Miami Dade
College

Game Development and Design
Associate in Science | Code: 25075 | 60 credits
CIP (1550041100**)**
Effective Term: Fall 2024 (2247)

This curriculum allows students to explore the entertainment technology landscape while still pursuing a broad-based education. With an emphasis on game programming, the program exposes students to the development and design processes. Students can further specialize in game design, production, engines and systems, graphics programming and animation, mobile, and more.

GENERAL EDUCATION REQUIREMENTS (15.00 Credits)
COMMUNICATIONS (3.00 credits)

ENC 1101	English Composition	(3 credits)	Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).

HUMANITIES (3.00 credits)

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Introduction to Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	
THE 2000	Theatre Appreciation	(3 credits)	

MATHEMATICS (3.00 credits)

MAC 1105	College Algebra	(3 credits)	Prerequisite: MAT 1033⬥

⬥*Note:* Students must seek advisement for proper mathematics course from discipline chairperson.

NATURAL SCIENCE (3.00 credits)

AST 1002	Descriptive Astronomy	(3 credits)
BSC 1005	General Education Biology	(3 credits)
CHM 1020	General Education Chemistry	(3 credits)
ESC 1000	General Education Earth Science	(3 credits)
EVR 1001	Introduction to Environmental Science	(3 credits)
GLY 1010	Physical Geology	(3 credits)
OCE 1001	Introduction to Oceanography	(3 credits)
PHY 1020	General Education Physics	(3 credits)

SOCIAL SCIENCE (3.00 credits)

AMH 2010	History of the US to 1877	(3 credits)
AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

COMPUTER COMPETENCY
Test type(s) needed:
Computer Competency Test (CCT)
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CGS 1060C	Introduction to Computer Technology & Application

MAJOR CORE REQUIREMENTS (8.00 Credits)

COP 1334	Introduction to C++ Programming	(4 credits)	
COP 2335	Object Orientated Programming Using C++	(4 credits)	Prerequisite: COP 1334

PROGRAM CORE REQUIREMENTS (37.00 Credits)

CAP 2047	User Interface Design	(4 credits)	Prerequisites: DIG 1710 and DIG 1729C; Pre/Co-requisite: COP 2335
CAP 2048	Game Development Project I	(3 credits)	Prerequisites: DIG 1430; CAP 2047 or DIG 1302; COP 1334 or DIG 1111; COP 2335 or DIG 1437; DIG 1710 or DIG 1132 Pre/Corequisites: DIG 2712 or DIG 2113
CAP 2920C	Game Development Project II	(3 credits)	Prerequisites: CAP 2048; DIG 2712 or DIG 2113
DIG 1430	Storyboarding	(3 credits)	
DIG 1710	Introduction to Game Development	(4 credits)	
DIG 1729C	Game Engines	(4 credits)	
DIG 1772C	Introduction to Virtual & Augmented Reality Technologies	(4 credits)	Prerequisite: DIG 1729C
DIG 2626	Artificial Intelligence for Game Development	(4 credits)	Prerequisites: CAP 2047 and COP 2335
DIG 2712	Level Building & Design	(4 credits)	Prerequisites: CAP 2047; COP 2335; DIG 1430
DIG 2717C	Game System Design	(4 credits)	Prerequisites: CAP 2047; DIG 2712; MAC 1105