



## Tier-O Robotics 12-Month Curriculum - Stage 1

| Her-U Robo     | tics 12-Month Curriculum - Stage 1                               |
|----------------|--|
| SESSION NUMBER | SESSION NAME   |
| Session 1      | Multiple LED blinking and effect of resistance                   |
| Session 2      | Patterns on LED  |
| Session 3      | Slide switch with LED & concept of if else                       |
| Session 4      | Variables in programming   |
| Session 5      | Traffic light activity using variables & comments in programmimg |
| Session 6      | Introduction to Arduino web-editor & working with web-editor     |
| Session 7      | Kit unboxing & hands on hardware components                      |
| Session 8      | Introduction to 7-segment on simulator                           |
| Session 9      | Activity on 7-segment using ELBB                                 |
| Session 10     | Introduction to digital Input                                    |
| Session 11     | Generating tones on ELBB   |
| Session 12     | Working with Liquid Crystal Display (LCD) on simulator           |
| Session 13     | Working with Liquid Crystal Display (LCD) on ELBB                |
| Session 14     | Real-life activity on LCD using simulator                        |
| Session 15     | Real-life activity on LCD using ELBB                             |
| Session 16     | Servo motor on simulator   |
| Session 17     | Servo motor on ELBB  |
| Session 18     | Introduction to the breadboard                                   |
| Session 19     | Circuit activity on breadboard                                   |
| Session 20     | RGB led  |
| Session 21     | Activity using RGB LED on breadboard                             |
| Session 22     | Traffic light on a breadboard                                    |
| Session 23     | Simple Servo motor application                                   |
| Session 24     | Servo motor application  |
| Session 25     | Introduction to serial monitor - Part I                          |
| Session 26     | Serial monitor - Part II   |
| Session 27     | Project 1 - Part I   |
| Session 28     | Project 1 - Part II  |
| Session 29     | Project 2 - Part I   |
| Session 30     | Project 2 - Part II  |
| Session 31     | Project 2 - Part III   |
| Session 32     | Math operators (==, >, <, etc) Random number generation          |
| Session 33     | AND, OR operation  |
| Session 34     | Count up & down in block coding                                  |
| Session 35     | Jackpot game   |
| Session 36     | Project 3 - Part I   |
| Session 37     | Project 3 - Part II  |
| Session 38     | Project 3 - Part III   |
| Session 39     | Miscellaneous (Optional)   |



- \*\* 1. The curriculum is subjected to changes and upgradation as per the feedback received from our customers.
  - 2. Project and activities will depend on the type of course and tier.
  - 3. Moonpreneur reserves all the rights to update its curriculum at any given point in time.











## Tier-0 Robotics 12-Month Curriculum - Stage 2

| SESSION NUMBER | SESSION NAME              |
|----------------|---------------------------|
| Session 1      | Identify user's need      |
| Session 2      | define problem            |
| Session 3      | Ideation                  |
| Session 4      | Gathering Components      |
| Session 5      | Preparation               |
| Session 6      | Prototyping Session 1     |
| Session 7      | Prototyping Session 2     |
| Session 8      | Prototyping Session 3     |
| Session 9      | Testing 1                 |
| Session 10     | Testing 2                 |
| Session 11     | Testing 3                 |
| Session 12     | Final Evaluation          |
| Session 13     | Planning Future Prospects |

## Disclaimer

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