

**SIES Graduate School of Technology**  
**Department of Electronics and Telecommunication Engineering**  
Presents

**3 days Hands on Training on**

**Advanced Antenna Design using IE3D**

**July 04<sup>th</sup>, July 11<sup>th</sup> and 18<sup>th</sup> July of 2018 Timing :10.00 AM to 4.00 PM, Venue : Lab 316**

Since the invention of the Microstrip Antenna four decades ago, the demand for its application has been increasing rapidly, especially within the last two decades. However, these applications have been in demand mostly by the Department of Defense. Because of their extremely thin profile (0.01 to 0.05 wavelength), printed Microstrip Antennas have found heavy applications in military aircraft, missiles, rockets, and satellites. The Microstrip Antenna, because of its small size, lightweight, low profile, and low manufacturing cost, is finding increasing applications in the commercial sector of the industry. This workshop aims at discussing briefly some of the antenna's technical design features and presents several important examples of the antenna's commercial applications, such as mobile satellite communications, direct broadcast satellite services, global positioning system, medical hyperthermia usage, etc.

**Objectives**

- Introduction to basic understanding and designing of the Patch Antenna.
- Simulation of the Patch Antenna using simulation software IE3D.
- To evolve, develop and improvise different types of patch antennas suitable for numerous applications like microwave communication, radar, mobile communication, RFID, IOT applications so on.

**Course Contents**

- Introduction to Antenna and IE3D software
- Design, Simulation and Optimization of a Microstrip Patch Antenna using IE3D software.
- Design, Simulation and Optimization of a Microstrip Patch Antenna Array.
- Design, Simulation and Optimization of a Microstrip Patch MIMO Antenna.
- Parameter enhancement of MSA by designing different types of periodic structure.
- Design of Microstrip Component, Fractal Antenna, Reconfigurable Antenna and fabrication of antenna.

**Speakers**

Prof. Shishir Jagtap  
Prof. Vandana Sawant

**Who Should Attend**

TE and BE ( EXTC) students - First come first serve (Seat available only for 20 students- 10 groups with 2 members each)

**Registration Fees**

Course Fees: FREE

(Cost of certificate will be applicable)

**Contact for Registration**