

About the Workshop:

Robotics focuses on the process of learning linked with actions rather than teaching, and the learning process is directly coupled with thinking. It is bound to play a crucial role in engineering education as a unifying, interdisciplinary, and intelligent science paradigm. Autonomous mobile robots have been widely adopted as a motivating platform for learning mechatronics and the LEGO Mindstorms kit is arguably the most widely used educational platform for understanding the concepts. It is also relatively inexpensive, reusable, robust, reconfigurable, and its modules are easy to understand. LabVIEW is a programming environment suitable for engineering education. It offers support for data acquisition hardware, built-in libraries, multitasking, and simple definition of user interfaces and is widely used in professional engineering.

This workshop intends to teach all the basics of LabVIEW programming environment and use the LEGO NXT Mindstorms kits. The goal of this combination is to stimulate design and experimentation with real hardware and representative software where mobile robotics is adopted as a motivating platform. Basic LabVIEW programming examples are taught. These are implemented with the NXT toolkit and the NXT direct command programming libraries for standalone and remote execution, respectively.

Workshop Contents:

- Introduction to Lego NXT programming : Sensors reading and basic program structure
- Introduction to LabVIEW: Sensors reading and basic structures
- Mobile robot control basics
- Line following robot
- Obstacle avoidance robot
- Construction of mobile robot using LEGO kit.

Batch Size: 15
(First come First serve basis)

The resource persons will be from PSG College of Technology.

Eligibility: Students from Engineering and Polytechnic colleges.

Course Fee

For UG & PG Students : Rs. 800/-
(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 **22.01.2018**

PSG CENTRE FOR NON FORMAL AND CONTINUING EDUCATION

DEPARTMENT OF ROBOTICS AND AUTOMATION

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

**One day workshop on
Mobile Robots Using LABVIEW and NXT
programming
January 27, 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.

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: 22/01/2018
Intimation of Acceptance by mail : 23/01/2018

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January 27, 2017

Organised by



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