Emerging Trends and Technical Developments
in Automated Machines

(26th to 30th September 2022)

Organized by

Center for Continuing Education, NIT Warangal

In association with

Department of Mechanical Engineering

Sreenidhi Institute of Science and Technology, Hyderabad

SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY **SNIST** Sreenidhi Institute of Science and Technology **AUTONOMOUS**

Center for Continuing Education, NIT WARANGAL:

The Center for Continuing Education, NIT Warangal Organizes FDPs / Training Programmes / Seminars / Workshops etc., in the frontier areas of Science, Engineering, Technology, Management, Humanities, Social science and Socially relevant themes on self-financial basis in three different modes at NIT Warangal, in collaboration with other organizations of NIT Warangal Faculty at the Host Organization / Institute.

Introduction and about STC:

The manufacturing industry has significantly evolved over the years, from the first industrial revolution when water and steam-powered machines, to mass production and assembly lines using electricity in the second, to the adoption of computer and automation technology in the third. Today, we find ourselves in the midst of yet another transformation commonly referred to as the fourth industrial revolution, or Industry 4.0, that optimizes the digitization of the third revolution with smart and autonomous systems fueled by data and machine learning.

Industry 4.0 holds tremendous potential for manufacturing companies in numerous industries to enable product customization, provide flexibility to meet new demands in real-time, and produce more efficient operations. We've listed some of the most important developments in industrial automation machine technology to watch as technical concepts advance and we approach a new industrial revolution (Industry 5.0).

This, Short term course aims to provide a broad overview on Industrial Internet of Things, Collaborative Robots, Machine Vision, 3-D Printing, Simulation and Intelligent Designs. The programme has been planned with eminent speakers from Industry and Academics for the benefit of Faculty, Industry persons, Scholars and Post graduates.

Expected Outcomes of the STC:

- After attending STC, participants will get in depth understanding of Industry 4.0
- Gain a better understanding of the scope of automation in the design and manufacturing.
- To make the participants familiar with the use of Industrial Internet of Things (IIoT) and Collaborative Robots for automatic manufacturing.
- Participants will aware of the recent developments in machine vision, 3D printing, intelligent design and its simulations.

Major Course Contents:

- Introduction to Industry 4.0
- Awareness regarding the automation in design and manufacturing.
- How does the Industrial Internet of Things work.
- Different approaches for intelligent design and simulations.
- Various Collaborative Robots available for automation.
- Use of machine vision.
- Advancements in 3D printing.

Faculty Conducting this Program:

The programme will be conducted and organized by the faculty members from National Institute of Technology (NIT), Warangal and Sreenidhi Institute of Science and Technology (SNIST), Hyderabad. Dr. Naga Srinivasulu G, Dept. of Mechanical Engineering, NIT, Warangal and Dr.Jayakiran Reddy E, Dept. of Mechanical Engineering, SNIST, Hyderabad are acting as the coordinators for this program.

Academicians in the concerned field from IITs / NITs / IIITs / Central / Deemed / State Universities are invited to deliver lectures in the programme. Experts from industries are also expected to deliver as a part of the course.

NIT-Warangal:
National Institute of Technology, Warangal is the first among 17 RECs setup as joint venture of the Government of India and the state government. Over the years the college has established itself as a premier institute imparting technical education of a very high standard leading to the B.Tech degrees in various branches of engineering, M.Tech and Ph.D programmes in various specializations. All B.Tech and M.Tech programmes of NIT Warangal are NBA accredited.

Sreenidhi Institute of Science and Technology, Hyderabad:
Sreenidhi Institute of Science and Technology (SNIST), Hyderabad is a non-profit organization founded by a group of Industrialists, Academicians, Professionals and non-resident Indians with an idea of imparting purposeful education to youth. SNIST which is being sponsored by Sree Educational Group was established in the year 1997 by Dr. K.T. Mahhe, an extraordinary educationist, a pragmatic leader and a dynamic entrepreneur with rich experience in Academics and Industry with the permission of AICTE, New Delhi and the Government of Andhra Pradesh. The Institute offers 11 UG (B.Tech) and 9 PG (M.Tech and MBA) programs. SNIST is striving hard to empower the students in their technical knowledge and imbibe adequate skills through the teaching by eminent faculty. The present annual intake of the institute is 1836. The institution has been accredited by NAAC with A+ grade and NBA, New Delhi. This year SNIST is celebrating its 25th year (Silver Jubilee).

Department of Mechanical Engineering:
The Department of Mechanical Engineering (ME) was established in the AY 1997-1998. Department is offering one B.Tech – Mechanical Engineering and two M.Tech programmes in CAD/CAM and Thermal Engineering. The B.Tech (ME) and M.Tech. CAD/CAM Courses were accredited by NBA. The department has research-focused laboratory facilities in the area of CAD/CAM, Advanced Materials, Additive Manufacturing and Thermal Turbo Machines. 30% of Mechanical engineering department faculties are Ph.D and are involved with Industry as well as government sponsored projects in various fields of their expertise. The department is currently involved in projects worth Rs. 1Crore. (Undergoing and sanctioned) in various research areas of the faculty.

Registration Fee Particulars:
Faculty/Research Scholars/Industry Participants/PG Students: *INR 500.00*
Participants need to pay the Registration Fee Online using the following details

    Account Name: Center for Continuing Education (NITW)
    Account No: 62403680215;
    IFSC: SBIN0020149
    Bank and Branch: State Bank of India, NIT (REC) Warangal

How to Apply:
Participants are required to fill the online registration form by clicking on the following/link:
Step 1: Register: https://forms.gle/iAoEG8FpScysrhwQ6
Step 2: Join in WhatsApp Group: https://chat.whatsapp.com/GW5zDXUr5pZCa1sP2CB2Sp

Selection Criteria:
Selection will be done based on a first-come-first-serve basis to a maximum number of 60 (sixty). Additionally, 10 participants from the industry are allowed to participate. The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the registration amount will be sent back. Candidates will be issued satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per norms.

Important Dates:
Last Date (Application & registration): 24th September 2022
Selection List intimation (by e-mail): 25th September 2022
Duration: 26th to 30th August 2022.

Coordinators:
    Dr. Naga Srinivasulu G, Dept. of ME, National Institute of Technology, Warangal, TS, India.
    Dr. Jayakiran Reddy E, Dept. of ME, Sreenidhi Inst. of Sci. and Tech, Hyderabad, TS, India.
    Contact: 9963786665; jayakirane@sreenidhi.edu.in

One Week Online Short-Term Course (STC)
Emerging Trends and Technical Developments
in Automated Machines
(26th to 30th September 2022)
Organized by
Center for Continuing Education, NIT Warangal
In association with
Department of Mechanical Engineering
Sreenidhi Institute of Science and Technology, Hyderabad

Name:

Designation:

E-mail: Institution:

Mobile No.:

Reference No. (fee paid):

Mode of Payment:

Amount paid:

Name of the Bank:

Educational Qualification:

Subjects taught so far:

Experience in Teaching:

Research:

Industry:

Do you belong to SC/ST: Yes or No

Declaration:
The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the STC and shall attend the course for the entire duration. I also undertake the responsibility of the course.

Signature of the Participant

Sponsorship Certificate:
Dr. / Mr. / Ms._____ is an employee of our Institute / organization and is hereby sponsored to participate in the ONLINE STC on Emerging Trends and Technical Developments in Automated Machines conducting by Center for Continuing Education NIT Warangal in association with Sreenidhi Institute of Science and Technology, Hyderabad during 26th to 30th September 2022.

Seal & Signature of the Head of the Institution