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 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
	Subtotal Credits	**12**	**17**	**18**
	Total Credits			**18**

Additional Information

Program Learning Outcomes

Graduates are able to:

- Know the syntax and usage of programing languages used in the game industry.
- Apply object-oriented programing 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.