

LEGO EV3– VAMA EDTECH

| Sr No | Topic | Learning Outcome |
|-------|-----------------------------------|---|
| 1. | Introduction to EV3 | Introduction + DRIVING BASE+ Forward and Backward Movements |
| 2. | Steering turns | How to steer the driving base, pivot turns |
| 3. | Motor stop and turn | motor stops turn, +maze |
| 4. | Mouse trap | MOUSE TRAP with Touch Sensor, understanding of how sensors work |
| 5. | Ultrasonic sensor | Driving base with ultrasonic sensor and edge detection |
| 6. | Color sensor | Intro to color sensor and programming |
| 7. | Robot Arm Construction | Robot Arm Construction with touch and color sensor. This will continued for the next session. |
| 8. | Robot Arm Construction | Robot Arm Construction Finished |
| 9. | Guitar construction | Guitar construction with ultrasonic sensor. Various sounds are produced at distinct levels. Construction & programming will be continued in the next session. |
| 10. | Guitar construction & programming | Programming will be done to produce different sounds with the ultrasonic sensor. |
| 11. | Gyro sensor | Introduction to gyro sensor with tank bot programming. |
| 12. | Revision of all sensors Attribute | Driving base with all sensor's revision |
| 13. | Fan building with gear ratio | Fan construction with gear ratio and ultrasonic sensor. |
| 14. | Forklift | Forklift construction and programming |
| 15. | Challenge | Final challenge |