

## **Report of Workshop on**

### **'Monte Carlo Simulations of Multiple Antenna Wireless System'**

**Date:** 5/8//2017

**Venue:** AV Room for lecture session and MCA Lab for Practical Session

**Speaker:** Dr Dhaval Patel, Ahmedabad University

Electronics and Communication Engineering Department organised a Workshop on '**Monte Carlo Simulations of Multiple Antenna Wireless System**' under 'Mobile and Wireless Technology Club' of the Department. The main goal was to provide direction to the final year students and ME researchers in the domain of Wireless Communication and understand the cumbersome mathematical modelling for the Wireless system. The workshop was technically supported by IEEE SCET Student Branch.

Total **43 participants** joined the workshop including 8 from ME II, GEC, Surat; 14 from ME II ECC SCET, and 21 from BE IV ECC, SCET. Dr Dhaval Patel, Assistant Prof, School of Engineering and Applied Science - Ahmedabad University was invited for conducting the Workshop. The journey of Wireless Communication was enlightened from rags to riches.

Program started with the Inauguration of Mobile and Wireless Technology Club (MWTC) of the Department followed by the skills required by successful engineers - target 2025. Importance of Electronics and Wireless Communication was well substantiated by the guest speaker with relevant practical examples. Dr Dhaval Patel provided an insight of multiple Antenna Wireless System with an application of SIMO (Single Input Multiple Output) system.

The post-lunch lab session was accomplished with Monte Carlo Simulation in Wireless System and BER (Bit Error Rate) Algorithm with 1x2 system was executed using MATLAB. Program code was explained in a quite lucid manner, line by line which provided thorough understanding of the mathematical approach to the participants. It was followed by general discussion session with the participants. The session lasted for 5 hours with productive outcome.

It was truly an effective session with thorough teaching, learning and understanding qualities. Some snapshots have been appended below as a glimpse of workshop.

