

### 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:

- ✓ Introduction to Microcontrollers
- ✓ Types of Arduino Board
- ✓ Arduino Uno Hardware & IDE
- ✓ Digital/Analog Input Interfacing
- ✓ Digital/ Analog output Interfacing
- ✓ Interfacing with sensors
- ✓ Stepper motor interfacing

The resource persons will be from PSG College of Technology.

**Eligibility:** Students from Engineering and Polytechnique colleges.

### Course Fee

For UG & PG Students : Rs. 600/-

(Inclusive of service tax)

The course fee includes cost towards course material, working lunch and refreshments.

### 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 **18.07.2018**.

**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**

### One day Workshop on Applications of Arduino July 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

Accommodation on Payment basis

### About the College

PSG College of Technology established in 1951, is one of the many educational institutions nurtured by PSG & Son's Charities Trust. The college is government – aided, autonomous, ISO 9001 certified and affiliated to Anna University. Equipped with latest facilities and excellent infrastructures, the college offers a total 60 full-time and part-time under-graduate and post graduate programs in Science, Engineering and Management.

The institution has a strong alumni base, most of them occupying coveted positions in many educational, industrial and research organizations all over the world. The college has established 46 Centres of Excellence in the campus in association with various leading industries.

### Organising Committee Chairman

Dr. R. Rudramoorthy  
Principal, PSG College of Technology

### Convenor

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

### Co-ordinator

Mr. C. S. Sundar Ganesh, 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 six 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: 8973509825,8903474718  
Email: [cia@psgtech.ac.in](mailto:cia@psgtech.ac.in),[css.rae@psgtech.ac.in](mailto:css.rae@psgtech.ac.in)

### Important Dates to Remember

Last date for receipt of the application:18/07/2018  
Intimation of Acceptance by mail : 19/07/2018

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July 20, 2018

Organised by



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PSG College of Technology  
Peelamedu, Coimbatore-641004