

# **Genuity Training**

## **Junior Roblox Mastery**

### **Course Overview**

This fun, hands-on course introduces children to the exciting world of robotics through engaging, creative, and educational activities.

This instructor-led, live training (onsite or online) is aimed at beginner-level children who wish to learn how to design, build, and program simple robots while developing logical thinking and teamwork skills.

### **Program Mission**

Junior Roblox Mastery is a 12-week technical track for students aged 8–14. We transition kids from playing games to building them, teaching professional 3D design and Lua coding—the same logic used in Python and C++.

### **Learning Path**

- Phase 1: 3D Design & Modeling – Building immersive worlds and mastering 3D physics.
- Phase 2: Lua Scripting Foundations – Learning variables, loops, and functions to make games interactive.
- Phase 3: Game Mechanics – Creating leaderboards, shops, and multiplayer features.
- Phase 4: Launch & Portfolio – Debugging and publishing a live game to the global Roblox platform.

### **Key Outcomes**

- Coding Literacy: Mastery of text-based programming logic.
- Problem Solving: Advanced debugging and critical thinking skills.
- Digital Entrepreneurship: Understanding game monetization and UI/UX design.
- Certification: Graduates receive a Junior Roblox Mastery certificate.

### **Requirements**

- Hardware: PC/Laptop (Windows or Mac).
- Software: Roblox Studio (Free).
- Goal: 100% project-based learning.

### **Audience**

- Children aged 10 to 16 years' old
- Beginner-level robotics learners

## Training Course Outline

Module	Topic	Coverage
<b>Phase 01: The Builder's World (Weeks 1-3)</b>		
Module 1	Introduction to the Metaverse	<ul style="list-style-type: none"> <li>• Setting up Roblox Studio &amp; Account Security.</li> <li>• Understanding the Interface: Explorer, Properties, and Toolbox.</li> <li>• <b>Project:</b> "My First Obby" (Obstacle Course) – Building basic platforms</li> </ul>
Module 2	Advanced Building Techniques	<ul style="list-style-type: none"> <li>• Using the Move, Scale, and Rotate tools.</li> <li>• Material and Color selection.</li> <li>• Introduction to <b>Union &amp; Negate</b> (creating custom shapes like windows or arches).</li> </ul>
Module 3	Environmental Storytelling	<ul style="list-style-type: none"> <li>• Using the Terrain Editor (generating mountains, water, and caves).</li> <li>• Adding lighting effects (Skybox, Sun Rays, Bloom).</li> <li>• <b>Project:</b> A "Hidden Jungle" or "Desert Island" map.</li> </ul>
<b>Phase 2: Introduction to Lua Scripting (Weeks 4-7)</b>		
Module 4	The Logic of Coding	<ul style="list-style-type: none"> <li>• What is a Script? Printing messages to the Output.</li> <li>• Variables and Data Types (Strings, Numbers, Booleans).</li> <li>• <b>Project:</b> Making a part change color when the game starts.</li> </ul>
Module 5	Interaction & Events	<ul style="list-style-type: none"> <li>• Understanding the Touched event.</li> <li>• Functions: Writing code that "does something" when triggered.</li> <li>• <b>Project:</b> Creating "Kill Bricks" (lava) and Speed Boost pads</li> </ul>
Module 6	Conditionals & Loops	<ul style="list-style-type: none"> <li>• If/Then statements: Making decisions in code.</li> </ul>

		<ul style="list-style-type: none"> <li>• <code>While</code> and <code>for</code> loops: Making objects spin or move repeatedly.</li> <li>• <b>Project:</b> A disappearing bridge that only appears for 5 seconds.</li> </ul>
Module 7	User Interface (UI) Design	<ul style="list-style-type: none"> <li>• Creating <code>ScreenGui</code>, <code>Frames</code>, and <code>TextLabel</code>s.</li> <li>• Scripting buttons to open menus or change scenes.</li> </ul>
<b>Phase 3: Game Mechanics &amp; Economy (Weeks 8-10)</b>		
Module 8	Leaderboards & Stats	<ul style="list-style-type: none"> <li>• Introduction to <code>Leaderstats</code>.</li> <li>• Creating "Coins" or "Points" systems.</li> <li>• <b>Project:</b> A treasure hunt game where points are saved.</li> </ul>
Module 9	<code>RemoteEvents</code> & Client-Server Communication	<ul style="list-style-type: none"> <li>• How the "Server" talks to "Players."</li> <li>• Creating tools (Swords, Flashlights, or Magic Wands).</li> </ul>
Module 10	Game Economy & Shop	<ul style="list-style-type: none"> <li>• Designing an in-game shop.</li> <li>• Introduction to <b>Robux and Monetization</b> (Game Passes and Developer Products).</li> </ul>
<b>Phase 4: The Grand Finale (Weeks 11-12)</b>		
Module 11	Debugging & Optimization	<ul style="list-style-type: none"> <li>• How to find "bugs" in the code.</li> <li>• Playtesting with friends and gathering feedback.</li> </ul>
Module 12	Publishing to the World	<ul style="list-style-type: none"> <li>• Creating a Game Icon and Thumbnail.</li> <li>• Setting up game descriptions.</li> <li>• <b>Final Project:</b> Launching a fully functional multiplayer game on the Roblox platform.</li> </ul>