# **Game Development (GAME)**

Purdue Polytechnic Institute

**Department of Computer Graphics Technology** 

# **Advising Worksheet**

**Disclaimer:** The Purdue West Lafayette catalog is considered the source for academic and programmatic requirements for students entering programs during the corresponding Fall, Spring, and Summer semesters. The Advising Worksheet assists students in the development of an individualized 8-semester plan. Students are encouraged to use this worksheet and MyPurduePlan\* (the online degree auditing tool) as they work with their academic advisor toward the completion of all their degree requirements.

**Notification:** Each student is ultimately responsible for knowing, monitoring, and completing all degree requirements.

An undergraduate degree in the Purdue Polytechnic Institute requires completion of the following degree requirements.

University Degree Requireme	iversity Degree Requirements				
Minimum 2.0 Cumulative	Minimum 120 Credits that		32 Residency Credits (30000-level		
GPA	fulfill degree requir	ements	and above) at a Purdue University		
			Campus		
University Core Curriculum *	*				
https://www.purdue.edu/provost/stude	ents/s-initiatives/curriculum	/courses.html			
<ul> <li>Human Cultures: Behav</li> </ul>	ioral/Social Science		ntitative Reasoning		
Human Cultures: Human	nities	• Scie			
<ul> <li>Information Literacy</li> </ul>			nce, Technology & Society Selective		
Oral Communication		• Writ	tten Communication		
Civics Literacy Proficiency					
https://www.purdue.edu/provost/abou	t/provostInitiatives/civics/				
Required Major Program Cou	ırses (see following p	pages)			
Departmental specific require	ement				
Students must earn a "C-" or	better in all CGT cou	ırses.			
Students must earn an "S" in	CGT 20500, 30505,	40500.			
Minimum 2.0 cumulative GP/					
Pass/No Pass option	n				
Pass/No Pass may be allog	Pass/No Pass may be allowed for Electives or Technical Electives only.				
Non-course/Non-credit Requirements					
<ul> <li>Complete a Professional Requirement.</li> <li>Complete a Humanities requirement</li> </ul> * Complete an Intercultural Requirement.					

- \* This audit is not your academic transcript and it is not official notification of completion of degree or certificate requirements.
- \*\* University Core Curriculum Outcomes may be met through completions of the Purdue Polytechnic Institute curriculum. Students should Consult with their academic advisors and MyPurdue Plan for course selections.

### Computer Graphics Technology - Game Development (GAME)

Name: PUID:

Suggested Arrangement of Courses:

Cr Fall 1st Year		Fall 1ct Vaar	Notes		Spring 1st Year	Notes
CI		ran 1st rear	Notes	Cr	Spring 1st real	Notes
3		CGT 10501 Introduction to Games		3	CGT 11600 Geo Mdl Visual & Comm	
3	3 CGT 11800 Fund. Of Imaging Tech 3 CGT 14100 Internet Fdtn Dev & Tech			3	CGT 17208 UX Design Studio I: Fund	
3				3	CGT 27000 Intro to Data Visualization	
3		CGT 24500 Game Development I: Core Skil:	s & Technologies	3	CGT 25500 Game Development II: Design & Psyc	chology
3	MA 15800 Pre-calculus*			3	MA 16010 Applied Calculus I*	
15				15		

Cr	Fall 2nd Year	Notes	Cr	Spring 2nd Year	Notes
3	CGT 21500 CG Programming I		0	CGT 20500 Portfolio Review	
3	CGT Entertainment Selective		4	PHYS 22000 Gen Physics*	
3	Technical Elective		3	CGT Entertainment Selective	
3	Human Culture: Humanities (HUM) Core*		1	CGT 25001 Professional Practices I	
3	SCLA 10100 Transformative Texts: Written Communication and Critical Thinking: Antiquity to Modernity*		3	SCLA 10200 Transformative Texts: Oral Communication and Critical Thinking: Modern World*	
			3	Free Elective	
15			14		

Cr	Fall 3rd Year	Notes	Cr	Spring 3rd Year	Notes
3	CGT 36500 Game Development Practicum		0	CGT 30505 Portfolio Review	
3	CGT Entertainment Selective		3	CGT 36500 Game Development Practicum	
3	Science (SCI) Core*		3	CGT Entertainment Selective	
3	Statistics Selective		3	Humanities Elective	
3	Technical Elective		3	Human Culture: Behavioral/Social Science (BSS)	Core*
			3	CGT Globalization Selective	
15			15		

