

Unity Creative Core pathway



Teacher preparation guide

What is Creative Core?

Creative Core is a 10-week learning pathway and your next step towards becoming a Unity creator. This free learning path will teach you all the core elements you will need to bring your imagination to life with Unity. Once you've completed Unity Essentials as an introduction to the fundamentals of the Unity Editor, take this pathway to learn VFX, Lighting, Animation, Audio, UI, and other creative skills, no programming required.

Key details

A 10- to the 12-week learning journey that teaches Unity basics and is designed for anyone who wants to become familiar with creating games and real-time experiences in Unity.

Scope of this document

This teacher preparation guide accompanies the Unity Creative Core Pathway and will help you get ready to bring this curriculum into your classroom.



Table of contents

Teacher orientation	2
Design your educational experience	4
Getting started checklist	8

Teacher orientation

1a. Familiarize yourself with the pathway content and available resources <i>For a detailed breakdown, see the Syllabus document</i>	
Objectives of the pathway	<ul style="list-style-type: none">→ Beginner Animation Systems→ Beginner 3D Animation (Native Unity)→ Beginner 3D Animation (Imported)→ Beginner User Interface→ Beginner Audio Design Principles→ Beginner Audio Implementation→ Beginner Prototyping→ Beginner Job preparation→ Absolute Beginner Design Process→ Beginner Render Pipelines→ Absolute Beginner Digital Citizenship→ Absolute Beginner Research→ Beginner Critical Thinking→ Beginner Materials→ Beginner Shader Scripting→ Beginner Shaders→ Beginner Lighting→ Beginner Particles and Visual Effects→ Beginner Unity Cameras→ Beginner Post-Processing
Pathway requirements	<ul style="list-style-type: none">→ Mac or PC with standard mouse required (* headphones recommended)→ 2 weeks minimum
Pathway structure	<ul style="list-style-type: none">→ Lessons→ Guided projects→ Independent project

1b. Understand who your learners are

Unity Creative Core is a comprehensive entry point for anyone with basic Unity real-time engine knowledge or who has completed the Unity Essentials pathway. Depending on the profile and prior experience of your learners, you can use it to facilitate a range of different experiences to best meet their needs.

Learner age range	Delivery suggestion
Lower secondary (middle school and junior high)	<ul style="list-style-type: none"> → Structured, facilitated sessions throughout that break down the self-paced technical instructions into sessions with extension opportunities to ensure the group keeps pace → Scaffolding and extension options mapped to those sessions will help provide differentiated learning experiences → The software installation/new user onboarding guidance is unlikely to be required for this age range
Upper secondary (high school)	<ul style="list-style-type: none"> → Independent completion of the self-paced technical learning content, with scaffolding and extension options to provide differentiated learning experiences → Facilitated research and discussion sessions on creator skills and real-time industry exploration → The software installation/new user onboarding guidance is unlikely to be required for this age range
Adult learners with no previous experience (higher, further, and casual education)	<ul style="list-style-type: none"> → Independent completion of the self-paced technical learning content, with extension options if appropriate → Facilitated research and discussion sessions on creator skills and real-time industry exploration
Adult learners with previous real-time engine experience (higher, further, and casual education)	<ul style="list-style-type: none"> → Unity Essentials may be useful for reference, but it is not designed for target learners in this group

Design your educational experience

2a. Adapting Unity Creative Core content for different teaching approaches and contexts

This guide takes into account in-person, blended, and fully virtual educational settings, and the following table offers some guidance on adapting this learning experience for your teaching approaches and circumstances.

Facilitator-led	<p>The step-by-step and modular structure of the pathway allows for facilitator-led teaching.</p> <p>As an instructor/facilitator for a learning experience based around Unity Creative Core, your most valuable contributions are likely to be:</p> <ul style="list-style-type: none">• Facilitating discussion around the various topics and showcasing industry examples for context.• Questioning to consolidate and deepen understanding.• Troubleshooting participant technical issues.
Flipped classroom/instruction	<p>Pre-class work can be assigned by tutorial or mission within the Unity Creative Core pathway. Presentations or peer review feedback on the personal projects sessions are also ideal for the flipped classroom.</p>
Asynchronous learning	<p>The Unity Creative Core pathway is a complete course with all relevant instruction presented in a mix of video and text. All resources required for a specific module are also linked under that module. This could allow for asynchronous learning where learners can go through the course at their own pace. We suggest combining this with peer review sessions or instructor check-ins to ensure everyone is on track and progressing.</p>

Share your unique insights

Whichever approach you decide on, make sure to share your own experience, insights, and perspectives with participants, and by providing this, you'll help participants develop their understanding of the realities of game development and real-time applications.

