

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
- ✓ Fundamentals of Embedded C
- ✓ Types of Arduino Board
- ✓ Arduino Uno Hardware & IDE
- ✓ Interfacing with Digital I/O
- ✓ Interfacing with Analog I/O
- ✓ Serial Interfacing
- ✓ Interfacing with sensors
- ✓ Motor Driver 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 **15.02.2018**.

The details of this workshop are available in the website 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 February 17, 2017 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, started in the year 1951, is an autonomous college for the past 39 years, offering totally 56 programmes in undergraduate, postgraduate and research programmes. PSG College of Technology, an AICTE approved institution is affiliated to Anna University, and is ISO 9001 certified. The College has developed into a Centre for Advanced Studies and Research in several areas of Engineering and Technology. The centres of excellence include PSG-Siemens Centre for Excellence in Automation, Rockwell Centre for Industrial Automation, Heidenhain Centre for CNC Systems, Lapp Centre for Excellence in Cable Technology, L&T Centre for Low Voltage Switchgear, Festo Automation Centre, Eplan Centre for ECAD, National Instruments Centre for Virtual Instrumentation, Adept Centre for Robotics, Centre for Advanced CNC & Robotics, PSG-Danfoss Centre of Excellence for Climate and Energy etc.

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 The Department of Robotics and Automation Engineering has been established in order to meet the growing demand for trained manpower in the field of Robotics and Industrial Automation. Automation Engineering is a cross-sectional discipline that requires knowledge in hardware, software, and their applications. This very unique programme is tailored to prepare superior quality Automation Engineers for Manufacturing, Defense, Food, Aerospace, Medical, and Service Sectors. The department draws teaching talent from industry and professional practice, apart from competent and committed faculty members to enhance the quality of the programme. The Faculty is actively involved in research and development projects, consultancy services.

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:
15/02/2018
Intimation of Acceptance by mail :
16/02/2018

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One Day Workshop on Applications of Arduino



February 17, 2017

Organised by



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