

Preamble

Automation or automatic control is the use of various control systems for operating equipment such as machinery, processes in factories, boilers and heat treating ovens, switching on telephone networks, steering and stabilization of ships, aircraft and other applications with minimal or reduced human intervention. Some processes have been completely automated

The biggest benefit of automation is that it saves labor, however it is also used to save energy and materials and improve quality, accuracy and precision.

Robotics in the branch of electrical engineering, mechanical engineering and computer science that deals with the design, operation and application of Robots as well as computer system for their control, sensory feedback, and information processing.

These technologies deal with automated machines that can take the place of humans in dangerous environments or manufacturing processes,

The above two interconnected technologies of Automation and Robotics is implemented using LabVIEW, which is a system design platform and development environment for a visual programming language from National Instruments.

Keeping above factors in view, the theme of the programme is chosen as **Application of LabVIEW to Automation and Robotics.**

Objective

This FDP is focused on providing both the theoretical basis and hands on training on the fundamentals of LabVIEW based Solutions to Automation and Robotics Applications. The major objective of the FDP is to make the participants confident in applying LabVIEW solutions.

Scope

Topics under focus in the Faculty Development Programme are

- Introduction to LabVIEW.
- Hand on sessions on LabVIEW
- Interfacing of sensors and actuators
- Data acquisition and processing
- Robotic Kinematics

About the Institute

Situated in the Sylvan surroundings at the foot of the Western Ghats, the village of Nitte is 57 km from Mangalore. Nitte Mahalinga Adyanthaya Memorial **Institute** of Technology (NMAMIT), an autonomous institution affiliated to Visvesvaraya Technology University (VTU) Belgaum is a dream reality of Nitte Education Trust (NET). The institution is named after the first ever Engineering graduate from coastal Karnataka. The Nitte Education Trust, (established in 1979) runs 28 Educational Institutions, five of which are at Nitte providing serenity of the rural atmosphere with all the facilities of an urban centre.

All the disciplines at BE level are accredited by the National Board of Accreditation, New Delhi. The Institution is ISO 9001:2008 Certified from KEMA Netherlands and is recognized as Lead Institution under World Bank's **TEQIP** programme.

NMAMIT, Nitte is an amalgamation of

- 13 Departments.
- 250 highly qualified faculty members.
- More than 4500 motivated students.
- 400 dedicated supporting staff.
- 7 Undergraduate programmes.
- 15 Post graduate programmes.
- Research Centre in all the departments.
- 100 acres of land.
- State of the art lab / workshop and digital library.
- Well connected internet with 50 mbps leased line connectivity.
- 25 years of experience in producing truly world class engineers.

About the Department

The department of E&E Engineering, established in 1987, conducts UG and PG courses. The department is a VTU-PG Extension Centre for M.Tech in Microelectronics & Control Systems. The Department is offering M.Tech in Power Electronics (Autonomous under VTU) since the academic year 2014-15. With the state of the art Laboratory in Power Electronics, Control Systems, Power Systems, Computers and High Voltage & Relay, which caters to the need of all the Electrical and Electronics Engineering students. The B.E. (E&E) program has been accredited by NBA Further; the department has been recognized as Research Centre by VTU.



Three Days

FACULTY DEVELOPMENT PROGRAMME

on

**Application of LabVIEW to
Automation and Robotics**

**JULY 25 - 27, 2016
(TEQIP-II Funded)**

Registration Form

Name : _____

Designation : _____

Affiliation : _____

Department : _____

Telephone No : _____

Email : _____

Accommodation : Required Not Required

DD Details : Date: _____ Bank: _____

No: _____

Signature : _____

Date : _____

Place : _____

Endorsement by the Head of the Institution

Organising Committee

Patron :

Shri N. V. Hegde
President, NET, Mangalore

Chairman :

Dr. Niranjana N. Chiplunkar
Principal

Advisor:

Dr. Nagesh Prabhu
HOD EEE Department.

Coordinators:

Dr. Pinto Pius AJ
Prof. Abdul Rehman

Members:

Dr. M Satyendra Kumar
Dr. Muralidhara
Prof. K Vasudeva Shettigar
Prof. Pradeep Kumar
Prof. Mahabaleshwara Sharma
Prof. Raksha Adappa
Prof. Dinesh Shetty
Prof. Ravikiran
Prof. Swathi Hatwar

Contact details:

Dr. Pinto Pius AJ
Professor, Department of EEE
NMAM Institute of Technology, Nitte
Karkala TQ, Udupi – 574110
Email : pintopaj@nitte.edu.in
Mob: 944 999 1085

Resource Persons:

Faculty from host Institute, National Instruments.

Participants

Faculty from engineering colleges and PhD Research Scholars who are planning to pursue research in Automation and Robotics are eligible to attend the workshop. Maximum number of participants is restricted to 30. Selection is on First-Come-First-Serve basis.

Eligibility:

Faculty of Engineering Colleges/ Technical Institutions teaching in the Department of EEE, ECE, Research scholars from Engineering colleges and Industries.

Registration Fees:

For participants from **academic Institutions** : **Rs. 1000/-**
(For faculty, PG students and research scholars)
For participants from **Industry & Others** : **Rs. 2000/-**

Mode of Payment:

Registration fee may be paid through Demand Draft, drawn in favour of **Principal, NMAMIT, Nitte** payable at Syndicate Bank, Nitte.

Accommodation

Limited accommodation (at nominal rates) is available in hostel (twin sharing) on first-come-first-serve basis.

Important dates

Last date for receipt of
Registration form : **July 15, 2016**
Date of intimation : **July 18, 2016**



NMAM INSTITUTE OF TECHNOLOGY

NITTE -574 110, KARNATAKA STATE

Department of

ELECTRICAL AND ELECTRONICS ENGINEERING

Organizes

Three Days

FACULTY DEVELOPMENT PROGRAMME

On

**"Application of LabVIEW to
Automation and Robotics "**

July 25 – 27, 2016

Funded by:

**Technical Education Quality Improvement
Programme (TEQIP – II)**

NMAM INSTITUTE OF TECHNOLOGY

NITTE -574 110.

(An Autonomous College Under VTU, Belgaum)

(A Unit of Nitte Education Trust)

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