Cr	Fall 4th Year	Notes	Cr	Spring 4th Year	Notes
2	CGT 41101 Contemp Prob in CGT I		1	CGT 45001 Professional Practice II	
3	CGT Entertainment Selective		2	CGT 41201 Contemp Prob in CGT II	
3	Humanities Elective		0	CGT 40500 Senior Portfolio Review	
3	Technical Elective		3	Advanced English Selective	
3	Free Elective		3	Technical Elective	
2	Free Elective		3	Free Elective	
			3	Free Elective	
16			15		

<sup>\*</sup>Satisfies a University Core Requirement

## **Graduation Requirements:**

\*\*Intercultural Requirement, Humanities Requirement, Professional Requirement Students must earn a "C-" or better in all CGT courses.

## 120 semester credits & 2.00 Graduation GPA required for Bachelor of Science degree.

Purdue policy states that a student may attempt a course no more than three (3) times. An attempt is defined as all courses displayed on a student's transcript including, but not limited to A,B,C,D,E,F,W,WF,I and IF Each student must have 32 credit hours of 300- or 400-level Purdue courses for graduation.

Revised 01/2023 (effective Fall 2024)



## **Computer Graphics Technology - Game Development (GAME)**

PURDUE

Purdue Polytechnic Institute

Name:

PUID:

PICGT-BS Catalog Term: 202410 120 Credit Hours to Graduate "C-"or better required in all major courses

		atal/Program Major Courses (54 credits)	
R	_	uired Major Courses (39 credits)	
	3	CGT 10501 - Introduction to Games	
	3	CGT 11600 – Geometric Modeling for Visualization	and Communication
	3	CGT 11800 – Fundamentals of Imaging Technology	
	3	CGT 14100 – Internet Foundations, Development &	9
	3	CGT 17208 - UX Design Studio I Fundamentals (sati	sfies Science, Technology & Society for core)
	0	CGT 20500 – Portfolio Review	
	3	CGT 21500 – CG Programming I	
	3	CGT 24500 – Game Development I: Core Skills & Te	echnologies
	1	CGT 25001 – Professional Practices I	1
	3	CGT 25500 – Game Development II: Design & Psych	nology
	3	CGT 27000 - Introduction to Data Visualization	
	0	CGT 30505 - Portfolio Review	
	6	CGT 40500 - Game Development Practicum	
	0	CGT 40500 – Senior Portfolio Review	Cm I
	2	CGT 41101 – Contemporary Problems in Applied Co	
	2	CGT 41201 – Contemporary Problems in Applied Co	al II
	1	CGT 45001 – Professional Practices II	
E	Enter	rtainment Selectives* - Select 3 of the following co	ourses (15 credits)
	15	<del>-</del>	
Othon D	lonon	outmontal /Program Course Pequirements (E2 gree	lita
other D	ераг	artmental /Program Course Requirements (52 cred	nus) nunication and Critical Thinking: Antiquity to Modernity (satisfies
	2		idification and Critical Timiking. Antiquity to Modernity (Satisfies
	3	Written Communication for core)	action and Critical Thinking, Madam Mould (actisfies Oral
	2		cation and Critical Thinking: Modern World (satisfies Oral
	3	Communication for core)	
	3	MA 15800 – PreCalculus (satisfies Quantitative Rea	
	3	MA 16010 – Applied Calculus I (satisfies <i>Quantitati</i>	
	4	PHYS 22000 – General Physics (satisfies Science Sele	
	3 3	Human Cultures: Humanities (HUM) (satisfies Human Cultures: Post Private (Notice) (Social Science (RSS))	an Cultures: Humanitues for Core) satisfies Human Cultures: Behavioral/Social Science for Core)
		Humanities Elective	satisfies numun cuitures: benavioral/social science for coref
	6		
	3	Science (SCI) (satisfies Science for core) Advanced English Selective	
	3	Statistics Selective	
	3		
	3 12	CGT Global Selective Technical Elective	
Elective	•	4 credits)	
	14	Free Elective	
Univers	ity C	Core Requirements	
		an Cultures Humanities	Science, Technology & Society Selective
		an Cultures Behavioral/Social Science	Written Communication
		mation Literacy	Oral Communication
		nce Selective	Quantitative Reasoning
		ace Selective	& annivative reasoning

