

# **Sri Vasavi Engineering College, Tadepalligudem**

## **APSSDC Program Report**

Date: 26-02-2022

**Name of the Department: ECE**

Name of the course/Workshop: Arduino with scratch

Duration with Dates: 1 WEEK for each section

ECE A SECTION: 6 days from 7-2-2022 TO 12-2-2022

ECE B SECTION: 6 days from 14-2-2022 TO 19-2-2022

ECE C SECTION: 6 days from 17-1-2022 TO 22-1-2022

ECT SECTION: 6 days from 24-1-2022 TO 29-1-2022

### **Resource Persons:**

- Mr.Ch.Santhosh, APSSDC
- Mr.Bhanu Chandar Reddy.T, APSSDC
- Mr.B Nagaraju, APSSDC

The Arduino with scratch was the course offered by APSSDC, for ECE and EEE students and was very useful for beginners. Students learned , how to work in Arduino IDE and simple interfacing circuits using Arduino. APSSDC provided Arduino boards and various sensors for student practice.

No. of students participated: ECE A, ECE B, ECE C and ECT-240

**Course Content: Enclosed.**

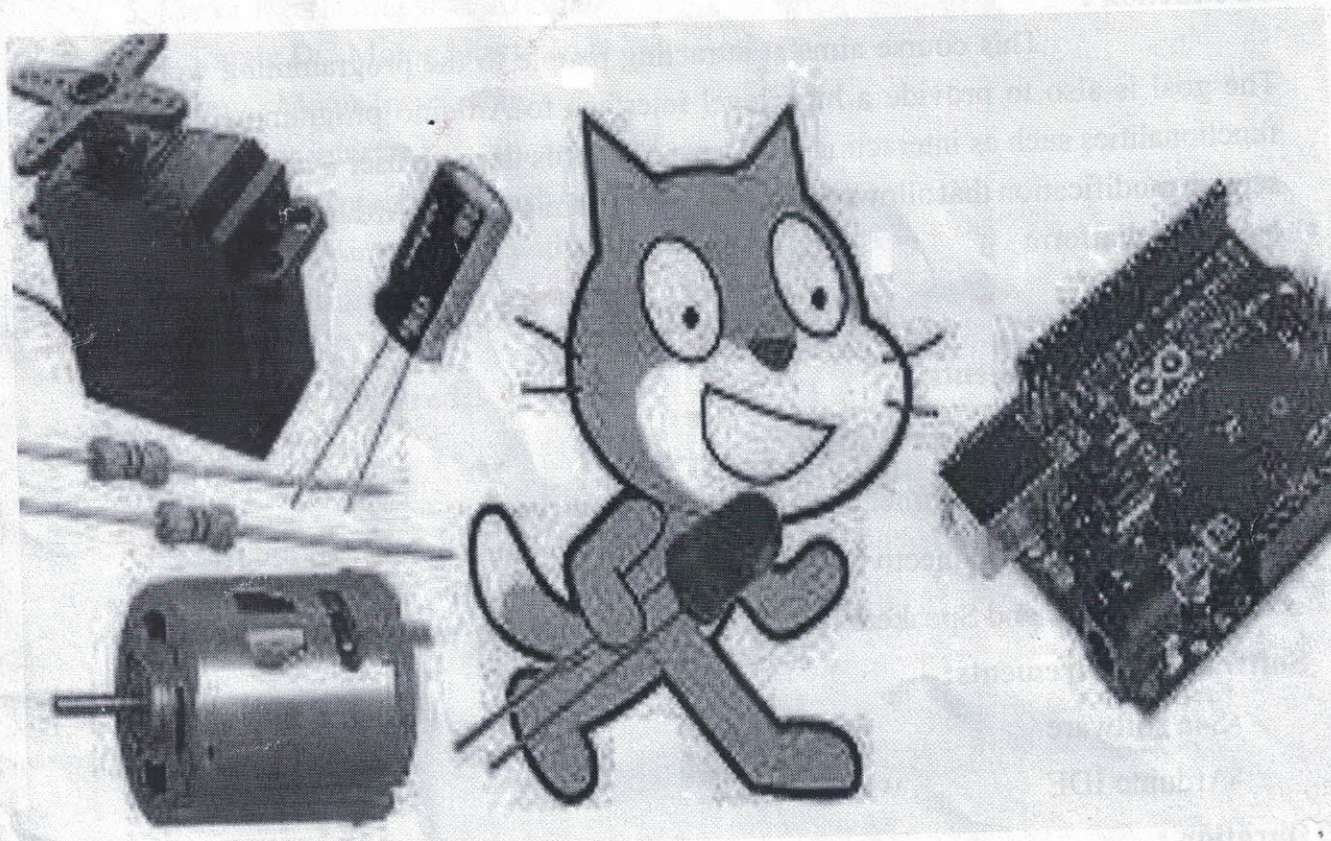
APSSDC Co-ordinator: Dr.M.Thamarai





# APSSDC

**Andhra Pradesh State Skill Development Corporation**  
(Department of Skills Development & Training, Govt of Andhra Pradesh)



## ARDUINO WITH SCRATCH





# APSSDC

**Andhra Pradesh State Skill Development Corporation**  
(Department of Skills Development and Training, Govt of Andhra Pradesh)



## **Introduction :**

This course aims at attracting people to the programming world. The goal is also to provide a high level interface to Arduino programmers with functionalities such as interacting with a set of boards through user events. S4A is a scratch modification that allows for simple programming of the Arduino open source hardware platform

## **Hardware Requirements:**

- i3 or above Processor is required
- 4 GB RAM is recommended
- Good Internet Connectivity
- Microphone and Speakers facility for Offline training program.

## **Software Requirements:**

- S4a software
