



L.D College of Engineering  
Department of  
Instrumentation and Control  
Engineering  
*Presents*



## Webinar Series

# Content Beyond Syllabus

Department of IC Engineering under the ISA Student Section LDCE, organize various webinars, industrial visit, workshops and invited talks for the students including industries and alumni.

To address the short coming in Curriculum to attain the program out comes Department Faculties handling the course took initiative to organize this webinar series on content beyond syllabus Topic such as Virtual Instrumentation application, Introduction and application on PID controller, Introduction to VLSI design more..



FROM OCT 7 TO OCT 23

PLATFORM : MICROSOFT TEAM

# Contents

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## Dr. M. T. Thakker

- Virtual Instrumentation application in Automation
- Instrumentation for Measurement of surface Properties

## Prof. U. V. Shah

- Step Motor Drives

## Prof. V. P. Patel

- Real time controller implementation on digital systems

## Dr. R. C. Patel

- ARM Cortex Micro-controller architecture and applications

## Prof. M.C. Patel

- Introduction to VLSI design and FPGA

## Prof. V. V. Patel

- Implementation and application of PID controllers

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## Prof. H. K. Shastri

- Importance of Moisture measurement in FMCG Industries

## Dr. A. K. Shah

- Implementation and application of PID controllers

## Prof. L. S. Patel

- Non sequential counter design

## Prof. D. V. Raninga

- AC Power: Complex power, apparent power and power triangle, power factor improvement, Related problems solving

## Prof. C. V. Shah

- Modern Wireless Transmitter use in Process Industry

## Prof. S. N. Shah

- Algorithms to Control the UAV

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## Prof. U. G. Suhagiya

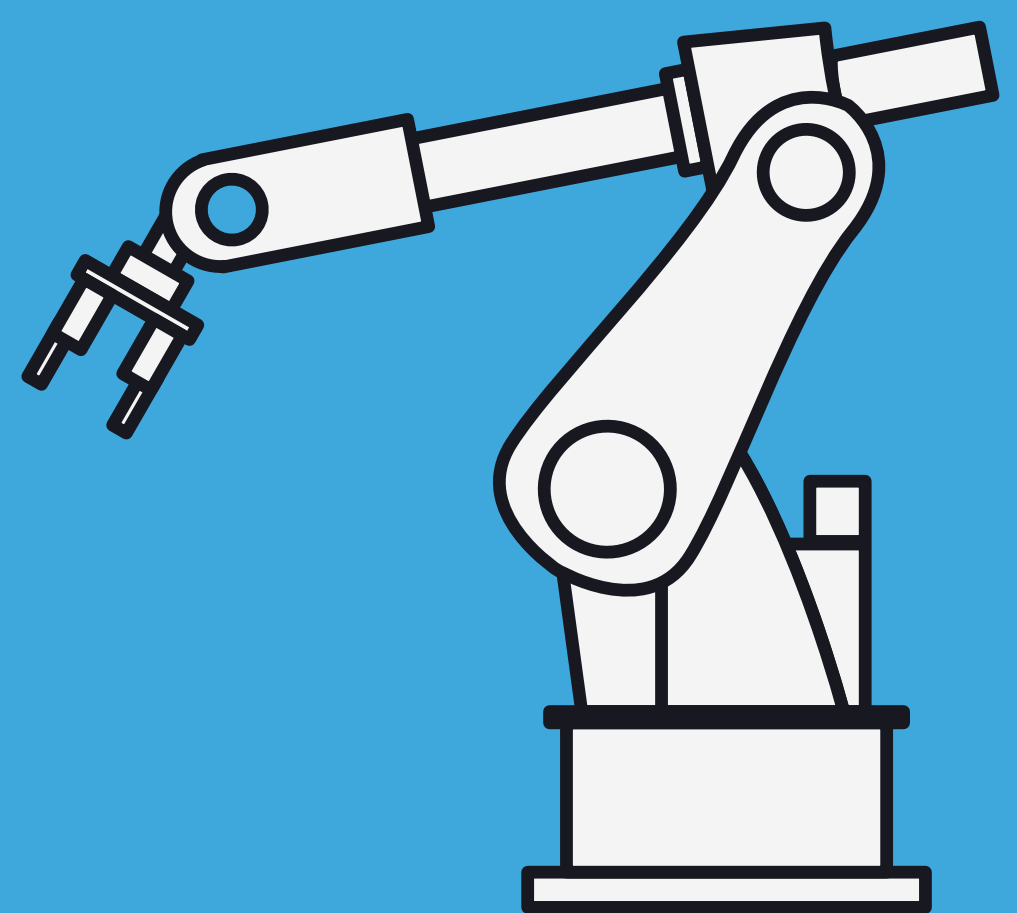
- FFT/IFFT sampling for OFDM

## Prof. N. A. Kanani

- Home Automation Robots - Changing the World

## Prof. K. R. Joshi

- Importance of S/H and ADC for Data Acquisition System Configurations



# VIRTUAL INSTRUMENTATION APPLICATION IN AUTOMATION

*Students learn various  
application for  
development of  
automation system  
using Virtual  
Instrumentation.*

