Unity Game Development Bootcamp

30 WEEKS | ONLINE | BEGINNER-FRIENDLY

Why Game Development?

Real-time 3D (RT3D) is one of the most in-demand tech skills and has one of the highest forecasted growth rates—over 70% in the next 10 years (Burning Glass). By learning Unity and Game Development, you can bring your creative vision to life and build the next generation of digital and Web3 experiences.

Gaining skills in 3D development opens up new career pathways and opportunities.

Common Job Titles

- ✓ Game Developer
- ✓ Game Engineer
- ✓ Augmented Reality Developer
- ✓ Virtual Reality Developer
- ✓ Unity Developer
- ✓ Gameplay Engineer

STATE OF MARKET

23 million jobs

Projected number of jobs that will be enhanced by VR/AR technologies by 2030

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Program Overview

Circuit Stream is the leading provider of XR education and Unity learning. Since 2015, we have educated more than 50,000 professionals and organizations through online workshops, and courses.   Circuit Stream has developed the curriculum for the Unity Game Development Bootcamp.

Our Unity Game Development Bootcamp is a career-focused program that prepares you to enter the 3D development industry. Over the course of 30 weeks, you will acquire real-time 3D skills to equip you to pursue entry-level jobs as game developer in 3D real-time industries, which include the video game industry and virtual and augmented reality industry. You will have experience in creating scalable game architecture using design patterns, implementing gameplay mechanics based on game design documents, and optimizing 3D applications. Additionally, you will have gained proficiency in implementing third-party libraries and APIs in game development.

By the end of the program, you will have completed a capstone project that demonstrates your ability to create a minimum viable project of a personal project using Unity, showcasing your practical skills and knowledge.

Admission Process

STEP 1

Submit online application

Fill out our online application form and we'll get back to you as soon as possible.

<u>Submit here</u>

STEP 2

Program Acceptance

Your application will be reviewed by the Circuit Stream admissions team. Once reviewed, if you are accepted, you will receive an email officially offering you a seat in the program.

Experience

Digital Badge

Upon completion of the Game Development Bootcamp, you will receive a Circuit Stream certified Game Developer badge and a Certificate of Completion from University of Central Florida Continuing Education to showcase the skills you have learned to your network and potential employers.

You will also be prepared to complete Unity's Associate-level certification, should you choose to pursue it.

Is This Course for You?

This 30-week beginner-friendly program is designed for individuals with an interest in pursuing a career within the RT3D Industry.

Unity Game Development Bootcamp is a beginner-friendly course, but basic computer literacy skills are necessary for a successful learning process. This includes file management and navigating your operating system (Windows, macOS, or Linux).

What to Expect

Overall Expectation

✓ 30 weeks

✓ 150+ hours live sessions

✓ Up to 10 one-on-one sessions

✓ Minimum 6 portfolio worthy projects

✓ 1 final capstone project

Weekly Program

✓ 5-hours of live class time per week

✓ 10 hours independent study per week

Outcomes

Unity Development Process

Develop the skills necessary to work in a 3D software development team. You will understand the process of crafting an application from start to finish, including industry-standard and Agile practices.

C# Coding for Gaming

Learn the basics of Object Oriented Programming and C#, a programming language commonly used to create games. The course will also help you develop a coder mindset for logic and effective problem solving.

API Integration

Learn to leverage third-party tools to complement your game and create more immersive experiences.

Mobile Game Development

Create engaging mobile games by learning mobile-specific input handling, such as touch and gestures. Leverage APIs and databases to optimize data management and functionality, and prepare your games for export and publication on app stores.

Optimization

Learn the benefits of cross-platform game development which allows you to code once and release your game on a range of platforms including mobile, console, AR/VR, and PC.

Career Development in Gaming

Build a strong foundation for your career. This course guides you through the steps of crafting your elevator pitch, perfecting your interview skills, and much more.

Experience with Industry-Recognized Tools

Unity Game Development Bootcamp is designed to teach you the industry-standard tools of building 3D and XR experiences.

Unity	Git	Jira
Visual Studio	ClickUp	Trello
GitHub	Slack	Rider

Program Structure

Overview

Live Sessions
Each week, there are five hours of live online teaching per week, split into two 2.5 hour sessions. Led by an instructor, you will learn the latest game development skills and best practices.

Lab Sessions
Labs include technical workshops where you practice and build themed projects, career workshops, dedicated working sessions, and game jams.

Premium Support
Stay on track with access to premium academic support. A qualified expert will be available to address any technical questions you have and provide guidance as you work through your course material.

Career services
Student coaching is at the heart of the program. From day one, we'll be there to provide guidance through career coaching, group workshops, one-on-one sessions, and guest lectures. The career component of the program runs concurrently with the technical training.

Learning Activities and Projects

Unity Game Development Bootcamp is structured around project-based learning that has you gain practical skills while working on real-world projects to help build solid foundations for a career in game development. The course consists of:

01 Weekly assignments

02 In-class challenges

03 Portfolio projects

04 Capstone project

Completion Requirements

To successfully complete the bootcamp and earn your Circuit Stream certified Game Developer badge, you must finish with a grade of at least 70%.

- Assignments — — — — — — — — — — — — — — — — — 20%
- Midterm — — — — — — — — — — — — — — — — — 30%
- Capstone project — — — — — — — — — — — — — — — — — 50%

Prerequisites

Unity Game Development Bootcamp is beginner-friendly and requires no prior experience to be admitted. Students can enter the program and begin confidently learning from day one. To be accepted into the program, you must:

- Be 18 years of age or older.
- Have basic computer literacy.
- Have internet access.
- Have a computer that can comfortably run Unity Editor.

