



Create Minecraft Mods in Java *Syllabus*

Course Overview

This course introduces students to the fundamentals of modding in Minecraft using Java. Participants will learn to create, register, and display custom items, blocks, tools, weapons, and entities while gaining hands-on experience in coding and modding principles.

This course is recommended for ages 11 and up, at the intermediate learning level. With over 35 hours of Java coding content, tailored to the creation of mods for minecraft.

Course Objectives

By the end of this course, students will:

- Understand the basics of Java programming for Minecraft modding.
- Learn to set up a development environment for creating Minecraft mods.
- Create and customize new items, blocks, tools, and entities.
- Develop and register custom recipes, smelting processes, and gameplay mechanics.
- Test, package, and deploy their mods in Minecraft

Course Outline

Lesson 1 - Setup and Items

- Using this Course
- 1.1 - Setup
- 1.2 - Create Your Worm
- 1.3 - Register Your Worm
- 1.4 - Display Your Worm
- 1.5 - Ingot Create and Register

- 1.6 - Display Your Ingot

Lesson 2 - Blocks

- 2.1 - Dirt Block
- 2.2 - Register Dirt Block
- 2.3 - Display Your Dirt
- 2.6 - Create & Register Ore Block
- 2.4 - Drop That Worm
- 2.5 - Generate Your Dirt
- 2.7 - Display Ore
- 2.8 - Smelt Ore
- 2.9 - Generate Your Ore

Lesson 3 - Tools

- 3.1 - Create Item Tier
- 3.2 - Create PickAxe
- 3.3 - Register and Display Pickaxe
- 3.4 - Create Shovel
- 3.5 - Register and Display Shovel
- 3.6 - Create Axe
- 3.7 - Register and Display Axe
- 3.8 - Create Hoe
- 3.9 - Register and Display Hoe

Lesson 4 - Super Sword

- 4.1 - Create Super Sword
- 4.2 - Register and Display Sword
- 4.3 - Sword Recipe

Lesson 5 - Armor

- 5.1 - Armor Material
- 5.2 - Create Helmet
- 5.3 - Register and Display Helmet
- 5.4 - Create Chestplate
- 5.5 - Register and Display Chestplate
- 5.6 - Create Leggings
- 5.7 - Register and Display Leggings
- 5.8 - Create Boots
- 5.9 - Register and Display Boots

Lesson 6 - Launcher

- 6.1 - Create Atomic Fireball
- 6.2 - Atomic Fireball Entity
- 6.3 - Atomic Fireball Renderer
- 6.4 - Launcher
- 6.5 - Register Atomic Fireball & Launcher
- 6.6 - Display Launcher

Lesson 7 - Teleporter

- 7.1 - Teleporter
- 7.2 - Register & Display Teleporter
- 7.3 - Custom Textures

Lesson 8 - Zombie

- 8.1 - Candy Zombie
- 8.2 - Candy Zombie Renderer
- 8.3 - Zombie Register
- 8.4 - Zombie Display

Lesson 9 - Super Fruit

- 9.1 - Create Super Fruit
- 9.2 - Super Fruit Bush
- 9.3 - Super Fruit Seeds
- 9.4 - Register
- 9.5 - Display Super Fruit

Package Your Mod

Resources

Required:

- A computer capable of running Minecraft and development tools.
- Installed Java Development Kit (JDK).
- Minecraft Forge Development Kit.
- A code editor (e.g., IntelliJ IDEA or Eclipse).