

Design and Code Programs

LEARNING GOAL & SCALE: Standard	
4	Student will be successful in level 3 and: Create a gaming using high-level functions and add additional features that were not provided through the tutorial they chose. Using the mini-tutorials or even more so through their own creation.
3	Student will: Plan Program Design & Code Programs (standards 42.0 & 43.0) <ul style="list-style-type: none"> ✓ Examine existing software and choose appropriate tool to use (Unity or Unreal) ✓ Prepare proper layout specifications (2D, 3D, Mobile, etc.) ✓ Utilize reference manuals (Udemy, tutorials, forums, etc.) ✓ Code routines, write programs & event-driven programs, logical statements, & score keeping. ✓ Implement enhanced program structures- help text & goals. (standard 47.0). Code, test, & debug throughout (standard 44) ✓ Create a maintain documentation/source code (standard 45)
2	Student will: Define: layout, event-driven, code, if-statement and array. Know which game engine you want to learn (C#- Unity or C++ Unreal)
1	With help from the teacher, the student has partial success with the current content.

Work Scenario: Since you've learned the basics of programming the gaming company you are interning at wants you to develop a basic game. They are giving you free-reign to in terms of genre. The game must demonstrate your coding abilities.

Learning Target: Plan a game design & build that game using C# in Unity. **Game must include score keeping, if-then statements, basic menu with start button, help text/instructions, goal/victory condition & one timed-event.**



****As you do these tutorials I want you to keep track of your source code (put in Notepad, keep track of which object you put in, etc.). You will turn in this source code as well as your game each week.**

For the below- not all will meet the requirements so you will have to do some coding on your own. Requirements that must be met include: score keeping, if-then statements, basic menu with start button, help text/instructions, goal/victory condition & one timed-event.

Udemy Options

Block Breaker, Laser Defender, Glitch Garden, TileVania Platformer:

<https://www.udemy.com/unitycourse/learn/lecture/10248456#overview>

Battle Royale: <https://www.udemy.com/course/build-a-battle-royale-and-an-rpg-in-unity-and-blender/learn/lecture/12824861#overview>

Bitblaster XL Clone or Farmville Clone (these are the only two options from this series – if you do one of the other games you must add significantly more code on your own): <https://www.udemy.com/course/unity-developer-course/learn/lecture/8581372#overview>

Project Boost, Argon Assault, Realm Rush, Zombie Runner (these are the only two options from this series – if you do one of the other games you must add significantly more code on your own):

<https://www.udemy.com/unitycourse2/learn/lecture/8190420#overview>

You can find tutorials on your own or create a game from scratch as well – it must meet all the same requirements!