

# Game Development Programming Certificate

## Degree Type

Certificate

This program is not currently accepting new students.

NHTI's Game Development Programming program certificate program teaches you programming, design skills, and multiple programming languages using industry-proven game development technologies. You'll create several game projects, including a team project. Courses in this program are offered days and evenings and can be completed in nine months. It is possible to complete this certificate's instruction and hands-on training in NHTI's computer labs. This program is financial aid-eligible.

**Do you have questions?** Contact Aaron Conn, department chair, at [aconn@ccsnh.edu](mailto:aconn@ccsnh.edu) or 603-271-6484 x4143.

## Career Information

Graduates will be able to enter an internship, apprenticeship, or on-the-job training program in game development; undertake preparation for entry-level game development certification exams; and/or continue in the Animation and Graphic Game Programming degree at NHTI.

## Admission Requirements

Applicants are required to have one of the following:

- At least three years of college preparatory mathematics (Algebra I, Algebra II, and Geometry) with minimum grades C or higher
- College board Math SAT or other formalized testing with a score that places applicant into Math 124C/XC or higher-level course
- Completion of one or both AGGP Math electives with a C or higher

## Curriculum

Item #	Title	Lecture Hours	Lab Hours	Credits
AGGP101C	Introduction to Game Design and Creation with Programming	2	3	3
AGGP103C	Introduction to Content Development	2	2	3
AGGP131C	Introduction to 2-D and 3-D Game Development	2	3	3
AGGP140C	Digital Art Modeling and Animation	2	3	3
CPET107C	Introduction to Programming with C++	2	3	3
CPET125C	Data Structures	2	3	3
<b>Subtotal Credits</b>		<b>12</b>	<b>17</b>	<b>18</b>
Total Credits			18	

## Additional Information

### Program Learning Outcomes

Graduates are able to:

- Know the syntax and usage of programming languages used in the game industry.
- Apply object-oriented programming design and techniques in software projects.
- Prototype content and game systems.
- Import custom content using content pipelines from one or more major game engines.

- Design and create games in a variety of genres using the systems from one or more major game engines.
- Identify and research topics about the game industry and game programming.
- Identify game mechanics and systems found within game genres and specific games.
- Be proficient in the use of one or more major source control systems.
- Understand and apply basic project management planning and techniques.