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**SPEAKER:**



DATE: 13 OCT 2020

FOR V & VII SEM

**DR. M.T.THAKKER**

PROF. AND HEAD  
IC DEPARTMENT  
FACULTY ADVISOR-ISA



# INSTRUMENTATION FOR MEASUREMENT OF SURFACE PROPERTIES

*Students learn about various industrial application (Pharma, Paint, Cement, Food etc.) with image processing, force trasducers for surface properties measurment.*

2

**SPEAKER:**



DATE: 13 OCT 2020

FOR V & VII SEM

**DR. M.T.THAKKER**

PROF. AND HEAD  
IC DEPARTMENT  
FACULTY ADVISOR-ISA

# STEPMOTOR DRIVES

*To bridge the gap between text book based drives and real world drives. To introduce element of design in curriculum.*

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**SPEAKER:**



**DATE: 8 OCT 2020**

**FOR VII SEM**

**PROF. U. V. SHAH**

ASSOCIATE PROFESSOR

# REAL TIME CONTROLLER IMPLEMENTATION ON DIGITAL SYSTEMS

*Students will learn  
various methods to  
implement real time  
controller on digital  
systems  
(PC, Microprocessors, Mi  
crocontrollers, etc...)*

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**SPEAKER:**



DATE: 20 OCT 2020

FOR V & VII SEM

**PROF. V.P. PATEL**

ASSOCIATE PROFESSOR.

TPO - LDCE



# ARM CORTEX MICROCONTROLLER ARCHITECTURE AND APPLICATIONS

*Student will learn 32  
bit microcontroller  
architecture and their  
industrial applications.*

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**SPEAKER:**



**DATE: 21 OCT 2020**

**FOR V SEM**

**DR. R.C. PATEL**  
ASSOCIATE PROFESSOR

# INTRODUCTION TO VLSI DESIGN AND FPGA

*Students will be able to  
learn verilog language  
and aware of FPGA  
platform.*

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**SPEAKER:**



DATE: 22 OCT 2020

FOR III SEM

**PROF. M.C. PATEL**

ASSITANT PROFESSOR

# IMPLEMENTATION AND APPLICATION OF PID CONTROLLERS

*Students will be able to learn application of different controllers and issues with the implementation (Process Control, Process dynamics and control).*

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**SPEAKER:**



DATE: 15 OCT 2020

FOR VII & V SEM

**PROF. V.V. PATEL**

ASSITANT PROFESSOR

# IMPORTANCE OF MOISTURE MEASUREMENT IN FMCG INDUSTRIES

*Student will learn about trending instruments, criticality of measurement also responsibilities as an instrumentation engineer in plant.*

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**SPEAKER:**



DATE: 14 OCT 2020

FOR V & VII SEM

**PROF. H.K. SHASTRI**

ASSITANT PROFESSOR  
FACULTY CO-ORDINATOR - ISA



# IMPLEMENTATION AND APPLICATION OF PID CONTROLLERS

*Students will be able to learn application of different controllers and issues with the implementation (Process Control, Process dynamics and control).*

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**SPEAKER:**



**DR. A.K. SHAH**

ASSITANT PROFESSOR

DATE: 15 OCT 2020

FOR VII & V SEM



# NON SEQUENTIAL COUNTER DESIGN

*Students will be able to  
design non sequential  
counter for some  
specific counting  
applications.*

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**SPEAKER:**



DATE: 07 OCT 2020

FOR III SEM

**PROF. L.S. PATEL**

ASSISTANT PROFESSOR

# A.C POWER AND RELATED PROBLEM SOLVING

*AC Power: Complex  
power, apparent power  
and power triangle,  
power factor  
improvement, Related  
problems solving.*

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**SPEAKER:**



**DATE: 16 OCT 2020**

**FOR III SEM**

**PROF. D.V. RANINGA**

ASSITANT PROFESSOR

# MODERN WIRELESS TRANSMITTER USE IN PROCESS INDUSTRY

*Student  
will be able to learn  
about Wireless  
Transmitter in Industry.*

12

**SPEAKER:**



DATE: 22 OCT 2020

FOR V & VII SEM

**PROF. C.V. SHAH**

ASSITANT PROFESSOR

# ALGORITHM TO CONTROL THE UAE

*Student will be able to learn about various control algorithms to Control UAV.*

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**SPEAKER:**



DATE: 23 OCT 2020

FOR VII SEM

**PROF. S.N. SHAH**

ASSITANT PROFESSOR

# FFT/IFFT SAMPLING FOR OFDM

*Student  
will be able to learn the  
application of FFT/IFFT.*

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**SPEAKER:**



DATE: 23 OCT 2020

FOR III & VII SEM

**PROF. U.G. SUHAGIYA**

ASSITANT PROFESSOR



# HOME AUTOMATION ROBOTS - CHANGING THE WORLD

*Student  
will learn about the  
new era of home  
automation.*

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**SPEAKER:**



DATE: 13 OCT 2020

FOR V SEM

**PROF. N.A. KANANI**

ASSITANT PROFESSOR

# IMPORTANCE OF S/H AND ADC FOR DATA ACQUISITION SYSTEM CONFIGURATIONS

*student will understand interfacing considerations in analog and analog to digital system.*

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**SPEAKER:**



DATE: 15 OCT 2020

FOR III SEM

**PROF. K.R. JOSHI**

ASSITANT PROFESSOR