- Arduino IDE

## **Duration :**

- 18 Hours (6 hours each day X 3 days)

## **Syllabus :**

- 1.Introduction to Scratch programming.
  - Example Programming on Scratch programming
    - a. Led Based
    - b. Button
    - c. Servo Motor Based
2. Introduction to Integrated Development Environment
  - a. Arduino IDE
3. I/O of Arduino
  - a. Digital Input
  - b. Digital output
  - c. Analog Input
  - d. Analog Output
4. Serial Communication with Arduino





# APSSDC

**Andhra Pradesh State Skill Development Corporation**  
(Department of Skills Development and Training, Govt of Andhra Pradesh)



5. Motor Interfacing with Arduino
  - a. Simple DC Motor Interfacing
  - b. Servo Motor Interfacing
6. IR Sensor interfacing with arduino
7. LDR sensor interfacing with arduino
8. LDR with IR interfacing with arduino
9. RGB interfacing with arduino

### **Components required:**

1. Arduino UNO
2. Led-5
3. 220-ohm Resistors -5
4. 10K resistors -2
5. pushbuttons - 2
6. Ultrasonic Sensor
7. Bread Board
8. LDR
9. IR Sensor
10. Servo 90g
11. 1293d motor Driver
12. DC motors 5v -2
13. Jumper Wires

### **Course Objectives :**

1. Computational Thinking-scratch
2. Attracting students to the programming world
3. Introducing easy way to interact with the real world
4. Basic Hardware Knowledge

### **Entry Requirements :**

- basic knowledge on 'C'

### **Eligibility :**

- Polytechnic 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> year and engineering 1<sup>st</sup> year students.

### **Mode Of Training :**

- Offline (Completely Hands on Training)









# SRI VENKATESWARA ENGINEERING COLLEGE(AUTONOMOUS)

Approved By AICTE., Affiliated to JNTUK, Kakinada  
Pedatadepalli, TADEPALLIGUDDEM-534 101, W.G. District, (A.P.)

Tel : 08818-284355

## DEPT. OF ELECTRONICS & COMMUNICATIONS ENGINEERING

### III Sem ROLL LIST 2021-22 SEC-A

TRAINER NAME :

SUBJECT:

TRAINER SIGN:

