	<b>S J P N Trust's</b> <b>Hirasugar Institute of Technology, Nidasoshi</b> <i>Inculcating Values, Promoting Prosperity</i> Approved by AICTE, Recognized by Govt. of Karnataka and Affiliated to VTU Belagavi. <b>Accredited at 'A' Grade by NAAC</b> <b>Programmes Accredited by NBA: CSE, ECE, EEE &amp; ME.</b>	<b>E&amp;CE Dept.</b>
		<b>Activity Report</b>
		<b>Workshop</b>
		<b>2021-22(Odd)</b>

<b>Date of Activity held and Time:</b>	16-12-2021 to 18-12-2021 9am to 5pm
<b>Name of Activity:</b>	Workshop on "IOT and Arduino IDE"
<b>Type of Activity:(cultural/curricular/co-curricular)</b>	Co-curricular
<b>Resource Person/Invitee:</b>	Mr. Vinayak R. Dhongadi
<b>Professional Details of Resource Person:</b>	Co-founder, AMSA Embedded Solutions, Hubli
<b>Year / Class:</b>	5 <sup>th</sup> semester students
<b>No. of Participants:</b>	29
<b>Activity In charge:</b>	Prof. S. S. Kamate Prof. D. B. Madihalli Prof. S. S. Ittannavar

**Description of Activity:** Workshop on "IOT and Arduino IDE" was arranged from 16-12-2021 to 18-12-2021. The workshop was arranged by ISTE student chapter in association with IIC and ECSA, ECE department. Resource persons for the workshop were Mr. Vinayak R. Dhongadi Co-founder, AMSA Embedded Solutions, Hubli Mr. Rajesh P. Chavan R&D Engineer, AMSA Embedded Solutions, Hubli.

The resource person addressed the introduction to Basic Foundation, Data sheet Analyzing, PCB (Printed Circuit Board) Introduction to PCB, Design Rules. PCB CAD Tool, Introduction to CAD tool, Software Installation, Understanding tools available in CAD, Embedded System Design, Embedded Product design flow, Sample Electronics circuits and its design - Theory. AtMega 328P, AVR Architecture, Specification and Feature of AtMega 328P Pin diagram Understanding. Programming basics Data types Variables Functions Scope rules Operators Decision making Loops Arrays String, ARDUINO IDE Software Installation Introduction to Arduino IDE tool Basic Programming with Arduino IDE Interfacing Wire and Wireless Serial, Introduction to Internet of Things, Service model, Introduction to Thing speak, Account activation on Thing speak. Project registration with selected field parameters. Data upload to Things Speak cloud using ESP8266 with ATMEGA328.

CO No.	CO Defined	RBT Level	Relevance POs	Relevance PSOs
1	To develop C- programming with Arduino IDE tool & interfacing of Arduino with LED, LCD, Buzzer, Relay and data converters.	L3	PO1, PO3, PO5, PO9, PO11, PO12	PSO1, PSO2



**Mr. Vinayak R. Dhongadi addressing the basics of IOT and Arduino**



**Mr. Vinayak R. Dhongadi explaining programming part.**



S J P N Trust's  
**Hirasugar Institute of Technology, Nidasoshi**  
*Inculcating Values, Promoting Prosperity*  
Approved by AICTE, Recognized by Govt. of Karnataka and Affiliated to VTU Belagavi.  
**Accredited at 'A' Grade by NAAC**  
**Programmes Accredited by NBA: CSE, ECE, EEE & ME.**

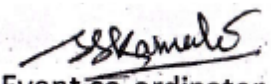
**E&CE Dept.**  
**Activity Report**  
**Workshop**  
**2021-22(Odd)**



**Mr. Rajesh P. Chavan explaining about interfacing of arduino with LED**



**Mr. Vinayak R. Dhongadi explaining programming part.**

  
Event Co-ordinator

  
Coordinator ECSA & IIC

  
HOD  
Electronics & Commn. Engg. Dept.  
HSIT NIDASOSHI