

# Game Development, A.A.S.

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.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program Information (<http://www.jccc.edu/cooperative>).

(Major Code 2650; State CIP Code 50.0411)

- Game Development (<http://www.jccc.edu/academics/computers/game-development>)

## Associate of Applied Science Degree

### First Semester

GAME 104	Introduction to Game Development	1
ENGL 121	Composition I*	3
MATH 171	College Algebra*	3
GAME 102	The Business of Games	3
GAME 105	Beginning Game Creation	3
CS 134	Programming Fundamentals	4
Total Hours		17

### Second Semester (Game Programming Option)

GAME 121	Game Programming I*	4
CS 201	Concepts of Programming Algorithms using C#*	4
GAME 110	Flash Gaming	4
Health and/or Physical Education Elective ^		1
Social Science and/or Economics Elective ^^		3
Total Hours		16

^ Health and/or Physical Education Elective (<http://catalog.jccc.edu/spring/degreecertificates/electives/health-and-or-physical-ed-aas>)

^^ Social Science and/or Economics Elective (<http://catalog.jccc.edu/spring/degreecertificates/electives/social-sci-econ-aas>)

### Second Semester (Game Design Option)

GAME 120	Game Design I*	4
GAME 136	Game Prototyping*	4
GAME 132	Game Level Editing*	4
Health and/or Physical Education Elective ^		1
Social Science and/or Economics Elective ^^		3
Total Hours		16

^ Health and/or Physical Education Elective (<http://catalog.jccc.edu/spring/degreecertificates/electives/health-and-or-physical-ed-aas>)

^^ Social Science and/or Economics Elective (<http://catalog.jccc.edu/fall/degreecertificates/electives/social-sci-econ-aas>)

### Third Semester (Game Programming Option)

GAME 240	Agile Game Development*	2
GAME 180	Artificial Intelligence for Games*	3
GAME 221	Game Programming II*	4

CS 236	Object-Oriented Programming Using C#*	4
Humanities Elective ^		3
Total Hours		16

^ Humanities Elective (<http://catalog.jccc.edu/spring/degreecertificates/electives/humanities-aas>)

### Third Semester (Game Design Option)

GAME 240	Agile Game Development*	2
GAME 180	Artificial Intelligence for Games*	3
GAME 220	Game Design II*	4
GAME 134	Game World Creation*	4
Humanities Elective ^		3
Total Hours		16

^ Humanities Elective (<http://catalog.jccc.edu/spring/degreecertificates/electives/humanities-aas>)

### Fourth Semester (Game Programming Option)

Game Elective (see list below)		3
GAME 250	Game Capstone*	4
SPD 120	Interpersonal Communication	3
or SPD 121	Public Speaking	
or SPD 125	Personal Communication	
GAME 255	Mobile Game Programming*	4
MATH 191	Math & Physics for Games I*	4
or PHYS 191	Math & Physics for Games I*	
Total Hours		18

### Fourth Semester (Game Design Option)

Game Elective (see list below)		3
GAME 250	Game Capstone*	4
SPD 120	Interpersonal Communication	3
or SPD 121	Public Speaking	
or SPD 125	Personal Communication	
ENGL 150	Digital Narratives*	3
GAME 235	Game Quality Assurance*	2
GAME 238	Serious Game Design	3
Total Hours		18

### Game Electives

GAME 110	Flash Gaming	4
GAME 120	Game Design I*	4
GAME 121	Game Programming I*	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
ENGL 150	Digital Narratives*	3

HUM 155	Classical Mythology	3
HUM 156	Contemporary Approaches to World Mythology	3

**Total Program Hours: 67**