

# **Analog Integrated Circuit Design**

Indian Institute of Technology Delhi Department of Electrical Engineering TEQIP-III Sponsored Online Short term Course Nov 29 – Dec 3, 2020

Course Coordinator: Dr. Rakesh Kumar Palani Assistant Professor, Electrical Engineering, IIT Delhi Guest Lectures: 1. Rajasekhar Nagulapalli Research Associate, Brookes Univ, UK. 2. Srikar Bhagavatula Manager, Mixed SIgnal Devices Inc Irvine, CA USA

## **Introduction**

- This online course (35 hours) introduces analog circuits and expands to opamp design.
- This also covers some network theory which is useful in analysing analog circuits.

# **Participation**

- Only for faculty members from TEQIP-III institutions.
- Based on first come first serve, a maximum of 50 participants will be allowed to register.

# **Course Content:**

- Introduction to small signal analysis.
- Time domain and frequency domain basics
- Biasing of transistor.
- Single and multi stage amplifier.
- Negative feedback systems.
- Mismatch and noise analysis of circuit
- Frequency compensation.
- Bandgap reference.

# **Objective:**

- Understanding Linear small signal analysis
- Transistor Biasing
- Analysis of Single Stage Amplifier
- Understanding Compensation schemes
- Design of 2 stage opamp
- Familiarization with LT Spice

## **Registration:**

Interested faculty members at TEQIP-III institutions should register by depositing a refundable security deposit of ₹ 2000 before 01<sup>st</sup> November, 2020. Bank details are below. After paying the security deposit, please fill the form with your details along with the transaction details.

#### **Registration Form:** Apply here

#### **Bank Details**

- Name of Account Holder: IITD CEP Account
- Bank Name
- Address
- IFS code
- Account Number
- Swift code
- Type of Account

- : State Bank of India
- : Indian Institute of Technology, Hauz Khas, New Delhi-16
- : SBIN0001077
- : 36819334799
- : SBININBB547
- : Saving

### **Contact:**

For any query related to registration and course content, please send an email to rakesh@ee.iitd.ac.in