>	3	
<u>HUM 371</u>	3	
GRAPHICS CLUSTER	3	
SCIENCE ELECTIVE	4	
FREE ELECTIVE	3	
	16	
	Year 2	
Semester 2	Credit	
	Hours	
<u>COM 424</u>	3	
<u>HUM 372</u>	3	
 ITMD 362	3	
ETHICS REQUIREMENT See degree requirements for	3	
course options	-	
SCIENCE ELECTIVE	3	
	15	
	Year 3	
Semester 2	Credit	
	Hours	
HUM 374	3	
	3	
	3	
SOCIAL SCIENCES ELECTIVE (300+)	3	
FREE ELECTIVE	3	
	15	
Comparter 2	Year 4	
Semester 2	Credit	
	Hours	
	3	
	3	
HUMANITIES ELECTIVE (300+)	3	
SOCIAL SCIENCES ELECTIVE (300+)	3	
FREE ELECTIVE	3	
	15	

Report to Faculty Council

## Reviewer

#### Comments

**Ayesha Qamer (aqamer) (02/06/25 11:19 am):** 2/6/25, AQ: Met with Carly Kocurek and adjusted sample curriculum table to match the bottom. ID 410 was replaced with Technical Elective.

Key: 561