

COMPUTER GAME AND MOBILE APPLICATIONS PROGRAMMER - CERTIFICATE

Overview

See Department website and program contacts here

The **Computer Game and Mobile Applications Programmer certificate** is designed for students seeking entry-level careers in mobile application and game development. The curriculum combines programming, design, and technical development skills to prepare students for work in the growing mobile app and video game industries.

Coursework includes topics such as **programming, game and app development tools, user interface (UI) design, and user experience (UX)**. Students develop practical technical skills that support success in entry-level programming and development roles.

The program is workforce-focused and emphasizes practical, applied learning that prepares students for opportunities in mobile application development, game programming, and related technology fields.

Students are encouraged to work with an advisor (<https://www.mhcc.edu/student-resources/academic-advising/>) to ensure appropriate course selection and program planning based on their educational background and career goals.

Refer to the tabs above for additional information about:

- **Education Plan** – provides a sample term-by-term sequence of courses
- **Career Info** – includes information on potential occupations, employment trends, and earnings

Program Learning Objectives

At the completion of this program, students should be able to:

- Design games and systems which can be deployed in a mobile environment
- Develop intermediately complex solutions to specific problems
- Demonstrate basic fluency in Apple iOS Mobile Apps development and Unity Game programming
- Demonstrate basic fluency in common web programming languages
- Demonstrate basic fluency in a common scripting language (such as Python)
- Critically analyze a customer request and provide multiple possible solutions
- Critically analyze a basic design structure and provide input on enhancing user experience
- Design an application or a game suitable for delivery in a mobile environment.

Education Plan

This sample Education Plan illustrates one possible course sequence. Students should consult an advisor (<https://www.mhcc.edu/student-resources/academic-advising/>) to create a personalized plan.

General education courses (such as math, writing, health, etc.) can be taken during any term, or before starting the program.

First Quarter		Credits
CIS125GA	Beginning Game Programming	3
CIS195	Interface Design for Interactive Applications	3
CIS197CSP	Web Authoring: Client-Side Programming	3
CIS197HTM	Web Authoring: HTML5 and CSS3	3
MTH065	Beginning Algebra II (or higher)	4
Credits		16
Second Quarter		Credits
CIS235UNA	Small Games Programming I	3
ISTM133P	Introduction to Python	4
ISTM235MA	Mobile Apps 1: Introduction to iOS Mobile Applications Development	3
WR121Z	Composition I	4
Credits		14
Third Quarter		Credits
CIS135TXP	Special Topics in Emerging Technologies	3
CIS235UNB	Small Games Programming II	3
ISTM235MB	Mobile Apps 2: Intermediate iOS Mobile Applications Development	3
Human Relations requirement (https://catalog.mhcc.edu/degree-certificate-requirements/aas/#human)		3-4
Credits		12-13
Total Credits		42-43

Awarding Requirements

The following requirement(s) must be fulfilled to be awarded the Computer Game and Mobile Applications certificate:

- All core program courses (AM) must be completed within five (5) years of starting the program.

Career Information

Explore potential careers related to this program, including typical job roles, employment trends, and projected growth. This information can help you better understand how your education may align with future career opportunities.