Sl.No	Roll No	Student Name	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
25	20A81A0425	KCDI SUMA PHANI SRAVYA	P	P	P	P	P	P	P	P	P	P
26	20A81A0426	KOLAKALURI SIVA TEJA	P	P	P	P	P	P	P	P	P	P
27	20A81A0427	KOLLA SIVANI	P	P	P	P	P	P	P	P	P	P
28	20A81A0428	KOLLURI HEMA VENKATA SATISH	P	P	P	P	P	P	P	P	P	P
29	20A81A0429	KONA DATTATREYA	P	P	P	P	P	P	P	P	P	P
30	20A81A0430	KONDAPANEHI AARTHI	P	P	P	P	P	P	P	P	P	P
31	20A81A0431	KONTAM LEELA KARTHIK KUMAR	P	P	P	P	P	P	P	P	P	P
32	20A81A0432	MEDASANI HEMANTH	P	P	P	P	P	P	P	P	P	P
33	20A81A0433	MEKA PHANINDITA	P	P	P	P	P	P	P	P	P	P
34	20A81A0434	MEKALA SINDHU	P	P	P	P	P	P	P	P	P	P
35	20A81A0435	MUNIKOTI SRAVANI JYOTHI	P	P	P	P	P	P	P	P	P	P
36	20A81A0436	MUTYALA GAYATHRI	P	P	P	P	P	P	P	P	P	P
37	20A81A0437	MYNAM VENKATA SRI SAI HANISHA	P	P	P	P	P	P	P	P	P	P
38	20A81A0438	NALLAMILLI VEDA SRAVANTHI	P	P	P	P	P	P	P	P	P	P
39	20A81A0439	NAMBURI VIDYA JAHNAVI	P	P	P	P	P	P	P	P	P	P
40	20A81A0440	PAKANATI MOSHE	P	P	P	P	P	P	P	P	P	P
41	20A81A0441	PALANKI TEJA SRI	P	P	P	P	P	P	P	P	P	P
42	20A81A0442	PALLELA DHANA LAKSHMI	P	P	P	P	P	P	P	P	P	P
43	20A81A0443	PATHIRI GANESH	P	P	P	P	P	P	P	P	P	P
44	20A81A0444	PENNADA RAMESH NAGA BABU	P	P	P	P	P	P	P	P	P	P
45	20A81A0445	PRADHAN JAYA KRISHNA	P	P	P	P	P	P	P	P	P	P
46	20A81A0446	REVALLA KRISHNA TEJA	P	P	P	P	P	P	P	P	P	P
47	20A81A0447	THOKAM JAYA KRISHNA SAI	P	P	P	P	P	P	P	P	P	P





# **SRI VASAVI ENGINEERING COLLEGE(AUTONOMOUS)**

Approved By AICTE, Affiliated to JNTUK, Kakinada  
Pedatadepalli, TADEPALLIGUDDEM-534 101, W.G. District, (A.P.)

Tel : 08818-284355

## **III Sem ROLL LIST 2021-22 SEC-A**

## **DEPT. OF ELECTRONICS & COMMUNICATIONS ENGINEERING**

TRAINER NAME : *Ch. Sankhade*

SUBJECT: *Audio with Soud*

TRAINER SIGN:

Sl.No	Roll.No	Student Name	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
48	20A81A0449	SHEIK SAEENA	P	P	P	P	P	P	P	P	P	P	P	P
49	20A81A0450	SINGAVARAPU PRAVEEN KUMAR	P	P	P	P	P	P	P	P	P	P	P	P
50	20A81A0451	SIRIPALLI SAI JYOTHIKA	P	P	P	P	P	P	P	P	P	P	P	P
51	20A81A0452	SORNAPUDI GIRIJA RANI	P	P	P	P	P	P	P	P	P	P	P	P
52	20A81A0453	TALARI AVINASH	P	P	P	P	P	P	P	P	P	P	P	P
53	20A81A0454	TANETI ABRAHAM	P	P	P	P	P	P	P	P	P	P	P	P
54	20A81A0455	TANGELLA VANI MANI MULA	P	P	P	P	P	P	P	P	P	P	P	P
55	20A81A0456	THOTA NAGA ABHIRAM	P	P	P	P	P	P	P	P	P	P	P	P
56	20A81A0457	TURUGOPU SWATANTRA VEER SAVARKAR	P	P	P	P	P	P	P	P	P	P	P	P
57	20A81A0458	UPPALA V V NAGA DURGA LAKSHMI TEJASWI	P	P	P	P	P	P	P	P	P	P	P	P
58	20A81A0459	VARANASI JAYA BHAVANI SATYA KRISHNA	P	P	P	P	P	P	P	P	P	P	P	P
59	20A81A0460	VARASALA PRAVEEN	P	P	P	P	P	P	P	P	P	P	P	P
60	20A81A0461	VEETHA VEERA NAGENDRA KUMAR	P	P	P	P	P	P	P	P	P	P	P	P
61	20A81A0462	VEEMURI LAKSHMI	P	P	P	P	P	P	P	P	P	P	P	P
62	20A81A0463	VANDRAPU SAIMANASWINI	P	P	P	P	P	P	P	P	P	P	P	P
63	21A85A0401	ADARI SITA SAI LUKITHA	P	P	P	P	P	P	P	P	P	P	P	P
64	21A85A0402	ALLU JNANESWARI	P	P	P	P	P	P	P	P	P	P	P	P
65	21A85A0403	GANDI MANU	P	P	P	P	P	P	P	P	P	P	P	P
66	21A85A0404	KARELLA SUPRIYA	P	P	P	P	P	P	P	P	P	P	P	P
67	21A85A0405	NAGABATHULA PHANEENDRA	A	A	A	A	A	A	A	A	A	A	A	A
68	21A85A0406	PADMANABHUNI LAKSHMI CHARITHA	P	P	P	P	P	P	P	P	P	P	P	P
69	21A85A0407	RAJAMAHENDRAVARAPU JYOTHI RATNAM	P	P	P	P	P	P	P	P	P	P	P	P
70	21A85A0408	VARANSETTI DURGA DEVI	P	P	P	P	P	P	P	P	P	P	P	P





