

### About the Workshop:

This workshop focus on facilitating the students to gain experience with the Embedded system development board, Arduino. Arduino is an open-source electronics prototyping platform based on flexible, easy-to-use hardware and software. It's intended for artists, designers, hobbyists, and anyone interested in creating interactive objects or environments. Some attractive features of the Arduino includes

- Open Source hardware
- Open Source Software
- Third party hardware support
- Easy and cheap availability
- Versatility

Unlike most of the programmable circuit boards, the Arduino does not need a separate piece of hardware (called a programmer) in order to load new code onto the board – requires simply use of a USB cable. Additionally, the Arduino IDE uses a simplified version of C++, making it easier to learn to program. Finally, Arduino provides a standard form factor that breaks out the functions of the micro-controller into a more accessible package. Arduino can be used to develop interactive objects by receiving input from a variety of sensors and can affect its surroundings by controlling lights, motors, and other actuators. The microcontroller on the board is programmed using the Arduino programming language (based on Wiring) and the Arduino development environment (based on Processing). Arduino projects can be stand-alone or they can communicate with software on running on a computer. Arduino serves many applications such as robot/motor control, miniaturized applications, UAVs, sensor networks, etc.

### Workshop Contents:

- ✓ Embedded System development boards
- ✓ Types of Arduino Board
- ✓ Arduino Uno Hardware & IDE
- ✓ Interfacing with Digital and Analog inputs and outputs
- ✓ Interrfacing with sensors
- ✓ Interfacing with DC motor with different control techniques
- ✓ Obstacle avoidance robot
- ✓ Line following robot

### Eligibility:

Faculty members from academic institutions  
UG/PG Engineering college students.

### Course Fee

For UG & PG Students : Rs. 1100/-  
For academicians : Rs. 1500/-  
(Inclusive of all taxes)

The course fee includes cost towards course material, working lunch and refreshments. As limited number of seats is available (maximum 40), selection of candidates will be on first come first served basis

### Registration details

Registration for workshop can be made by sending the duly filled application form along with a Demand Draft drawn in favor of "PSG CNCE" payable at Coimbatore on or before **13.01.2018**.

### Faculty:

The resource persons will be from PSG College of Technology.

**The details of this workshop are available in the website [www.psgtech.edu](http://www.psgtech.edu).**

**PSG CENTRE FOR NON FORMAL AND CONTINUING EDUCATION**

**DEPARTMENT OF ROBOTICS AND AUTOMATION**

**PSG COLLEGE OF TECHNOLOGY,  
COIMBATORE-641004**

**Two Day Workshop on  
EMBEDDED ROBOTICS  
January 19-20, 2018**

### Application Form

Name (in Block Letters) .....

Age & Gender .....

Designation & Dept. ....

Organization .....

Address for .....

Communication .....

.....

Office No. .... Mob No. : .....

Contact No.....

Course Fee:.....

Demand Draft No. & Bank : .....

.....

Accommodation required \*: Yes / No

### DECLARATION BY THE CANDIDATE

The given information is true to the best of my knowledge. I agree to abide by the rules and regulations governing the programme. If selected, I shall attend the course for the entire duration.

Place :

Date : Signature of the candidate

\*Accommodation on nominal rate (300 Rs/day) can be arranged on prior request based on the availability of rooms.

### About the College

PSG College of Technology, established in 1951, is one of the many educational institutions nurtured by PSG & Sons' Charities Trust. The college is government-aided, autonomous, ISO 9001 certified and affiliated to Anna University. The Institution has a strong alumni base, most of them occupying coveted positions in many educational, industrial and research organizations all over the world. PSG is among the foremost of Institutes of national importance in higher technological education and in engineering, basic and applied research. Currently more than 520 research scholars, both full-time and part-time are working for their Ph.D degrees in various disciplines. The College has established 48 Centres of Excellence in the campus in association with various leading industries.

One of the unique features of PSG College of Technology is the presence of a full-fledged manufacturing company producing precision machine tools, pumps and motors located within the campus and benefit our engineering students by giving training to them. PSG Tech is renowned for the close collaboration with Industry, resulting in the cross fertilization of theory and practice.

### ORGANISING COMMITTEE CHAIRMAN

Dr. R. Rudramoorthy  
Principal, PSG College of Technology

### CONVENOR

Dr. B. Vinod, Head, Dept. of RAE

### CO-ORDINATORS

Mr. C. S. Sundar Ganesh, Dept. of RAE  
Mr.T.Subramani, Dept. of RAE

### About the RAE Department

The Department of Robotics and Automation Engineering was established in the academic year 2011 in order to meet the growing demand for trained manpower in the field of Robotics and Industrial automation. This unique program is tailored to develop superior quality robotics & automation talent for manufacturing, defense, food, medical aerospace, and service sectors.

The Department draws teaching talent from industry and professional practice, apart from competent and committed academicians to enhance the quality of the program. A full-fledged centre for robotics is operational, which houses various kinds of robots. The Department has several laboratories and ten Centres of Excellence.

The duly filled application form be sent to:

Ms.K.Vidya,  
Department of RAE  
K-309, K Block, Second floor  
PSG College of Technology  
Peelamedu, Coimbatore -641004  
Contact No: 8973509825  
Email: cia@psgtech.ac.in

### Important Dates to Remember

Last date for receipt of the application: 13/01/2018  
Intimation of Acceptance by mail : 17/01/2018

### PSG CENTRE FOR NON FORMAL AND CONTINUING EDUCATION

### DEPARTMENT OF ROBOTICS AND AUTOMATION PSG COLLEGE OF TECHNOLOGY, COIMBATORE-641004

### Two Day Workshop on EMBEDDED ROBOTICS



**JANUARY 19-20, 2018**

**Organised by**



**Dept. of Robotics & Automation Engineering  
PSG College of Technology  
Peelamedu, Coimbatore-641004**