

## **CENTRE OF EXCELLENCE**

### **ROBOT MODELS**

1. Staircase Robot
2. Pipe Crawling Robot
3. Agriculture Robot
4. Fire Fighting Robot
5. Brain Controlled Wheel Chair
6. BCI Pick and Place
7. Floor Cleaning Robot
8. Path Finding Robot
9. Computer Vision Shopping Trolley
10. Robocop
11. AWS Inventory management automation using IoT
12. Deep learning based variable vehicle speed limiter for accident avoidance using RF transmitter

### **Facilities in CoE**

| Sl. No. | Description of Equipment | Sl. No. | Description of Equipment |
|---------|--------------------------|---------|--------------------------|
| 1.      | Arduino IDE              | 15.     | Encoder DC Motor         |
| 2.      | Embedded C               | 16.     | Camera                   |
| 3.      | RoS                      | 17.     | Ultrasonic Sensor        |
| 4.      | Python                   | 18.     | Water Pump               |
| 5.      | OpenCV                   | 19.     | Brainwave Sensor         |
| 6.      | MATLAB                   | 20.     | MPU-6050                 |
| 7.      | Python IDE               | 21.     | Line Sensor              |
| 8.      | DC Motor                 | 22.     | NodeMCU ESP32            |
| 9.      | Arduino UNO              | 23.     | IR Sensor                |
| 10.     | HC-05                    | 24.     | Load cell                |
| 11.     | Motor Driver             | 25.     | AWS                      |
| 12.     | Jetson Nano              | 26.     | RF transmitter receiver  |
| 13.     | RPLidar                  | 27.     | L293D                    |
| 14.     | Arduino Nano             | 28.     | YOLO                     |