## SRI VASAVI ENGINEERING COLLEGE (AUTONOMOUS)

(Sponsored by Sri Vasavi Educational Society)

(Approved by AICTE, New Delhi & Recognized by UGC under section 2(f) & 12(B))  
(Permanently affiliated to JNTUK, Kakinada, Accredited by NBA and NAAC with 'A' Grade)  
Pedatadepalli, TADEPALLIGUDEM - 534 101. W.G.Dist. (A.P)

### Department of Electronics and Communication Engineering

#### TRAINER FEEDBACK

Name of the Trainer(s)	: CH. Santhosh
Designation	: Technical Skill trainer
Institution/University/Organization	: APSSDC
Title of the Training Program	: Arduino with scratch.
Date & Time	: 7-2-22 to 12-2-22
Venue	: Sri Vasavi college
Beneficiary	:
Comments Speaker(s)	:
Signature	: Ch. Santhosh

Name of faculty who offered feedback (feedback enclosed):

- 1.
- 2.
- 3.
- 4.
- 5.

Convener

Head of the Department

#### Vision:

To develop the department into a centre of excellence and produce high quality, technically competent and responsible Electronics and Communication Engineers.

#### Mission :

To create a learner centric environment that promotes the intellectual growth of the students.

To develop linkages with R & D organizations and educational institutions for excellence in teaching, learning and consultancy practices.

To build the student community with high ethical standards.



**SRI VASAVI ENGINEERING COLLEGE (AUTONOMOUS)**

(Sponsored by Sri Vasavi Educational Society)

(Approved by AICTE, New Delhi &amp; Recognized by UGC under section 2(f) &amp; 12(B))

(Permanently affiliated to JNTUK, Kakinada, Accredited by NBA and NAAC with 'A' Grade)

Pedadapalli, TADEPALLIGUDEM - 534 101, W.G. Dist. (A.P)

**Department of Electronics & Communication Engineering****WORKSHOP EVALUATION FORM**

Please fill out this form and return to the Department. This form is only used to evaluate the quality/value of the trainers.

**Trainer Name:** CH. Santosh**Workshop Name:** Arduino with scratch**Date & Time:** 11/2/2021, 2:30PM**Name of the****Organisation:** APSSDC.**Branch:** ECE**Name of the Student & Reg. No:** Y. Sai Manaswini & 20A81A0463

- (1) The Trainers communicated at an appropriate level for the course. [4]
- (2) The Trainers did a good job of relating course concepts to the real world. [4]
- (3) The Trainers demonstrated a thorough knowledge of the subject. [4]
- (4) The Trainers were well prepared. [4]
- (5) The Trainers made the class valuable. [4]
- (6) Overall, these Trainers were:

1	2	3	4
Average	Good	Superior	Excellent

**Suggestions (if any):**

Y. Sai Manaswini  
  
Signature of the Student

**Vision:**

To develop the department into a centre of excellence and produce high quality, technically competent and responsible Electronics and Communication Engineers.

**Mission:** To create a learner centric environment that promotes the intellectual growth of the students. To develop linkages with R & D organizations and educational institutions for excellence in teaching, learning and consultancy practices.

To build the student community with high ethical standards.







