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# 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 (http://www.jccc.edu/academics/computers/game-development)

#### Associate of Applied Science Degree

#### **First Semester**

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

#### Total Hours

### 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 <sup>^</sup>		1
Social Science and/or Economics Elective		3
Total Hours		16

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

# Second Semester (Game Design Option)

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

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

#### Third Semester (Game Programming Option)

Total Hours		16
Humanities Elective ^		3
CS 236	Object-Oriented Programming Using C#*	4
GAME 221	Game Programming II*	4
GAME 180	Artificial Intelligence for Games*	3
GAME 240	Agile Game Development*	2

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

# Third Semester (Game Design Option)

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

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

# Fourth Semester (Game Programming Option)

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

# Fourth Semester (Game Design Option)

Game Elective (see list b 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**