

COMPUTER GAME DEVELOPMENT (B.S.)

Degree: Bachelor of Science

Major: Computer Science

Concentration: Game Development

Total Hours: 120

Code	Title	Hours
General Education Core Curriculum		
<i>Communication</i>		
ENGL 1301	Composition I	3
Select one of the following:		3
COMM 1315	Public Speaking I	
COMM 1321	Business and Prof Speech	
ENGL 1302	Composition II	
FREN 1311	Beginning French I	
SPAN 1311	Beginning Spanish I	
<i>Mathematics</i>		
MATH 2413	Calculus and Analytical Geometry I	4
<i>Life and Physical Sciences</i>		
Select two from the following:		8
BIOL 1406	General Biology I (Majors)	
BIOL 1407	General Biology II (Majors)	
CHEM 1311	General Chemistry I ¹	
CHEM 1312	General Chemistry II ¹	
PHYS 2425	University Physics I	
PHYS 2426	University Physics II	
<i>Language, Philosophy and Culture</i>		
Select three hours from the following:		3
DSDE 1374	Introduction to Deaf Studies	
ENGL 2300	Ethics and Literature	
ENGL 2322	British Literature	
ENGL 2326	American Literature	
ENGL 2331	World Literature	
ENGL 2376	African-American Literature	
FREN 2312	Intermediate French II	
PHIL 1370	Philosophy of Knowledge	
PHIL 2306	Ethics	
SPAN 2312	Intermediate Spanish II	
<i>Creative Arts</i>		
Select three hours from the following:		3
ARTS 1301	Art Appreciation	
ARTS 1303	Art History I	
COMM 1375	Film Appreciation	
COSC 1324	The Art of Computer Game Development	
DANC 2303	Dance Appreciation	
MUSI 1306	Music Appreciation	
MUSI 1309	Jazz History and Appreciation	
MUSI 1310	History of Rock and Roll	

PHIL 1330	Arts and Ideas	
THEA 1310	Theatre Appreciation	
<i>American History</i>		
Select six hours from the following:		6
HIST 1301	U S History I 1763-1877	
HIST 1302	U S History II Since 1877	
HIST 2301	Texas History	
<i>Government/Political Science</i>		
POLS 2301	Intro to American Government I	3
POLS 2302	Intro/American Government II	3
<i>Social and Behavioral Sciences</i>		
Select three hours from the following:		3
ANTH 2346	Introduction to Anthropology	
ANTH 2351	Cultural Anthropology	
BULW 1370	Business Environment and Public Policy	
CRIJ 1301	Intro to Criminal Justice	
ECON 1301	Principles and Policies	
ECON 2301	Principles of Economics I Macro	
ECON 2302	Principles of Economics II Micro	
FINC 2310	Intro to Consumer Finance	
INEN 2373	Engineering Economics	
PSYC 2301	General Psychology	
PSYC 2315	Lifespan Development	
POLS 1301	Intro to Political Science	
SOCI 1301	Introduction to Sociology	
SOWK 2361	Intro Social Work	
<i>Component Area</i>		
ENGL 1302	Composition II	3
Additional credit hours from 4 credit hour math and lab science used to complete component area core requirement.		
Required Major Courses		
<i>Computer Science Courses</i>		
COSC 1172	Thinking, Speaking, and Writing	1
COSC 1173	Programming Lab	1
COSC 1174	Fundamentals of Computing II Lab	1
COSC 1324	The Art of Computer Game Development	3
COSC 1336	Programming Fundamentals I	3
COSC 1337	Programming Fundamentals II	3
COSC 2324	Mobile Computer Game Development	3
COSC 2336	Programming Fundamentals III	3
COSC 2372	Computer Organization Assembly Language	3
COSC 2375	Discrete Structures	3
COSC 3302	Intro to Computer Theory	3
COSC 3304	Algorithms Design and Analysis	3
COSC 3306	UNIX/C++	3
COSC 3308	Design Programming Languages	3
COSC 3325	Computer Law and Ethics	3
COSC 4272	Senior Assessment	2
COSC 4302	Operating Systems	3
COSC 4310	Introduction to Computer Architecture	3
COSC 4319	Computer Graphics	3
COSC 4324	Computer Game Development I	3

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COSC 4325	Computer Game Development II	3
CPSC 4317	Computer Networks	3
CPSC 4360	Software Engineering	3
CPSC 4370	Artificial Intelligence	3
CPSC 4380	3D Modeling for Computer Graphics	3
CPSC 4381	3D Animation for Computer Graphics	3
MATH 2318	Linear Algebra	3
MATH 1342	Elementary Statistical Methods	3
	or MATH 3370 Introduction to the Theory of Statistical Inference	
Electives		
Select one hour of Elective ²		1
Total Hours		120

¹ If these science courses are selected, they must be accompanied by the corresponding 1-hour laboratory course (CHEM 1111 General Chemistry I Laboratory and CHEM 1112 General Chemistry II Laboratory). These additional hours will be applied to the 120-hour requirement for the major.

² Please see advisor for best option.

First Year		
Fall		Hours
COMM 1315	Public Speaking I	3
COSC 1336	Programming Fundamentals I	3
COSC 1173	Programming Lab	1
COSC 1172	Thinking, Speaking, and Writing	1
COSC 1324	The Art of Computer Game Development	3
HIST 1301	U S History I 1763-1877	3
Hours		14

Spring		
ENGL 1301	Composition I	3
COSC 1174	Fundamentals of Computing II Lab	1
HIST 1302	U S History II Since 1877	3
Creative Arts		3
Life & Physical Science		3
COSC 1337	Programming Fundamentals II	3
Hours		16

Second Year		
Fall		
ENGL 1302	Composition II	3
COSC 2324	Mobile Computer Game Development	3
COSC 2375	Discrete Structures	3
COSC 2336	Programming Fundamentals III	3
Life/Physical Science Core		3
Hours		15

Spring		
Language, Philosophy & Culture		3
MATH 2413	Calculus and Analytical Geometry I	4
POLS 2301	Intro to American Government I	3
COSC 2325	Computer Organization	3
Hours		13

Third Year		
Fall		
POLS 2302	Intro/American Government II	3
COSC 3304	Algorithms Design and Analysis	3
MATH 3370	Introduction to the Theory of Statistical Inference	3
COSC 3306	UNIX/C++	3
COSC 3308	Design Programming Languages	3
Hours		15

Spring		
COSC 3325	Computer Law and Ethics	3
COSC 3302	Intro to Computer Theory	3
COSC 4302	Operating Systems	3
MATH 2318	Linear Algebra	3
Academic Elective		3
Hours		15

Fourth Year		
Fall		
COSC 4324	Computer Game Development I	3
CPSC 4380	3D Modeling for Computer Graphics	3
COSC 4319	Computer Graphics	3
CPSC 4317	Computer Networks	3
Social and Behavioral Science Core		3
Hours		15

Spring		
COSC 4325	Computer Game Development II	3
CPSC 4381	3D Animation for Computer Graphics	3
COSC 4310	Introduction to Computer Architecture	3
CPSC 4360	Software Engineering	3
CPSC 4370	Artificial Intelligence	3
COSC 4272	Senior Assessment	2
Hours		17

Total Hours **120**