

# CREATIVE ARTS AND TECHNOLOGY - GAME DEVELOPMENT AND DESIGN CONCENTRATION (B.A.)

Unless otherwise noted, 120 credits of coursework is required for a baccalaureate degree with a minimum 2.0 overall GPA, and a minimum 2.0 major GPA.

## Degree Requirements Overview

Code	Title	Credits
	New Student Seminar	3
	SEEDS General Education Requirements	30-33
	Major Requirements	71
	Free Electives	16-13
	<b>Total Credits</b>	<b>120</b>

## Major Requirements

Code	Title	Credits
<b>Major Core</b>		
CAT 121A	CAT Foundation Studio	4
CAT 380A	Internship I	3
CAT 420	Capstone Project I	4
<b>Concentration Requirements</b>		
CAT 108	Introduction to Game Design	3
CAT 150	History and Culture of Games	3
CAT 236	Visual Design for Games	3
CAT 237	Group Game Project I	4
CAT 238	Game Programming I	3
CAT 253	Digital Game Design	3
CAT 264	Computer Imaging	3
CAT 274	Game Programming 2	3
CAT 308A	Group Game Project II	4
CAT 369	Game Theory Analysis	3
CAT 408A	Pre-Capstone: Game Development	4
<b>Electives</b>		
	Complete 24 credits from the list below.	24
	<b>Total Credits</b>	<b>71</b>

## Electives

Code	Title	Credits
CAT 107	Introduction to Music Technology	3
CAT 117	Process Interaction: An Introduction	3
CAT 120	Drawing I	3
CAT 130	Introduction to Data Visualization	3
CAT 134	Drawing For 2-D Animation	3
CAT 215	Level Design	3
CAT 247	Design Thinking and Practice	3
CAT 261	Interaction And Interface: Introduction To Physical Computing	3

CAT 270B	Web Design I	3
CAT 286C	Sound Design I: Audio for Video I	3
CAT 327	Game Programming Studio	3
CAT 328	Artificial Intelligence for Games	3
CAT 360	Selected Topics in Technology	3
CAT 361A	3D Modeling	3
CAT 364	Motion Capture with Motionbuilder	3
CAT 372	3D ANIMATION	3
CAT 430A	Internship II	3

## New Student Seminar

Code	Title	Credits
FYS 100	First Year Seminar	3
	<b>Total Credits</b>	<b>3</b>

## SEEDS General Education Requirements

Click here for a listing of courses that fulfill the SEEDS requirements. (<http://catalog.montclair.edu/programs/seeds-general-education-requirements/>)

Code	Title	Credits
<b>Foundations</b>		
	<i>Effective Writing I</i>	
	Complete one Effective Writing I course.	3
	<i>Effective Writing II</i>	
	Complete one Effective Writing II course.	3
	<i>Interactive Communication</i>	
	Complete one Interactive Communication course.	3
	<i>Quantitative Reasoning</i>	
	Complete one Quantitative Reasoning course.	3
	<i>Political and Civic Life</i>	
	Complete one Political and Civic Life course.	3
	<i>World Languages</i>	
	Complete two sequential classes in one World Language when starting at the Beginner I or Beginner II level. Complete one class when starting at the Intermediate/Advanced Level.	3-6
<b>Exploration</b>		
	Complete one course from four different Exploration categories.	12
	<i>Analyzing Cultures and Societies</i>	
	<i>Creative Expression</i>	
	<i>Ethical Inquiry</i>	
	<i>Historical Thinking</i>	
	<i>Literary and Artistic Analysis</i>	
	<i>Scientific Reasoning</i>	
	<b>Total Credits</b>	<b>30-33</b>

## Recommended Roadmap to Degree Completion

This recommended degree plan is provided as an outline for students to follow in order to complete their degree requirements within four years and 120 credits. This plan is a recommendation and MUST be used in consultation with their academic advisor. Important note: Students

should be aware this plan assumes no pre-requisite coursework is required. If pre-requisite coursework is needed, students may have additional requirements to fulfill which do not appear on the plan.

**First Year**

<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
WRT 105A (Fulfills SEEDS: Effective Writing I)		4 WRT 109 (fulfills SEEDS: Effective Writing II)	3
FYS 100		3 MTH 131 (Fulfills SEEDS: Quantitative Reasoning)	3
CAT 108 (fulfills SEEDS: Exploration 1 - Creative Expression)		3 CAT 253	3
CAT 121A		4 CAT 150 (Fulfills SEEDS: Exploration 2 - Literary and Artistic Analysis)	3
		Major Elective	3
	<b>14</b>		<b>15</b>

**Second Year**

<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
CAT 238		3 CAT 274	3
CAT 264		3 CAT 369	3
CAT 236		3 SEEDS: World Language 2 or Free Elective	3
SEEDS: World Language 1		3 Major Elective	3
Major Elective		3 Major Elective	3
	<b>15</b>		<b>15</b>

**Third Year**

<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
CAT 237		4 CAT 308A	4
SEEDS: Exploration 3		3 Major Elective	3
Major Elective		3 SEEDS: Exploration 4	3
Free Elective		3 Free Elective	3
SEEDS: Interactive Communication		3 SEEDS: Political and Civic Life	3
	<b>16</b>		<b>16</b>

**Fourth Year**

<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
CAT 408A		4 CAT 420	4
CAT 380A		3 Major Elective	3
Major Elective		3 Free Elective	3
Free Elective		3 Free Elective	3
Free Elective		3	
	<b>16</b>		<b>13</b>

**Total Credits 120**