



## Tier 3: Robotics Car Kit

| Tier 3 : Roboti |   |
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| SESSION NUMBER  | SESSION NAME  |
| Session 1       | Introduction to the Robotics                                    |
| Session 2       | Introduction to Simulators                                      |
| Session 3       | Kit unboxing and verification & simple robotics activity        |
| Session 4       | Use of motor driver IC  |
| Session 5       | Controlling motor speed & direction                             |
| Session 6       | Assembling & coding to test motor driver                        |
| Session 7       | Circuit connection & Testing                                    |
| Session 8       | Speed control of motor  |
| Session 9       | Interfacing LCD   |
| Session 10      | Run the robot   |
| Session 11      | Introduction to I2C LCD   |
| Session 12      | Assemble hit switch and software                                |
| Session 13      | Hit switch real life functioning                                |
| Session 14      | IR Sensor Assembly and Software                                 |
| Session 15      | IR Sensor with LCD display                                      |
| Session 16      | IR Sensor & LCD project   |
| Session 17      | Assembly of Servo motor and Ultrasonic                          |
| Session 18      | Ultrasonic with servo   |
| Session 19      | Programmimg concepts using Ultrasonic and Serial monitor        |
| Session 20      | Programming concepts using function parameters                  |
| Session 21      | Obstacle detection - Part 1 (Using servo and ultrasonic)        |
| Session 22      | Obstacle avoiding - Part 2                                      |
| Session 23      | Servo Motor with Ultrasonic sensor and IR sensor                |
| Session 24      | Servo Motor with Ultrasonic sensor using IR sensor, LCD, Buzzer |
| Session 25      | Accelerometer introduction part 1                               |
| Session 26      | Accelerometer introduction part 2                               |
| Session 27      | Accelerometer project   |
| Session 28      | Introduction of IR Array  |
| Session 29      | Line follower Robot Part 1                                      |
| Session 30      | IR Array Project 1  |
| Session 31      | Advanced software topics - Part I                               |
| Session 32      | Advanced software topics - Part II                              |
| Session 33      | Student Challenge 1 - Part I                                    |
| Session 34      | Student Challenge 1 - Part II                                   |
| Session 35      | Student Challenge 1 - Part III                                  |
| Session 36      | Student Challenge 2 - Part I                                    |
| Session 37      | Student Challenge 2 - Part II                                   |
| Session 38      | Student Challenge 2 - Part III                                  |
| Session 39      | Preparation for Next Stage                                      |
|                 |   |

Disclaimer

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.







\*\* 1. The curriculum is subjected to changes and upgradation as per the feedback received from our customers.





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| 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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