The student is ultimately responsible for knowing and completing all degree requirements. myPurduePlan is knowledge source for specific requirements and completion



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	SUPPLEMENTAL CGT INFORMATION
<b>CGT Selectiv</b>	e - Entertainment:
CGT 11200	Sketching for Visualization & Communication
CGT 11505	Scripting and Computational Thinking
CGT 12300	Animation Foundation
CGT 14700	Visual Effects Introduction
CGT 24100	Intro to Computer Animation
CGT 24700	VFX Particles & Procedures for FX
CGT 26505	Video Game Level Design
CGT 27000	Introduction to Data Visualization
CGT 27500	Data Visualization II
CGT 29000	Computer Graphics - Variable Titles
CGT 32101	Digital Illunstration
CGT 32500	Animation For Games
CGT 33300	Modeling For Entertainment Graphics
CGT 33500	Game Scripting
CGT 34000	Digital Lighting & Rendering for Computer Animation
CGT 34100	Motion for Computer Animation
CGT 34505	Environment Modeling for Games
CGT 34600	Digital, Video Audio
CGT 34800	Photorealistic Shaders
CGT 35300	Principles of Interaction & Dynamic Media
CGT 35600	Web Programming, Development, & Data Integration
CGT 37000	Interactive Data Visualization
CGT 37500	Game Audio
CGT 37700	Scientific Visualization
CGT 38500	Game Production
CGT 39000	Computer Graphics - Variable Titles
CGT 42500	Game Design
CGT 44500	Game Development IV: Procedural Asset Creation for Games
CGT 45600	Advanced Web Programming, Development & Data Integration

## **Advanced English Selective**

**Data Visualization Studio** 

Computer Graphics - Variable Titles

Special Topics in Computer Graphics

ENGL 20500	Introduction to Creative Writing	ENGL 42000	<b>Business Writing</b>
ENGL 30400	Advanced Composition	ENGL 42100	Technical Writing
ENGL 41900	Multimedia Writing		

## **Statistics Selective**

CGT 47000

CGT 49000

CGT 49100

IET 31600	Statistical Quality Control	STAT 30100	Elementary Statistical Methods
PSY 20100	Introduction to Statistics in Psychology	STAT 35000	Introduction to Statistics
STAT 22500	Introduction to Probability Models		

## **Technical Elective**

Any Course within the Purdue Polytechnic Institute, Engineering, Management, or Science. Subjects include: AAE, ABE, AFT, ASTR, AT, BCHM, BCM, BIOL, BME, BMS, CE, CGT, CHE, CHM, CLPH, CM, CNIT, CPB, CS, EAPS, ECE, ECET, ECON, EEE, ENE, ENFY, ENGR, ENGT, ENTM, ENTR, EPCS, GEP, IDE, IE, IET, EPPH, IT, MA, MCMP, ME, MET, MFET, MGMT, MSE, MSL, NS, NUCL, NUPH, NUR, OBHR, OLS, PHPR, PHRM, PHYS, PTEC, SCI, STAT, TECH, & TLI.

### **Humanities Elective**

Any Course within the Purdue College of Liberal Arts. Subjects include: AAS, AD, AMST, ANTH, ARAB, ASAM, ASL, CHNS, CLCS, CMPL, COM, DANC, ENGL, FR, FVS, GER, GREK, GS, GSLA, HEBR, HIST, IDIS, ITAL, JPNS, JWST, KOR, LALS, LATN, LC, LING, MARS, MUS, PHIL, POL, PTGS, REL, RUSS, SCLA, SOC, SPAN, THTR, & WGSS.



#### **Humanities Elective**

Any Course within the Purdue College of Liberal Arts. Subjects include: AAS, AD, AMST, ANTH, ARAB, ASAM, ASL, CHNS, CLCS, CMPL, COM, DANC, ENGL, FR, FVS, GER, GREK, GS, GSLA, HEBR, HIST, IDIS, ITAL, JPNS, JWST, KOR, LALS, LATN, LC, LING, MARS, MUS, PHIL, POL, PTGS, REL, RUSS, SCLA, SOC, SPAN, THTR, & WGSS.

