



PCDDC  
TECHNICAL TRAINING

### What do you learn and experiment?

- a Basic Communication Model, Sampling, Base Band Modulation Schemes : PCM Modulation  
**Lab Experiment:** A/D Conversion & D/A conversion.
- b Source Coding, Line encoding, Data Scrambling, Channel coding.  
**Lab Experiment:** PCM : Convolution Coder (MATLAB).
- c Pass band modulation Schemes, Digital Carrier Modulation : FSK, PSK, ASK, M-Arrays, GMSK, Raised Cosines  
**Lab Experiment:** ASK, FSK, PSK, Performance analysis of QPSK and BPSK
- d Channel Modeling, Rayleigh, Rician, Channel Equalization, Synchronization.  
**Lab Experiment:** Matlab Simulation of Rayleigh Channel, Matlab Simulation of Rician Channel.
- e Decision feedback detectors, Maximum likelihood detector, Introduction to Information Theory, Introduction to Advanced Digital Communication technologies.  
**Lab Experiment:** Simulation of OFMA.
- f Multiple Access techniques: FDMA, TDMA, SDMA, CDMA  
**Lab Experiment:** Matlab simulation of CDMA.

### Who should attend ?

- a All those Electrical engineers, Electronic postgraduates who are involved in R&D organizations, mobile/ WLL comm companies and want to update their knowledge
- b Students of 7/8<sup>th</sup> semester of BSc Elec/telecom Engineering who do not have access to Communication System Design Laboratory Environment.
- c Engineers seeking overseas admissions/ employment in R&D, Mobile comm Companies/organisations

### Educational background ?

- a BSc Engineering in Electrical, Mechatronics, computer systems or Telecom.
- b Msc in Electronics

### FEE STRUCTURE

- **Students**  
Rs 5,000/-
- **Academic**  
Rs 10,000/-
- **Professionals**  
Rs 15,000/-

### DURATION

- **30 Hours**
- **3 Days a Week**
- **5 Hours a Day**