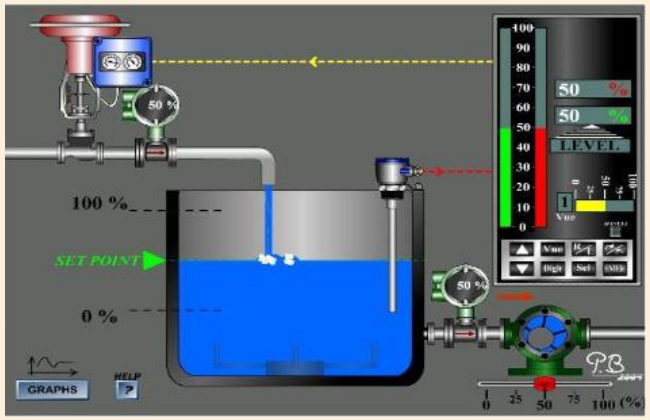
A Value Added Programme

On

Control Systems, Sensors, Process Control and Automation

Dates: 12-03-2024 to 30-03-2024



Organized by

School of Electrical Engineering
Vellore Institute of Technology,
Vellore-632014.

VIT®
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

ABOUT THE VAP

Control Systems, Sensors, Process Control and Automation are the core specialization areas in instrumentation engineering. Control systems are used to enhance production, safety and efficiency in various fields. Sensor data plays vital role for the effective functioning of control systems. Selection of proper sensors and designing the signal conditioning plays critical role in industrial applications. Process control deals with the science of maintaining the output of a specific process within a desired range. Process control is commonly used for mass production. Due to its precise nature, it enables the automation of industrial processes. The purpose of this VAP is to provide students a grasp of the fundamental concepts and operational characteristics of various sensors, designing controllers and programming PLCs. This skill will uplift the student's employability ratio.

TECHNICAL SESSIONS

- Design of signal conditioning circuit for RTD.
- Study the characteristics of an Inductive sensor
- Study the characteristics of Capacitive sensor
- Study of first order and second order systems
- System identification for servo motor
- PID controller design for speed/position control
- Single-loop and multi-loop process control
- PLC configuration, Ladder Programming for factory automation.
- Distributed Control System Configuration, Function block creation for process automation

ABOUT VIT

VIT was established with the aim of providing quality higher education on par with international standards. It persistently seeks and adopts innovative methods to improve the quality of higher education on a consistent basis. The campus has a cosmopolitan atmosphere with students from all corners of the globe. Experienced and learned teachers are strongly encouraged to nurture the students. The global standards set at VIT in the field of teaching and research spur us on in our relentless pursuit of excellence. In fact, it has become a way of life for us. The highly motivated youngsters on the campus are a constant source of pride. Our Memoranda of Understanding with various international universities are our major strength. They provide for an exchange of students and faculty and encourage joint research projects for the mutual benefit of these universities. Many of our students, who pursue their research projects in foreign universities, bring high quality to their work and esteem to India and have done us proud. With steady steps, we continue our march forward.

ABOUT THE SCHOOL OF ELECTRICAL ENGINEERING

The School of Electrical Engineering (SELECT) has over 98 faculty members who pursued their UG, PG and Doctoral degrees from top-notch universities. The school offers B.Tech. (Electrical and Electronics Engineering), B.Tech. (Electronics and Instrumentation Engineering), M.Tech. (Power Electronics and Drives), M. Tech. (Control and Automation), Ph.D and Integrated Ph.D in Engineering. Both B.Tech. and M.Tech. programmes attract the Intelligent students from the country and abroad. The B.Tech. Electrical and Electronics Engineering and B.Tech. Electronics and Instrumentation Engineering Programmes are accredited by the Engineering Accreditation Commission of ABET. All UG & PG programmes of

the school are accredited by the Institution of Engineering and Technology (IET), U.K. The placement record of the school has always been impressive. Almost 100% of the students secure job from the campus placement and many of them are recruited in core companies. Danfoss Advance Drives Lab, Schneider Electric Smart Energy Monitoring Lab, Fluke Testing and Calibration Lab, Q-Max Automated Test Engineering Lab (Alumni Sponsored Lab) and NxP Semiconductors, India, have established Centre of Excellence for students R&D activities under the guidance of faculty members and industry experts.

Resource Persons

Dr. Venkata Lakshmi Narayana N
SELECT, VIT

Dr. Vinodh Kumar E
SELECT, VIT

Dr. Geetha M
SELECT, VIT

Dr. Medarametla Praveenkumar
SELECT, VIT

Dr. Jitendra Kumar Goyal
SELECT, VIT

REGISTRATION

Registration fee : Rs.200/-

* Registration fee excludes 18% GST.

Prospective participants are requested to register for the VAP through the following web link

https://events.vit.ac.in/

IMPORTANT DATES

Last date for registration: 05-03-2024

Dates of VAP: 17-03-2024, 23-03-2024, 24-03-2024, 29-03-2024 and 30-03-2024

Co-ordinators

Dr. Venkata Lakshmi Narayana N
Mobile: 9790763938

Dr. Vinodh Kumar. E
Mobile: 9962093935

Dr. Medarametla Praveenkumar
Mobile: 9791435394

ORGANIZING COMMITTEE

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