2b. Review common pathway configurations					
	Main tutorials	Guided project and quizzes	Independent projects	% teacher - led % in-class	Relevant affordances and constraints
1: Teacher-led	Teacher-led In-class	Independent In-class	Teacher-led In-class	80% teacher-led 100% in-class	Students can't work at home You want complete control You feel confident w/ material or can spend time on training
2. Teacher-assisted	Video-led In-class	Independent In-class	Video-led In-Class	0% teacher-led 100% in-class	Students can't work at home You do not feel confident with material yet and/or do not have time for training

2c. Determine your unique classroom affordances and constraints		
Available hardware?	<ul style="list-style-type: none"> In your classroom, do you have a way of projecting or displaying your own computer's screen so that the entire class can see it? (<i>"Yes" allows for teacher-led in-class or video-led in-class activities.</i>) 	Yes No
	<ul style="list-style-type: none"> Can a set of headphones be included at each computer station? (<i>"Yes" allows for independent in-class activities.</i>) 	Yes No
Student work at-home?	<ul style="list-style-type: none"> Can all of your students access a computer that can run Unity outside of class time? This could include getting access to the computer lab outside of their normal class period. (<i>"Yes" allows for at-home activities.</i>) 	Yes No
Experience	<ul style="list-style-type: none"> Do you either (a) have ~20 hours to dedicate to training and 	Yes No

with material?	<i>learning the material before the course begins or (b) already have a lot of experience teaching Unity and C#? (If "Yes," teacher-led activities are an option for you. If "No," independent or video-led activities may be best to start.)</i>	
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2d. Determine how much of the pathway you should aim to complete		
Determine if you can finish the entire pathway.	How many combined in-class hours and at-home hours (if any) will the students have to work on this course?	___ weeks
	The entire pathway takes approximately 10 weeks (40-50hrs) to complete independently but can take longer in a classroom depending on class size, experience, amount of time given to work on personal projects, and other factors. How long do you think it would take for your class to complete the pathway?	___ weeks
Units or activities to exclude from curriculum (if any)	The Creative Core pathway consists of self-contained modules, throughout which learners develop a final project. You can choose to exclude certain topics, but this will have an impact on the final project.	Yes No

Getting started checklist

3a. Set up the computer lab and method for students to submit their assignments		
Get Unity licenses	<ul style="list-style-type: none"> You can either (a) apply for a Unity Educational license through the license grant program or (b) have students create individual Unity IDs. 	<input type="checkbox"/>
Install Unity software in computer lab	<ul style="list-style-type: none"> Download Unity Hub and install Unity version 2020.3 LTS (including Visual Studio) on all of the computers in the lab, then test to make sure that (a) Unity opens successfully and (b) Visual Studio opens successfully. 	<input type="checkbox"/>
Set up a system for students to submit their work	<ul style="list-style-type: none"> Using your school's LMS, Google Classroom, or other systems, make sure your virtual classroom is set up so that students can submit their work. Students can submit screenshots/screencasts of their projects (recommended) or submit .zip files of their Unity assets. It is possible to use version control software like Github to track and 	<input type="checkbox"/>

	evaluate students' projects.	
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3b. Prepare to teach and connect with a support community		
<p>Schedule time for training</p> <p>Connect with the Unity teacher community</p>	<ul style="list-style-type: none"> Regardless of the pathway configuration you have chosen, it is recommended that you complete at least the first unit of the online pathway independently prior to the pathway start date. This will take approximately 1 hour. If you intend to do any teacher-led activities, it is also strongly recommended that you complete that content in the online pathway independently prior to leading the students. 	<div></div>
<p>Schedule time for training</p> <p>Connect with the Unity teacher community</p>	<ul style="list-style-type: none"> Click this link to register and join the teacher support community, where you can get help from experts and connect with other new teachers. 	<div></div>