

A Quick Step-by-Step Setup Guide for Educators

Teaching Programming with Minecraft (Java Edition)

2025 Edition

1 Introduction

Minecraft isn't just a game—it's a powerful learning environment. With the **VisualModder** plugin, you can transform the standard Minecraft into an interactive classroom where students learn programming through creativity and play.

This guide walks you through everything you need to get started—from setup to your first teaching session. You can also watch the **companion video** that demonstrates each step in detail.



2 What You'll Need

Before diving in, make sure you have the following. The next sections explain how to get each item.

- **Minecraft: Java Edition** – One license per student
 - **An online Minecraft server** – Where everyone connects to play and learn together
 - **The VisualModder plugin** – Adds block-based coding tools inside Minecraft
 - **Teaching materials** – Free, ready-to-use lessons and examples
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3 Step-by-Step Setup

3.1 Download the VisualModder Plugin

Download the plugin from the official website:

 <https://visualmodder.org/plugin-download/>

VisualModder lets students create mods and automate actions in Minecraft using simple, drag-and-drop coding blocks.

It's **free** and supports up to **five students** with the base license.

3.2 Download the Teaching Materials

Access the free curriculum that comes with VisualModder here:

👉 <https://visualmodder.org/free-teaching-materials/>

The materials include guided lessons, coding challenges, and creative building activities—perfect for beginners.

3.3 Buy Minecraft: Java Edition Licenses

Each student needs their own license to join the server. For testing, you can start with just one.

Licenses can be purchased directly from the official Minecraft website:

👉 <https://www.minecraft.net/en-us/store/minecraft-java-bedrock-edition-pc>

Depending on your classroom setup, choose one of the following options:

Option 1: Students purchase their own license

Great if students use their own laptops and want to keep learning at home after classes.

Estimated cost: around \$30 per student.

Option 2: The school provides licenses

Ideal for shared or school-owned laptops. Licenses can be shared and reused over the years.

3.4 Get a Server Subscription

You'll need an online Minecraft server to share your world with students.

Option 1: Use a paid hosting service

Simple and reliable—recommended for most schools.

The setup was successfully tested with **Apex Hosting** as an example:

👉 <https://apexminecrafthosting.com/>

Cost: around \$6 per month for a small server.

For classes of up to 20 students, a server with **at least 16 GB RAM** is recommended (this may cost more).

Option 2: Host your own server

Suitable only for schools with the technical expertise and infrastructure to manage it.

3.5 Upload the Plugin

Once your server is running, upload the **VisualModder plugin** to your server's `plugins` folder.

Restart the server to activate it.

3.6 Test Your Setup

Before starting your class, log in and confirm that everything is working properly:

- You can create a simple program in the editor
- The program runs successfully in Minecraft
- Coding blocks appear as expected

3.7 Start Teaching!

You're ready to begin!

Use the provided lesson plans to introduce students to programming concepts, foster creativity, and make learning fun inside Minecraft.

4 About the Teaching Materials

The free teaching resources include:

- Clear theory explanations
- Step-by-step coding exercises
- Quizzes
- Example projects and activities

These materials are designed for children and beginners—**no prior programming experience required.**