#### CORE CURRICULUM

https://www.purdue.edu/provost/students/s-initiatives/curriculum/courses.html

HUMAN CULTURES: HUMANITIES (HUM) CORE (satisfies Human Cultures: Humanities)

Any Human Cultures: Humanities (HUM) allowed.

HUMAN CULTURES: BEHAVIORAL/SOCIAL SCIENCE (BSS) CORE
Any Human Cultures: Behavioral/Social Science (BSS) allowed.

SCIENCE (SCI) CORE - 2 Courses Required. PHYS 22000 and 1 course Any Science (SCI) allowed.

SCIENCE, TECHNOLOGY & SOCIETY (STS) CORE - CGT 17208 UX Design Studio I Fundamentals - Required

#### **CGT GLOBALIZATION SELECTIVE:**

AAS 27100	Intro to African American Studies	HIST 30000	Eve of Destruction: Global Crises and World Organization in the 20th Century
AAS 37300	Issues in African American Studies	HIST 33805	History of Human Rights
AGR 20100	Communication Across Cultures	HIST 35000	Sci & Society in the 20th Centrury World
	Leadership for a Diverse Workplace	HIST 36600	Hispanic Heritage of the USA
	Biological Bases of Human Social Behavior	HIST 37700	History & Culture of Native America
	Human Culture Diversity	HIST 46900	Black Civil Rights Movement
	Technology and Culture	HTM 37000	Sustainable Tourism & Responsible Travel
	Culture, Food and Health	HTM 37000 HTM 37200	Global Tourism Geography
	Gender Across Cultures	MSL 20100	Individual Leadership Studies
	Global Perspectives on Health		Creativity in Business & Industry
	Culture and Personality	OLS 35000 PHIL 11400	Global Moral Issues
	Native American Cultures		
	Arabic Culture	PHIL 43500	Philosophy of Mindy
	Intr to Asian American Studies	POL 22200 POL 23500	Women, Politics & Public Policy Rich & Poor Nations
	Ethics and Aviation		
AT 23300 CNIT 32000		POL 32600	Black Political Participation in America Global Green Policies
	Policy, Regulation, & Globalization in IT	POL 32700	
COM 22400	Communicating in the Global Workplace	POL 36000	Women and the Law
COM 30300	Intercultural Communication	POL 41300	The Human Basis of Politics
COM 32000	Small Group Communication	POL 42300	International Environmental Policy
COM 41200	Theories of Human Interaction	POL 42900	Contemporary Political Problems
COM 42300	Leadership, Communication, & Organizations	POL 43300	International Organization
ECET 29000	International Experience	PSY 12000	Elementary Psychology
ECET 38001	Global Professional Issues in ET	PUBH 23500	Stress And Human Health
EDPS 23500	Learning and Motivation	SOC 10000	Intro to Sociology
EDPS 30000	Student Leadership Development	SOC 31000	Racial and Ethnic Diversity
EDPS 30100	Peer Counseling Training	SOC 33900	Intro to Sociology of Developing Nations
EDPS 31500	Collaborative Leadership: Listening	SYS 30000	It's a Complex World-Addressing Global Challenges
EDPS 31600	Collaborative Leadership: Cross-cultural Settings	TECH 33000	Technology & the Global Society
EDPS 31700	Collaborative Leadership: Mentoring	TLI 11200	Foundations of Tech Leadership
	Literature & Culture	TLI 31400	Leading Innovations in Organizations
HDFS 28000		WGSS 28200	Intro to LGBT Studies
HDFS 33200	1 0 1 7	WGSS 38000	Gender & Multicultralism
HEBR 38500	The Holocaust in Modern Hebrew Literature	WGSS 38300	Women and Work
		Any Foreign L	anguage: 20100, 20200, 30100, 30200, 40100, 40200

#### \*\*Professional Requirement (1 required):

- A Complete an Internship
- B Complete a Co-op
- C Employment during the academic year related to Major Field of Study
- D Complete an in-class internship-like experience created by Major
- E Student Proposed Alternative: must be commensurate with the expectations of Professional Requirements related to Major Field of Study

