

# e-Yantra Robotics Competition (eYRC-2016)

## Task 3 – Navigate A Terrain

This task is divided into two parts:

- Hardware Testing
- Flex Printing

You will find the following folders in Navigate A Terrain folder along with this Read Me file.

- **Hardware Testing:**

Please find the following folder/files in this folder:

1. Bot Assembly
2. Installing Operating System Images on the Raspberry Pi
3. Remote login using Wi-Fi dongle
4. Understanding GPIO and PWM
5. Working with node Node\_MCU
6. Checklist
7. Hardware\_Testing\_Read\_Me

In this stage of the competition, you will use the Raspberry pi and NodeMCU based robotic systems. It is necessary to test the working of the Hardware Components in order to ensure smooth completion of the subsequent tasks.

Follow the instructions provided in the **Hardware\_Testing\_Read\_Me** file in the Hardware Testing folder and complete the task as instructed. We have provided a **Checklist** to verify the working of components of the robot which can be found in the Hardware Testing folder. After testing the hardware of the robot, you have to complete the checklist and upload it on the e-Yantra Portal.

- **Flex Printing:**

Please find the following files/folder in this folder:

1. Navigate A Terrain
2. Flex\_Printing\_Read\_Me

Instructions for printing the flex is given in the Flex\_Printing\_Read\_Me file of this folder. Navigate A Terrain.pdf is inside Navigate A Terrain folder for printing. Please take a picture of the printed flex sheet to upload on e-Yantra Portal.

**Instructions for uploading the picture as well as the Completed Checklist are provided in the Task 3 tab of the portal.**