

# **Narula Institute of Technology**

## **Dept. of Electronics & Communication Engineering**

### **Seminar Report** **on** **Mobility - Basic to Broadband** *(One Day Industry Based Educational Program under TEQIP, Phase-II)*

Being a member of Electronics & Communication Engineering Department, it is our sole responsibility to encourage the students in the field communication. To fulfill that aim, the department was taken an initiative to organize one day industry based educational program on “Mobility-Basic to Broadband” on 19th of February, 2013. The program was sponsored under TEQIP, Phase-II. It was our great opportunity to have Mr. Chanchal Chakraborty as a guest speaker. Mr. Chakraborty has an experience in Telecom for more than 25 years. Few key achievements of the speaker are -

- Worked as Chief Technology Officer, Uninor.
- Worked in different capacities in NTPC, BSNL (erstwhile DOT), Aircel.
- Rolled out Metro Network and entire East Zone Mobile network for three operators- BSNL, Aircel and Uninor.
- Experience in all fields of Telecom- Switch, Microwave, Optical Fibre, Satellite Communication and Broadband.
- Prepared Technical specifications in GSM systems.
- Planned and deployed more than 100 Digital Switches on Pan India Basis.
- Rich experience in deployment of IT enabled system, Data Centre.

All the Faculty and Technical Assistants of ECE department, M. Tech students, Final year students of B. Tech and the interested faculty members of the college as an audience. Prof (Dr) M R Kanjilal, HEAD, ECE, has given the welcome address. The lecture session was continued for four hours and the program was ended with vote of thanks.

**Brief outline of the program:**

The entire program was divided in two sessions. The duration of session-1 was 11.00 am to 1.00 pm and the session-2 was 2.00 pm to 4.00 pm.

**Topics discussed in session-1:**

1. Basics of GSM
2. SS7 basics
3. GSM Architecture Overview
4. Access Network
5. NSS Topology
6. Radio (Um) Interface

**Topics discussed in session-2:**

1. Broadband on Mobile
2. GSM/EDGE evolution to 3G / HSPA
3. Characteristics of 3GPP Technologies
4. Architecture (2G, 2,5G, 3G)
5. EDGE technology
6. OFDM
7. MIMO
8. LTE technology

Mr. Chakraborty delivered his talk in a very lucidly manner. Apart from the projector, he used board several times for illustration.

## Photo Gallery



Mr. Chanchal Chakraborty



Mrs. S. Pattanayak conducting the program



Memento presented by HEAD-ECE



Mr. Chakraborty addressed the audience



Staffs and students of NIT



Discussion going on during question-answer session



Vote of thanks by Mr. Pranab Hazra