Game Development, AAS

The game development associate of applied science degree provides students with the focused knowledge and understanding of game design and development useful in qualifying for entry level industry positions as game programmers, tool builders, collision detection developers, engine builders and interface programmers as well as video and online training developers, Q/A (Question/Answer) Testers, customer supporters and simulations developers. Completion of this degree program will greatly enhance students' ability to create code for 2D/3D graphics and real time virtual environments. Additional skills will include an understanding of game ethics, of the proper presentation of "game bibles" and of math and physics required to model a realistic game world.

(Major Code 2650; State CIP Code 50.0411)

Game Development Program web page (http://www.jccc.edu/academics/credit/game-development/)

Associate of Applied Science Degree

First Semester

CIS 142	Beginning Programming using Python	4
ENGL 121	Composition I*	3
GAME 102	The Business of Games	3
GAME 104	Introduction to Game Development	1
GAME 105	Beginning Game Creation	3
MATH 171	College Algebra*	3
Total Hours		17

Second Semester (Game Programming Option)

CS 201	Concepts of Programming Algorithms using C#*	4
GAME 121	Game Programming I*	4
GAME 131	User-Centered Design*	4
GAME 180	Artificial Intelligence for Games*	3
Social Science and/or Economics Elective ^		3
Total Hours		18

^   See all AAS general education electives (http://catalog.jccc.edu/degreerequirements/associate-applied-science/)

Second Semester (Game Design Option)

GAME 120	Game Design I*	4
GAME 132	Game Level Editing*	4
GAME 136	Game Prototyping*	4
GAME 180	Artificial Intelligence for Games*	3
Social Science and/or Economics Elective ^		3
Total Hours		18

^   See all AAS general education electives (http://catalog.jccc.edu/degreerequirements/associate-applied-science/)

Third Semester (Game Programming Option)

CS 236	Object-Oriented Programming Using C#*	4
GAME 221	Game Programming II*	4
GAME 242	Agile Game Development*	3
MATH 191	Math and Physics for Games I*	4
or PHYS 191	Math and Physics for Games I*	
Total Hours		15

Third Semester (Game Design Option)

GAME 134	Game World Creation*	4
GAME 220	Game Design II*	4
GAME 235	Game Quality Assurance*	2
GAME 242	Agile Game Development*	3
Humanities Elective ^		3
NOTE: HUM 155 or HUM 156 is recommended		
Total Hours		16

^   See all AAS general education electives (http://catalog.jccc.edu/degreerequirements/associate-applied-science/)

Fourth Semester (Game Programming Option)

COMS 120	Interpersonal Communication	3
or COMS 121	Public Speaking	
or COMS 125	Personal Communication	
GAME 250	Game Capstone*	4
GAME 255	Mobile Game Programming*	4
Game Elective (see list below)		3
Humanities Elective		3
NOTE: HUM 155 or HUM 156 is recommended		
Total Hours		17

^   See all AAS general education electives (http://catalog.jccc.edu/degreerequirements/associate-applied-science/)

Fourth Semester (Game Design Option)

COMS 120	Interpersonal Communication	3
or COMS 121	Public Speaking	
or COMS 125	Personal Communication	
ENGL 150	Digital Narratives*	3
GAME 238	Serious Game Design*	3
GAME 250	Game Capstone*	4
Game Elective (see list below)		3
Total Hours		16

Game Electives

ENGL 150	Digital Narratives*	3
GAME 120	Game Design I*	4
GAME 121	Game Programming I*	4
GAME 131	User-Centered Design*	4
GAME 132	Game Level Editing*	4
GAME 134	Game World Creation*	4
GAME 136	Game Prototyping*	4
GAME 220	Game Design II*	4
GAME 221	Game Programming II*	4
GAME 235	Game Quality Assurance*	2
GAME 238	Serious Game Design*	3
GAME 255	Mobile Game Programming*	4
GAME 292	Special Topics:*	3

Total Program Hours: 67