# **Registration Certificate**

1. Name:
(in block letters)
2. Organization/Institution:
3. Category: Faculty / Research Scholar / Student
4. Gender:
5. Address for communication:
6. Phone:
7. Email:
8 Specialization:
-

Kindly register "One Week Blended mode(Online/offline) Faculty Development Programme on ARDUINO".

Signature of the Applicant

Place: Date:

# **REGISTRATION LINK**

https://tinyurl.com/ACSCE-One-Week-on-ARDUINO

# **Important Dates**

Last date of Registration

21-09-2022

Intimation of selection by e-mail

21-09-2022

# **Address for Correspondence**

Prof. Aswini, S

Prof. Shruthi A

Assistant Professor, CSE Assistant Professor, CSE

Prof. Ganga B M

Assistant Professor, CSE

Email: research@acsce.edu.in Mobile: 8884000900

#### **Chief Patrons**

Dr. A. C. Shanmugam,

B.A LLB, FIMSA, FRCPS (Glasgow, UK), Chairman, RRGI

## Er. A. C. S. Arun Kumar.

B.Tech (Hons), LMISTE., MIET, (UK), LMCSI, Vice-Chairman, RRGI

#### **Patrons**

Executive Director, RRGI

Dr. S. Vijayanand, M.Tech., Ph.D. Sri C.N. Seetharam, IAS (Rtd), Chief Executive Officer, RRGI

> Dr. S. Jevabalan, Ph.D. Special Officer, RRGI

# **Advisory Committee**

Dr. M.S Murali, Principal, ACSCE

Dr. Mareeswari V. HOD, CSE Engg., ACSCE. Dr. T Senthil Kumaran Dean, R & I Centre

> Dr. C.S.Pillai, Professor

## Coordinator

Prof. Aswini. S.

Assistant Professor, CSE

Prof. Ganga B M,

Assistant Professor,CSE

Mrs. Kavita K Patil.

Assistant Professor, CSE

Prof. Sunita Chalageri Assistant Professor, CSE

Prof. Mrs. Vinutha K Assistant Professor, CSE Prof. Shruthi A

Assistant Professor, CSE

Mr. Krishna Kumar A.

Assistant Professor, CSE

Mrs. Sandhayrani H G

Assistant Professor, CSE

Prof Mrs. Sushma T.

Assistant Professor, CSE

Prof. Mr. Venkatesh Kumar

Assistant Professor, CSE



# ACS COLLEGE C

#207, Kambipura, Mysore Road, Bengaluru-74 Approved by AICTE, New Delhi, Affiliated to VTU, Belagavi and Approved by Govt. of Karnataka

Website: www.acsce.edu.in









One Week Blended mode(Online/offline) **Faculty Development Programme on ARDUINO** 

23<sup>rd</sup> to 29<sup>th</sup> September 2022

Organized By

**Department of** COMPUTER SCIENCE AND ENGG.

In association with









MHRD, Government of India





#### **About the Institute**

ACS College of Engineering (ACSCE), established in the year 2009 under Moogambigai Charitable and Educational trust is recognized by AICTE, New Delhi, Government of Karnataka and is affiliated to Visvesvaraya Technological University (VTU), Belgavi, Karnataka. The institute is accredited by NBA, NAAC, and HLACT. The institute offers Seven UG courses in Computer Science and Engineering, Aeronautical Engineering, Aerospace Engineering, Bio medical Engineering, Civil Engineering, Electronics and Communication Engineering, Mechanical Engineering, PG courses and Research Centers. All the departments have well qualified staff and well equipped laboratories, library, computing and sports facilities along with other amenities. The college is located at a distance of 17 kms from Bangalore City Railway Station on Mysore road.

# **About the Department**

The department was established in the year 2009 with an intake of 180 students. It has well qualified and experienced Teaching and Supporting Staff. Our department is having total area of -- 1994 sq meters. The department has spacious classrooms and a well-equipped computer labs with 220 systems, 2 servers all in a networked environment with uninterrupted power supply. Our Department is having smart class room, seminar Hall, Departmental Library, R&D, Language Lab. The institution offers Wi-Fi enabled high-speed Internet (100 Mbps) facility. The department is NBA accredited and NAAC accredited with 'A'Grade.

#### **About the FDP**

Arduino is an open-source electronics platform used for building electronics projects. Arduino consists of both a physicalprogrammable circuit board or microcontrollerand a software IDE (Integrated Development Environment) that runs on the computer.It is used to write and upload computer code to the physical board. This course will be helpful to build small Mechatronics, Robotics and electronics component. Spoken Tutorial FDP will cover, basic and intermediate level of course for Arduino with 100% active learning, so, teachers who undergo this training will be able to start using Arduino immediately after the workshop.

## **Program Contents**

Following topics will be covered for Teachers in this workshop:

- > Overview of Arduino and basic operations
- > Assembly programming through Arduino
- Seven segment display
- > Arduino with Tricolor LED and Push button
- > Arduino with LCD
- > Display counter using Arduino
- ➤ Seven Segment Display
- > Pulse Width Modulation
- > Analog to Digital Conversion
- ➤ Wireless Connectivity to Arduino
- > Digital logic design with Arduino
- > AVR-GCC programming through Arduino
- > Interfacing LCD through AVR-GCC programming
- ➤ Introduction to IOT
- > Sending data to the cloud using IOT devices

#### **Course Material**

> Content of the courses will be shared via link after registration. The course can be downloaded and can be completed in self paced mode

## Certification

➤ E-certificate will be provided to all the registered participants after completing the course and taking the online test.

# **Eligibility**

➤ This program is open to Faculty members/Research Scholars/Industry person.

## Registration

No Registration fees

# please visit the following link:

https://spoken-tutorial.org/tutorialsearch/?search\_foss=Arduino&search\_language=English

# **Program Schedule**

# 23-SEP-2022(FRIDAY) - OFFLINE

**Registration & Hands on Training in our campus** 

# 24-SEP-2022(SATURDAY) - ONLINE

Overview of Arduino
Electronic components and connections
Introduction to Arduino
Arduino components and IDE
First Arduino Program

## 25-SEP-2022(SUNDAY) - ONLINE

Arduino with Tricolor LED and Push button
Arduino with LCD
Display counter using Arduino
Seven Segment Display

## 26-SEP-2022(MONDAY) - ONLINE

Pulse Width Modulation
Analog to Digital Conversion
Wireless Connectivity to Arduino
Introduction to IoT
Sending data to the cloud using IoT devices

# 27-SEP-2022(TUESDAY) - ONLINE

Assembly of Robot
Robot Control using Bluetooth
Assembly programming through Arduino

# 28-SEP-2022(WEDNESDAY) - ONLINE

Digital Logic Design with Arduino AVR-GCC programming through Arduino

# 29-SEP-2022(THURSDAY) - ONLINE

Interfacing LCD through AVR-GCC programming
Mixing Assembly and C programming
Arduino Programming with Python