

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; 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* (or higher)	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

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

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

Fourth Semester (Game Programming Option)

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

Fourth Semester (Game Design Option)

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

Total Program Hours: 67

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

* This course has a registration requirement.

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