

# Game Development Bachelor of Science

## Degree Type

Bachelor of Science

## Environment

online

## Program Length

108 weeks

## Overview

The Game Development curriculum is designed to give you the programming skills and theory needed to excel in the world of game development. First, you will learn the details of a game development cycle from preproduction to finished product and begin to create simple games that will help to develop your programming and design skills. Then you will move into more complex and detailed tasks in courses such as Computer Graphics, Computer Architecture, Artificial Intelligence, and Software Engineering. Finally, you will focus these skills on a complete, playable game that you will design, develop, and produce from start to finish. This is part of a complete game development education that will get you ready to face the demands of the professional game world. In addition to learning the game development process, you will have courses focusing on probability, digital logic, and game architecture.

## Objective

**Bachelor's Objective** The goal of the Game Development Bachelor of Science degree program is to provide you with the focused knowledge and understanding of game development useful in qualifying for entry-level industry positions as game programmers, tool builders, network programmers, I/O programmers, collision-detection developers, artificial-intelligence programmers, engine builders, and interface programmers. Completing this degree program will enhance your ability to create program code for 3-D graphic display, multiplayer gaming, artificially intelligent opponents, and real-time virtual environments. Additional skills developed in this program include the proper presentation of game docs as well as the math and physics required to model a realistic game world. In addition to technical proficiency and creative development, your education will help you develop critical-thinking, problem-solving, and analytical skills that contribute to lifelong learning, providing you with tools to help sustain a long and productive professional career in the entertainment and media industries.

## Month 1

Month 1

Code	Title	Credit Hours
GEN1011	Creative Presentation	3.0

## Month 2

Month 2

Code	Title	Credit Hours
DEP1013	Psychology of Play	3.0

## Month 3

Month 3

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
TEM1001	Technology in the Entertainment and Media Industries	4.0

## Month 4

Month 4

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
MAD1100	Discrete Mathematics	4.0

## Month 5

Month 5

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
COP1000	Programming I	4.0

## Month 6

Month 6

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
COP2334	Programming II	4.0

## Month 7

Month 7

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
SDV3111	Systems Programming	4.0

## Month 8

Month 8

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
COS119	Project and Portfolio I: Computer Science	3.0
ENC1101	English Composition I	4.0

## Month 9

Month 9

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
SDV2213	Data Structures and Algorithms	4.0

## Month 10

Month 10

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
GEN242	Linear Algebra	4.0

## Month 11

Month 11

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
GDD258	Software Engineering	4.0
GEN262	Physics	4.0

## Month 12

Month 12

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
SDV3012	Applied Human-Computer Interaction	3.0
COS1111	Professional Development Seminar I: Computer Science	1.0

## Month 13

Month 13

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
GDB229	Project and Portfolio II: Game Development	3.0

## Month 14

Month 14

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
GDB239	Project and Portfolio III: Game Development	3.0
COS2222	Professional Development Seminar II: Computer Science	1.0

## Month 15

Month 15

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
COD3412	Digital Logic	4.0

## Month 16

Month 16

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
GDD291	Operating Systems	3.0
GEN3322	Probability	4.0

## Month 17

Month 17

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
COD3511	Computer Organization and Architecture	3.0
COD3315	Computer Graphics	3.0

## Month 18

Month 18

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
COD3622	Information and Database Systems	3.0

## Month 19

Month 19

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
GDD245	3-D Content Creation	3.0

## Month 20

Month 20

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
GDB349	Project and Portfolio IV: Game Development	3.0

## Month 21

Month 21

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
GDD379	Engine Development	4.0
COD3721	Computer Networks	3.0

## Month 22

Month 22

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
CAP4053	Artificial Intelligence	4.0

## Month 23

Month 23

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
GDB359	Project and Portfolio V: Game Development	3.0

## Month 24

Month 24

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
GDD483	Game Architecture	3.0
HIS3320	Historical Archetypes and Mythology	4.0

## Month 25

Month 25

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
GDB469	Project and Portfolio VI: Game Development	3.0

## Month 26

Month 26

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
GDD4319	Game Integration	3.0

## Month 27

Month 27

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
GDB479	Project and Portfolio VII: Game Development	3.0
CRR4000	Career Readiness	4.0
<b>Total Credit Hours</b>		<b>120</b>