

# GAME DEVELOPMENT, BS

Campus: NYC, Westchester

Requirement	Credits
University Core Requirements	44-54
Major Requirements	55-63
Open Electives	1-12
<b>Total Credits</b>	<b>120</b>

## UNIVERSITY CORE REQUIREMENTS (44-54 CREDITS)

See complete University Core (<https://catalog.pace.edu/undergraduate/university-core-curriculum/>) requirements.\*

\*Students pursuing a BS in Game Development are required to complete CS 121 Introduction to Computer Science from the Foundation Requirements.

## MAJOR REQUIREMENTS (55-63 CREDITS)

Code	Title	Credits
<b>Game Development Core Required Courses (31 credits) <sup>1</sup></b>		
CIS 151	Game Development for Everyone	3
CS 255	Game Development Patterns and Algorithms	4
CS 256	Game Design and Prototyping	4
CS 355	Advanced Topics in Game Development	4
CS 356	Mobile Game Development and Publishing	4
CS 357	Augmented Reality (AR), Virtual Reality (VR), and the Metaverse	4
CS 455	Game Engine Architecture	4
CS 456	Game Development Capstone	4
<b>Computer Science Core Required Courses (12 credits) <sup>1</sup></b>		
CS 113	Mathematical Structures for Computer Science	4
CS 121	Introduction to Computer Science <sup>2</sup>	4
CS 122	Object-Oriented Programming	4
CS 241	Data Structures and Algorithms	4
<b>Related Computing Electives (6-8 credits)</b>		
<i>Two (2) 300 level or higher Computer Science courses.</i>		
CS Elective 1		
CS Elective 2		
<b>Interdisciplinary Track (9-12 credits)</b>		
Three courses from one track in Liberal Arts and Science (below):		
<i>Communication and Media Studies Track (Choose 3 courses)</i>		
CMS 113, CMS 226, CMS 228, CMS 244, CMS 291, CMS 296B		
<i>Writing/English Track (Choose 3 courses):</i>		
ENG 223, ENG 224, ENG 317, ENG 326F		
<i>Film and Screen Studies Track (Choose 3 courses):</i>		
FSS 203, FSS 215, FSS 237, FSS 317, FSS 323		
<i>Literature Track (Choose 3 courses):</i>		
LIT 213C, LIT 340, LIT 387D		
<i>Math Track (Choose 3 courses):</i>		
MAT 131, MAT 132, MAT 236, MAT 238, MAT 303		
<i>Media and Communication Arts Track (Choose 3 courses):</i>		
MCA 112, MCA 220, MCA 226, MCA 276, MCA 350		

<sup>1</sup> Students must earn a grade of C or better in each prerequisite core.

<sup>2</sup> Course is taken as part of the University Core Requirements.

## OPEN ELECTIVES (1-12 Credits)

Code	Title	Credits
<b>Open Electives</b>		
Select 1-12 credits		
<b>Total Credits</b>		<b>1-12</b>
<b>Course Title Credits</b>		
<b>First Year</b>		
<b>Fall</b>		
CS 121	Introduction to Computer Science	4
MAT 104	Finite Mathematics	3
ENG 110	Composition	3
UNV 101	First-Year Seminar: Introduction to University Community	1
AOK 2 Course		3
AOK 4 Course		3
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
CS 122	Object-Oriented Programming	4
CIS 151	Game Development for Everyone	3
CS 113	Mathematical Structures for Computer Science	4
MAT 117	Elementary Statistics	4
<b>Credits</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
CS 255	Game Development Patterns and Algorithms	4
CS 241	Data Structures and Algorithms	4
ENG 120	Critical Writing	4
Course Related to Track		3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
CS 256	Game Design and Prototyping	4
ENG 201	Writing in the Disciplines	3
COM 200	Public Speaking	3
Course Related to Track		3
AOK 3 Course		3
<b>Credits</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
CS 355	Advanced Topics in Game Development	4
Related CS Elective (300 level or higher)		4
Science		4
Language 1		3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
CS 356	Mobile Game Development and Publishing	4
CS 357	Augmented Reality (AR), Virtual Reality (VR), and the Metaverse	4
AOK 5 Course		3
Language 2		3
<b>Credits</b>		<b>14</b>

**Fourth Year****Fall**

CS 455	Game Engine Architecture	4
Related CS Elective (300 level or higher)		4
Course Related to Track		3
AOK 2 Course (WE)		3

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<b>Credits</b>		<b>14</b>
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**Spring**

CS 456	Game Development Capstone	4
LAS/Elective/Free (CE/WE/ARE)		4
AOK 3 Course		3
AOK 4 Course		3

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<b>Credits</b>		<b>14</b>
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<b>Total Credits</b>		<b>120</b>
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