

# Roblox-Curriculum

Duration: 45–50 Hours

## Module 1: First Steps in Roblox Studio

### Lesson 1 — Welcome to Roblox Studio

- Interface overview
- Explorer and Properties
- Move, Scale, Rotate
- Anchor basics

**Project:**

- Simple Obby Starter

### Lesson 2 — Building with Parts

- Part types
- Materials
- Colors
- Surface appearance
- Collision basics

**Project:**

- Colorful Platform World

### Lesson 3 — Creating Your First Play Area

- Terrain Editor
- Sculpt Tool
- Basic level planning

**Project:**

- Fantasy Island Build

### Lesson 4 — Terrain Editor Basics

- Flatten tool
- Smooth tool

- Paint
- Water placement

**Project:**

- Multi-Island World

## **Lesson 5 — Advanced Tools**

- Properties
- Referencing
- Toolbox
- Model insertion
- Safe asset use

**Project:**

- Dice Game

## **Lesson 6 — Natural Landscapes**

- ParticleEmitter
- Grouping
- Wedges
- Deep Subtract
- Union
- Negation

**Project:**

- Torch Light
- Volcano Scene

## **Lesson 7 — Lighting and Atmosphere**

- Lighting service
- Atmosphere
- Shadows
- Fog settings

**Project:**

- Day and Night Environment

## **Lesson 8 — Decorative Environment Design**

- Decals
- Surface details

- Asset placement
- Theme design

**Project:**

- Medieval Village

## **Module 2: Roblox Lua Programming Foundations**

### **Lesson 9 — First Lua Scripts**

- print()
- Script.Parent
- Script placement
- Output window debugging

**Project:**

- Part prints message in output

### **Lesson 10 — Variables in Roblox**

- local
- storing values
- storing parts
- strings and numbers

**Project:**

- Color-changing brick

### **Lesson 11 — Events Begin**

- Touched Event
- Trigger interactions
- Event connections

**Project:**

- Touch brick changes color

### **Lesson 12 — Smart Conditions**

- if / then / else
- humanoid detection
- multiple conditions

**Project:**

- Human-only trigger block

## **Lesson 13 — Functions in Roblox**

- Creating functions
- Calling functions
- reusable systems

**Project:**

- Door open / close system

## **Lesson 14 — Loops in Action**

- while
- for
- repeat loops

**Project:**

- Blinking light timer

## **Lesson 15 — Operators and Comparisons**

- greater than / less than
- equality
- logical operators

**Project:**

- Speed gate logic

## **Lesson 16 — Randomness in Games**

- math.random()
- random ranges

**Project:**

- Random color floor

## **Lesson 17 — Tables in Lua**

- storing lists
- indexing
- looping through tables

**Project:**

- Random reward selector

## **Lesson 18 — Advanced Functions**

- function parameters
- return values

**Project:**

- Score calculator

## **Lesson 19 — Debugging in Roblox**

- common script errors
- debugging strategies
- output reading

**Project:**

- Fix broken scripts challenge

## **Lesson 20 — ModuleScripts Introduction**

- reusable code modules
- require() basics

**Project:**

- Shared utility script

# **Module 3: Interactive Game Mechanics**

## **Lesson 21 — GUI Basics**

- Buttons
- Text labels
- ScreenGui structure

**Project:**

- Button hides platform

## **Lesson 22 — GUI Scripting**

- changing text
- button events

**Project:**

- Simple score button

## **Lesson 23 — ProximityPrompt Systems**

- Trigger without touching

**Project:**

- Walk near object → light toggles

## **Lesson 24 — TweenService Basics**

- Smooth movement
- tween properties

**Project:**

- Sliding door

## **Lesson 25 — Sound Programming**

- Play / stop / loop
- sound triggers

**Project:**

- Music control button

## **Lesson 26 — Animation Basics**

- humanoid animation
- animation IDs

**Project:**

- NPC dance trigger

## **Assessment**

- Interactive Mini Obby with button logic

# **Module 4: Collectibles and Game Systems**

## **Lesson 27 — Cloning Objects**

- Instance.new()
- duplication logic

**Project:**

- Coin spawner

## **Lesson 28 — Player Storage**

- folders
- value objects

**Project:**

- Coin counter

## **Lesson 29 — UI Updates**

- text changes live

**Project:**

- Coin count display

## **Lesson 30 — Checkpoints and Win Logic**

- goal zones
- respawn systems

**Project:**

- Win zone system

## **Lesson 31 — Leaderboards**

- leaderstats
- score tracking

**Project:**

- Coins leaderboard

## **Lesson 32 — Save Systems Introduction**

- datastore concepts
- persistent values

**Project:**

- Save player score prototype

# **Module 5: NPCs, Tools, and AI Systems**

## **Lesson 33 — ClickDetector Systems**

- click interaction

### **Project:**

- NPC says message

## **Lesson 34 — Giving Tools**

- tools to players

### **Project:**

- Flashlight giver

## **Lesson 35 — Health Systems**

- humanoid health
- damage zones

### **Project:**

- Healing fountain + trap

## **Lesson 36 — Unlock Systems**

- boolean tracking

### **Project:**

- Door unlock by collected coins

## **Lesson 37 — NPC Pathfinding**

- PathfindingService basics

### **Project:**

- NPC follows player

## **Lesson 38 — Enemy AI Basics**

- chasing logic
- attack zones

### **Project:**

- Monster chase system

# **Module 6: Escape Game Development**

## **Lesson 39 — Escape the Maze Part 1**

- Maze layout
- traps

## **Lesson 40 — Escape the Maze Part 2**

- Timed doors
- checkpoints

## **Lesson 41 — Escape the Maze Part 3**

- Win system
- polish

## **Lesson 42 — Escape the Maze Final Publish Version**

### **Project:**

- Complete Maze Game

# **Module 7: Multiplayer and Advanced Roblox Systems**

## **Lesson 43 — Tower Defense Basics**

- Enemy pathing
- wave logic

## **Lesson 44 — Tower Attack Systems**

- target detection
- loops

## **Lesson 45 — Round Systems**

- enemy spawning

## **Lesson 46 — RemoteEvents Introduction**

- client-server communication
- secure scripting basics

### **Project:**

- Multiplayer button trigger

## **Lesson 47 — Raycasting Basics**

- hit detection
- directional logic

### **Project:**

- Laser trap system

## **Lesson 48 — Survival Game Systems**

- random disaster logic
- countdown logic
- elimination rules

### **Project:**

- Survive the Disaster Mini Game

# **Module 8: Final Roblox Creator Capstone**

## **Lesson 49–50 — Final Game Project**

- Tower Defense Mini Game
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