

## ABOUT THE WORKSHOP

This workshop would be based on application of robotics for designing embedded systems. It will be focused on real life applications of Arduino Microcontroller. In this intensive workshop methodologies and basic techniques of working with Arduino would be explained and hands on training would be provided. The participants would be encouraged to develop various projects based on microcontrollers using sensors, control circuits and motors with intelligent systems.

### Workshop goals:

- *Understand what an Arduino is and how it works*
- *Program your Arduino using code that is written in the Arduino IDE (Integrated Development Environment)*
- *Learn programming concepts using C and C++ along with Arduino specific programming*
- *Understand best practice concepts for programming and prototyping*
- *Use a wide variety of hardware and components and prototype your projects using a breadboard*
- *Build your own innovative project with Arduino*

## TECHNICAL PROGRAM SCHEDULE

**Monday, 17<sup>th</sup> February, 2020**

<b>TIME</b>	
<b>09:00 AM-09:30 AM</b>	<b><i>Registration</i></b>
<b>09:30 AM-10:00 AM</b>	<b><i>Inauguration and Welcome address</i></b>
<b>10:00 AM-11:00 AM</b>	<b><i>Introduction about Microcontroller &amp; Arduino Board</i></b>
<b>11:00 AM-11:15 AM</b>	<b><i>Tea Break</i></b>
<b>11:15 AM-01:00 PM</b>	<b><i>Basic Programming of Arduino-I</i></b>
<b>01:00 PM-01:30 PM</b>	<b><i>Lunch Break</i></b>
<b>01:30 PM-03:00 PM</b>	<b><i>Basic Programming of Arduino-II</i></b>
<b>03:00 PM-03:15 PM</b>	<b><i>Tea Break</i></b>
<b>03:15 PM-04:00 PM</b>	<b><i>Interfacing and coding-I</i></b>

**Tuesday, 18<sup>th</sup> February, 2020**

<b>TIME</b>	
<b>09:30 AM-11:00 AM</b>	<b><i>Interfacing and coding-II</i></b>
<b>11:00 AM-11:15 AM</b>	<b><i>Tea Break</i></b>
<b>11:15 AM-01:00 PM</b>	<b><i>Project-I</i></b>
<b>01:00 PM-01:30 PM</b>	<b><i>Lunch Break</i></b>
<b>01:30 PM-03:00 PM</b>	<b><i>Project-II</i></b>
<b>03:00 PM-03:15 PM</b>	<b><i>Tea Break</i></b>
<b>03:15 PM-04:00 PM</b>	<b><i>Competition based on Arduino Programming</i></b>
<b>04:00 PM-04:30 PM</b>	<b><i>Valedictory function and Vote of Thanks</i></b>