Game Design

Associate in Applied Science Degree

Program **GAME.DESIGN.AAS**
CIP 360113

The A.A.S. degree program in Game Design helps to prepare graduates for careers in the video game software industry, a relatively new and rapidly expanding industry. The New York City / northern New Jersey metro region is one of the ten largest in the country for video game design and development. Game Design is a highly interdisciplinary field drawing from a number of diverse areas such as art, writing, sound design, sociology, anthropology, computer technology, and programming.

The computer is the primary tool of expression in the program; however, emphasis is placed on the development of creative thinking as well as art and design skills. Students should expect to use and develop skills with scripting tools to program interactive functionality. Most coursework takes place in a studio using regularly updated professional-quality hardware and software on both Macintosh and PC computer platforms.

The Game Design program prepares graduates for positions as game designers, level designers, interface designers, producers, production assistants, and game artists. Typical employers include game design firms, entertainment software companies, educational resource development companies, interactive design companies, game development companies and research, government, and military organizations.

The Game Design program may be pursued full-time or part-time. Some courses may be offered only during the evening.

PROGRAM OUTCOMES

- Understand the historical development of game play;
- Apply the design process to the research and development of professional video game concepts;
- Apply narrative structures in the design of video games and levels;
- Describe and reference industry trends and technologies in video gaming;
- Design meaningful video game experiences and game mechanics appropriate to context;
- Create diagrams, storyboards, and prototypes to specify game design concepts;
- Develop games with level editing and scripting tools within industry standard game engines;
- Understand basic programming concepts and apply scripting languages to create interaction in game environments;
- Create 2D and 3D game art assets from game concepts, utilizing professional 2D digital imaging and 3D modeling and animation software;
- Work effectively on interdisciplinary teams producing functioning games and levels.

Curriculum

Code	Course (lecture/lab hours)	Credits
FIRST SEMESTER		
ART 102	Basic Drawing (1/4)	3
ART 105	Two-Dimensional Design (1/4)	3
DMA 105	Introduction to Computer Art (1/4)	3
ENG 101	English Composition I (3/0)	3
GAM 120	Game Theory and Culture (1/4)	3
SECOND SEMESTER		
ART 106	Three-Dimensional Design (1/4)	3
COS 101	Introduction to Computer Science (3/2)	4
DMA 120	3-D Modeling I (1/4)	3
ENG 102	English Composition II (3/0)	3
GAM 140	Game Design I (1/4)	3
THIRD SEMESTER		
ART 104	Life Drawing (1/4)	3
DMA 135	Digital Narrative (1/4)	3
GAM 145	Game Programming I (2/2)	3
GAM 240	Game Design II (1/4)	3
MAT —	Mathematics elective[1]	3
— —	Science elective[2]	4
FOURTH SEMESTER		
ART 125	Topics in Contemporary Art (3/0)	3
DMA 225	Animation I (1/4)	3
GAM 260	Game Development (1/4)	3
HPE 110	Concepts of Health and Fitness (1/2)†	2
— —	General Education elective[3]	3
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[1] MAT 120 or 125 recommended. Select in consultation with an academic advisor.

[2] BIO 103 or 106, or PHY 101 recommended. Select in consultation with an academic advisor.

[3] Select course from the following general education categories: Social Science, Humanities, Historical Perspective, Diversity and Global Perspective.

†**CSW 100 is a preferred alternative**; HPE 111 is an acceptable alternative.

NOTE: Students must earn a minimum grade of C in all COS, DMA, and GAM courses.

NOTE: All program listings are subject to periodic updates. Please consult your program advisor, academic division, or **www.mccc.edu/programs_degree**