

Approved by AICTE, New Delhi
Affiliated to Visvesvaraya Technological University, Belagavi
Recognized by UGC with 2(f) and 12(B) status
Accredited by NBA and NAAC

## **Training on Robotic Basics**

## Training on Robotic Basics for Robo Kabbadi

The Department of Electronics and Communication Engineering in association with Robotics and Industrial Automation lab, organized a Training on Robotic Basics for Robo Kabbadi. In this training, students trained on interfacing microcontroller, Bluetooth model, motor driver, wheels for Bluetooth controlled robot. This training was conducted by Mr. Paulson, Ms. Srinidhi and team, totally 118 students from various department participated in this training. The training was coordinated by Mr. Bhanuteja G (AP, ECE).



Training on Robotics Basics for Robo Kabbadi, on 17, 18 and 19 Feb 2020 from 3.10 PM to 6 PM at Robolab Mr. Bhanuteja G(AP, ECE) observing the explanation given by student coordinators

As the Robots industry is reaching its pinnacle, there is a fast multiplying opportunity in construction, industrial, military and office robots. Journey of robotics learning starts with basic design and control. The training was started by explaining about what is robot? How human is better than robot? Parameters to be considered for designing any robot, the difference between microcontrollers and development board.



Srinidhi, 6th Sem, ECE explaining about the inter connections required for motor drivers and arduino during Training on Robotics Basics for Robo Kabbadi on 17,18 & 19 Feb 2020.

The training was conducted on 17<sup>th</sup> 18<sup>th</sup> 19<sup>th</sup> Feb 2020 from 3:10 PM to 6:00PM. The trainers explained the trainees about the basic of robotics, how to choose components for different robots, and explained about the ARDUINO board and components required for basic robot.



Students working in Robotics Lab during the Training on Robotics Basics for Robo Kabbadi

At the end of the session students understood the architecture of Arduino Uno board and how to interface electronics components with the board. Later students taught about how to select different motors based on the application. Robolab student coordinators explained about the HC-05 Bluetooth module and how to communicate with android platform from Arduino using serial communications. By the end of the session students prepared Bluetooth controlled robot.



Training on Robotics Basics, 4th Semester ECE students assembling components for Robo Kabbadi

## **Outcomes:**

- Students learnt about the basics of robotics and how to choose microcontroller, Motors for different robotic applications.
- Totally 118 students learnt basics of Robotics, how human is better than robot and parameters to be considered for different applications.
- Students learnt about difference between Mechatronics system and a Robot.
- Students learnt about different sensors, use of motor driver and they had hands on session on doing soldiering.
- Students learnt to build Bluetooth controlled robot for Robo kabbadi.