



# ROBOTIC TIER-0 CURRICULUM



## Session Plan Overview



| S.No. | Session Name                      | Class Topics   | Tool Used            |
|-------|-----------------------------------|--|----------------------|
| 1     | <b>Dancing Animation</b>          | <ul style="list-style-type: none"> <li>• Introduction to MoonTinker</li> <li>• Understanding the basic blocks</li> <li>• Introduction to Microbit</li> <li>• Creating the first program</li> </ul>   | MoonTinker Simulator |
| 2     | <b>Exploring Buttons</b>          | <ul style="list-style-type: none"> <li>• Understanding sensors</li> <li>• Displaying numbers, texts and icons using buttons</li> </ul>   | MoonTinker Simulator |
| 3     | <b>Counter</b>                    | <ul style="list-style-type: none"> <li>• Understanding variables and operations</li> <li>• Creating a counter using buttons (how to increment and decrement variable using buttons)</li> </ul>   | MoonTinker Simulator |
| 4     | <b>Step Counter</b>               | <ul style="list-style-type: none"> <li>• Gesture integration</li> <li>• Creating a foot step counter</li> </ul>  | MoonTinker Simulator |
| 5     | <b>Rock, paper &amp; Scissors</b> | <ul style="list-style-type: none"> <li>• Understanding Randomness (random no. generation)</li> <li>• using it to create the iconic rock paper scissors game</li> <li>• Understanding conditional commands</li> </ul>   | MoonTinker Simulator |
| 6     | <b>Coin Toss</b>                  | <ul style="list-style-type: none"> <li>• Creating a digital coin toss</li> </ul>   | MoonTinker Simulator |
| 7     | <b>Dice Game</b>                  | <ul style="list-style-type: none"> <li>• Developing a digital dice</li> <li>• Developing a game that utilizes a digital dice</li> </ul> <p><b>Example:</b></p> <ul style="list-style-type: none"> <li>• Generate a number (1-6)</li> <li>• If number &gt; 3 → show "Win"</li> <li>• Else show "Try Again"</li> </ul> | MoonTinker Simulator |
| 8     | <b>Mini Project + Showcase</b>    | <ul style="list-style-type: none"> <li>• Build an independent project and showcase in the class</li> </ul>   | MoonTinker Simulator |