Hardware and Software

Hardware

A PC or Mac with the following minimum requirements: 3 GHz (2 cores/4 threads), 8 GB RAM, 8 Mb/s network bandwidth. macOS users must have 10.12 (macOS Sierra) or later, while Windows users must have Windows 8 or later in a 64-bit environment.

Software

- Unity Hub and Unity Editor (steps to download here)
- Microsoft Visual Studio or JetBrains Rider
- Git and Github

Curriculum

The bootcamp curriculum is divided into six modules. Each module teaches you new skills to become a successful game developer. You will practice your skills with various activities and apply the skills you learned in some cases to a game template.

Part I: Foundations

Introduction to Game Development

Gain the introduction of basic concepts at the core of game development, delving into vital concepts like gaming loop, 3D assets, 3D physics systems, animation, player input, among other concepts using the Unity Hub and Unity Editor. You will also get started in C# coding using Git for versioning.

Unit 1
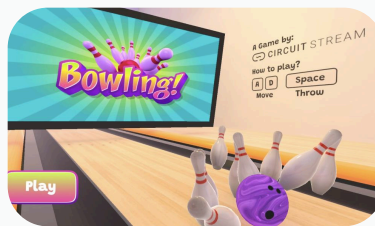
Portfolio Project: Bowling

Coding for Games

Dive deep into the fundamentals of Object-Oriented Programming (OOP) and harness its power with C# to craft rich gaming applications. Establishing a solid foundation in C# empowers developers to sculpt dynamic games, enriched with tailored behaviors and enduring data persistence. Moreover, master the art of teamwork by leveraging collaborative tools such as Git and GitHub.

Unit 2
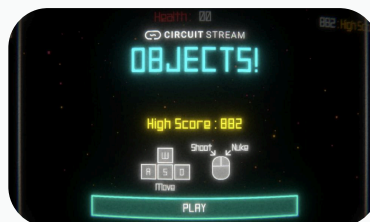
Portfolio Project: Objects

Part II: Intermediate

Unit 3

Game Architecture

Delve into the importance of structuring code for robustness and scalability. Central to this approach are industry-standard design patterns, that solve common problems and challenges. Employ these design patterns to create scalable games, and gameplay mechanics anchored in a detailed game design document.

Portfolio Project: Turning Test

Unit 4

Data Structures and Algorithms

Dive into the intricacies of selecting the ideal data structures and algorithms tailored to specific scenarios and challenges. Grasp the nuances of basic algorithm design techniques, analyze algorithmic complexity, and implement use common data structures, ensuring solutions are both effective and efficient.

Portfolio Project: City Builder

Unit 5

Mobile Games

Learn to create games for mobile platforms. You will gain skills in mobile-specific input handling, performance optimization, and preparing games for deployment on app stores. In this unit, you will clone an existing mobile game and add features to enhance its user experience and functionality.

Portfolio Project: Clone App

Unit 6

Multiplayer Games

Learn how to develop multiplayer games will enable you to tap into the rapidly expanding market of online gaming, allowing you to reach a larger and more engaged audience. Mastering multiplayer development in Unity enhances one's programming and problem-solving skills, as it involves complex networking concepts, synchronization, and server-client interactions.

Portfolio Project: Tanks

Unit 7

Capstone Project

You will use the skills, knowledge and techniques you have learned throughout the Bootcamp to create a final project. The goal is to create a minimum viable product, or MVP, which can be summarized as a basic version of your idea and incorporates all the concepts you've learned. Finally, you will have the opportunity to pitch your project to industry leaders who will give you feedback on your game.

Career Preparation and Guidance

With the help of Circuit Stream's career lab support, you will learn to leverage your technical and behavioral strengths, gain awareness of the Unity digital ecosystem, create a compelling portfolio, elevate your digital presence according to your personal brand, learn how to network effectively, and become interview-ready for industry jobs.

Career support highlights

✓ Writing résumés and cover letters

✓ Job search navigation

✓ Crafting an elevator pitch

✓ Preparing for interviews

✓ Salary negotiations

✓ Dedicated pitch and networking events

Modules

Self Discovery

Navigating your way through a new industry can be overwhelming, but getting clarity on what you want and need makes things easier. In this lab, you will undergo deep self-exploration. In the end, you will determine your goals to start a career in RT3D development.

Market Research

Learn how to do research and compare what you are thinking with the reality of the job market, using public information like postings and industry descriptions.
Then, figure out how job search works in any industry and define an overview of the most important steps you need to follow, and the challenges you might face.

Personal Brand

Your personal brand should comprise the aspects you defined in the previous labs. You will implement your strengths and industry knowledge to refine your digital messaging to make the right connections for your new career.

Digital Presence

Once you determine what your new and shiny personal brand should be, turn it into your digital presence. You will show what you can do with key digital tools that will lead to a successful career transition.

Job Search

Discover the best practices for job search and interview success, including: job application strategies, résumé building and etiquette, writing your personal brand statement, networking to find job leads and potential employers.

Networking Events

Through Circuit Stream's partnership network, you will receive the opportunity to network and connect with hiring partners— including those looking to hire talent with game development skills.

Pitch Day

You will have the opportunity to take part in Pitch Day, a day dedicated to showcasing your capstone project that takes place a month after Bootcamp ends. The event ranges between 2-3 hours, and you will have the opportunity to present and pitch your project to hiring managers and industry experts. This is also an opportunity to gain feedback from peers and participants alike.

Outcomes

✓ Networking with industry professionals

✓ Real-time project feedback

✓ Connect with potential employers

Pricing

Pay Upfront

Pay in full before you start. Circuit Stream accepts wire transfers and credit card payments.

$14,995
excluding tax

Loans

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Paying for education isn't one-size-fits-all. We are able to offer flexible payment solutions, so you can make tuition payments in the way that works for your situation.

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