REGISTRATION FORM

A One Week Online AICTE-ISTE Sponsored Induction / Refresher Programme on

"Real Time Aspects of Automation in Industry — Need of the Hour"

3rd – 8th January 2022

Name :_____

Designation :_____

Department :_____

Institution Name: _____

_____

Address:_____

_____

_____

_____

Pincode: _____

Mobile:_____

E-Mail:_____

ISTE Life Membership : _____

Signature of Applicant   Signature of Head of Institution

Eligibility: This programme is designed for faculties of EEE, ECE and ME departments from AICTE approved educational institutions.

Important Dates:

Last date for registration: **20-12-2021**

Registration: Participants are requested to register by filling the registration form and sending the same to the Coordinator. The number of participants are limited to 100. The selection is based on first come first serve basis. Priority will be given to ISTE Life Members.

Test & Certificate: Test will be conducted at the end of programme and digital certificates will be issued to participants who have attended the programme with a minimum of 80% attendance and scored a minimum of 60% in the test. The participants are also required to submit feedback for each session using the feed back link that will be provided to them.

The Google form links for Registration:

https://forms.gle/ufEPXXwArGDEAJVm6

ADDRESS FOR ALL CORRESPONDENCE

Dr. T. Bramhanandra Reddy, SMIEEE, MISTE

Professor & H.O.D, Coordinator

Department of Electrical & Electronics Engineering

G. Pulla Reddy Engineering College (Autonomous)

KURNOOL - 518 007, Andhra Pradesh, India.

Mobile: +91-9966655504, +91-7095667776

E-mail: gprecripa2022@gmail.com,

hodeee@gprec.ac.in

Website: www.gprec.ac.in,

Organized by

Dept of Electrical & Electronics Engineering

G. Pulla Reddy Engineering College (Autonomous), KURNOOL – 518007 Andhra Pradesh, India.

Accredited by NBA of AICTE and NAAC of UGC & Affiliated to JNTUA, Ananthapuramu

ABOUT THE COLLEGE

The College is the brainchild of the renowned philanthropist, Late Sri G. Pulla Reddy. Established in 1985 and managed by G. Pulla Reddy Charities Trust. The college is affiliated to Jawaharlal Nehru Technological University Anantapur, Ananthapuramu and approved by AICTE & accredited by NBA of AICTE and NAAC of UGC. The college offers Under Graduate Programmes in Nine Engineering branches and three Post Graduate programmes. The college is situated on Kurnool – Chittoor National Highway No.18. Kurnool is well connected by Rail and Road. The places of interest nearby are Srisailam, Alampur, Mahanandi, Mantralayam and Belum Caves.

ABOUT THE DEPARTMENT

The department of Electrical & Electronics Engineering was started in 1994. The department has excellent infrastructure facilities, laboratories and faculty. Also the department offers Labview Academy programmes and various industry related trainings.

ABOUT THE WORKSHOP

Industrial Automation is today a key pillar of every manufacturing organization strategy. Usage of robots, AI and latest generation software to execute routine tasks and minimizing human involvement is proving to be extremely cost effective solution to the challenges of modern manufacturing. It helps in increasing quality, reliability and production rate and reducing overall cost of production. Use of industrial automation minimizes human errors. With the reduction of human errors, uniformity & product quality can be improved. Industrial automation enables the process variables to be maintained at desired values with the help of closed-loop control techniques. Automated machines or robots can work in hazardous working conditions and reduce manual error. It Provides knowledge of the different systems available and their applications, enabling engineers to design automation solutions to solve real industry problems. It Includes case studies and practical information on key items that need to be considered when procuring automation systems.

RESOURCE PERSONS:

Mr. R. Venugopal, M.D. VENJAY INSTITUTE OF AUTOMATION, Bengaluru, Karnataka

TOPICS TO BE COVERED

- Introduction to automations and different generations, controller, PLC, DCS, CNC, Robotics, Data Acquisition.
- **Electrical part of automation:** Introduction to single line diagram and electrical part of automation like switchgears and starters. Understanding of VCB, ACB, MCCB, OLR, ELR, MPCB and different types of electrical protection involved in automation.
- **Electronics part of automation:** Like sensors and transducers, Live demonstration using the actual sensors, limit switches, Variable frequency drives motors etc networking of devices, role of IOT in automation. Hardware architecture etc.,
- **Mechanical part of automation.**: Different type of conveying like Belt conveyor, chain conveyor, ball screws, lead screws, rack and pinion etc., Dense phase conveying, hydraulics/pneumatics
- Different types of programming tools involved in automation. Ladder and FBD programming and its advantage.
- Encoders and their methods of interfacing.
- Introduction to SCADA and HMI and their various aspects.
- Create an application of bottle filling in SCADA
- Live demonstration of sheet cutting, variable frequency drives, etc.
- Creation and live demonstration of cuber using SCADA and PLC programming.
- One session on Art of living.

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Chairman	:	Sri. P. Subba Reddy
Patron	:	Dr. B. Sreenivasa Reddy, Principal, GPREC, Kurnool
Coordinator	:	Dr. T. Bramhananda Reddy Prof & Head, EEE Dept.
Co-Coordinator	:	Dr. Y. V. Siva Reddy, Professor & Dean, EEE Dept.

Advisory Committee:

Dr. K. Sri Gowri, Professor, EEE Dept.
Dr. M. Siva Sathyanarayana, Asso.Prof, EEE Dept.
Dr. N. Ravi Shankar Reddy,Asso.Prof, EEE Dept.
Dr. V. Ananthalakshmi, Asso. Prof, EEE Dept.
Dr. G. Sateesh, Asso. Prof, EEE Dept.
Dr. G. Kishor, Asso. Prof, EEE Dept.
Dr. Abid Nayeemuddin, Asso. Prof, EEE Dept.
Dr. M.Harshavardhan Reddy,Asso.Prof, EEE Dept.
Dr. B.Urmila, Asso. Prof, EEE Dept.
Dr. C.Harinatha Reddy, Asso. Prof, EEE Dept.

Organizing Committee: All Assistant Professors of EEE Dept.