

# **Unity Learning Pathway Guide**

beginner all the way to certification.

We understand there are many resources available on the Unity Learn site. This document helps guide you through these resources to help you learn Unity: from complete

**Who should use this guide:** If you are an Educator learning Unity yourself, or if you are an Educator looking to provide students with a self-guided path to learn Unity.

It is important to note: most of the content below does not have associated lesson plans on how to bring this into the classroom, however there is a <u>dedicated section</u> at the end for available Educator resources.

# New to Unity (Complete Beginner)

(10-15 days in total- depending on chosen specializations)

The learning content in this pathway is to help you learn how to use the Unity Engine. It will also cover all of the foundational skills and competencies you will need to proceed to preparing for future certification if you are interested in taking that path. Once you complete the two required courses, you can then pick a specialty to focus on as you learn Unity - Game Development (which is more suitable for those looking to take the 3D Artist path) or Programming (more suitable for those looking to take the 3D Programmer path).

## **PART 1. START HERE**

(Requires: 2-3 days)

- Getting Started with Unity (4-5 hours)
- 2. <u>Unity Basics</u> (7-9 hours)

## **PART 2. NOW PICK A SPECIALTY**

We recommend completing at least 3 of the below courses in either Game Development or Programming specializations.

Game Development (8-10 days)	Programming (6-10 days)
Creator Kit Puzzle, Create Kit RPG, Creator FPS (3-4 hours)	Create with Code (32-40 hours)
Beginning 2D Game Development (16-18 hours)	Beginner Coding (3-5 hours)
Beginning 3D Game Development (21-15 hours)	Beginner Scripting (7-9 hours)
Beginner Fundamentals: Unity Game Dev Course (12-15 hours)	C# Survival Guide (10-20 hours)
Intermediate Fundamentals: Unity Game  Dev Course (5-7 hours)	Beginner Programming: Unity Game Dev Course (5-7 hours)
Advanced Fundamentals: Unity Game Dev Course (8-10 hours)	Intermediate Programming: Unity Game Dev Course (4-6 hours)

# Suggested Beginner Content

Similar to learning a second language, the more you practice your Unity skills in a variety of ways, the better you will become at being comfortable in the Engine. The below suggested content will help you bolster your Unity skills and feel more confident in teaching Unity.

Bonus Content
VR Development: <u>Design Visualization for Automotive</u>
VR Development: <u>Build a Site Construction Tour</u>
Up to Speed with Timeline
Ruby's Adventure 2D Beginner

John Lemon's Haunted Jaunt: 3D Beginner

Beginner Level Tutorials on the Learn Platform

# PART 3. INTERESTED IN TAKING IT FURTHER WITH UNITY CERTIFICATION?

The learning content in this pathway is meant to prepare you to take the certification courseware in your chosen speciality - Art & Design or Programming - in order to successfully pass either the <u>Unity Certified 3D Artist</u> or <u>Unity Certified Programmer</u> exams. We recommend completing at least 4 of the content offerings within your certification specialization prior to taking the <u>Unity Certified 3D Artist Exam Preparation course</u> or the <u>Unity Certified Programmer Exam Preparation</u> course

Certified 3D Artist (40-60 hours)	Certified Programmer (20-40 hours)
Unity Game Dev Course Art Series (45-54 hours)  Beginner Art Intermediate Art Advanced Art	Unity Game Dev Course Programming Series: (20-26 hours)  Beginner Programmer  Intermediate Programmer  Advanced Programmer
Creating Believable Visuals (1-2 hours)	C# Survival Guide (10-20 hours)
Unity Game Dev Course Design Series: (19-24 hours)  Beginner Design Intermediate Design Advanced Design	Intermediate Scripting (2 hours)
	Tower Defense Template (2-4 hours)

# Suggested Certification Preparation Content:

Similar to learning a second language, the more you practice your Unity skills in a variety of ways, the better you will become at being comfortable in the Engine. The below suggested content will help you bolster your Unity skills and feel more confident as you prepare for certification.

Bonus Content	
Up to Speed with Timeline	
Working with Cinemachine Cameras	
Exploring Unity 2018 LTS	
Tutorials for Graphics and Visual Effects on the Learn Platform	
Tutorials for Particles and Effects on Learn Platform	
Tutorials for Scripting on the Learn Platform	
Transitioning from Unreal to Unity	

## **EDUCATOR SPECIFIC RESOURCES**

Unity had developed free resources available online specifically for Educators. Please find more details on these resources below.

#### With Curriculum Guides:

#### <u>Create with Code</u> and associated <u>Teacher Training Course</u>

In this introductory course, students will use Unity to learn the fundamentals of programming (C#) in the context of creating their own projects.

#### Getting Started with Playground: For Educators

Getting Started with Unity Playground is a perfect project for students who have no/limited familiarity with Unity. This curriculum guide consists of eight lesson plans that correspond to 45-60 minute class periods.

#### Catapult Physics: Forces & Energy

This project allows students to experiment with foundational Physics concepts like mass, velocity, forces, and energy within Unity, a powerful real-time physics engine. This provides students with a fun and interactive way to tinker with various physical constants and immediately see their impact in a simulated environment. Not only is this an excellent way for students to solidify their understanding of these concepts, but it will also open their eyes to the possibility of using 3D engines like Unity to grapple with real-world scenarios.

#### Probability and Design Thinking: Make a Spinner!

Make a Spinner is a great entry-level project to get students to think about programming and development. This series was created with students in middle/high school in mind, but it could be used for younger and older students with modification on how the content is presented. It is a simple project that introduces students to the basic functionality of Unity and core programming concepts, but could also be tied in with other Math concepts, such as coordinate systems, velocity, acceleration, and probability.

#### With Learning Objectives:

Creator Kits: RPG, Puzzle, FPS (First Person Shooter)

Beginner Scripting (C#)

## 3D Gamekit Lite

VR in Unity: A Beginner's Guide

# Self-guided:

MicroGames: Karting, 2D Platformer, FPS (First Person Shooter)