ISTE approved

One Week Short Term Training
Program on

## Trends and Advances in Technologies for Wireless Communication

8th July to 12th July 2024

Organized by

## Department of Electronics & Telecommunication Engineering

## in association with IQAC_KJSCE

## Somaiya Vidyavihar University

Established in 2019, Somaiya Vidyavihar University (SVU), Mumbai, is a self-financed private university recognized by the University Grants Commission (UGC). Somaiya Vidyavihar has over six decades of rich experience in building and managing educational institutes of great repute. The University has been operational since 26th August 2019, and a place where learners can explore new possibilities and pursue their passion.

There are ten constituent colleges under the umbrella of SVU. Being located in the heart of Mumbai spread across a vast 50 acre sprawling green campus, and having state-of-the-art learning infrastructure, it caters to 39,000+ students in diverse fields of education, including design, engineering, library science, management, religion, culture, sports, music, humanities and sciences. SVU offers students the flexibility to earn degrees in multiple disciplines, offered by our constituent colleges. The university also accommodates an advanced incubation center, which serves as a launch pad for entrepreneurs/start-ups. The placement cell facilitates ample employment opportunities for graduates, and the on-campus hostels ensure a comfortable and safe stay for the students and academicians. The University aims to provide quality holistic education to make great citizens of India, those who know how to live better and make this world better for living.

## About K J Somaiya College of Engineering

K J Somaiya College of Engineering is a leading engineering college of Somaiya Vidyavihar University in Mumbai Since its establishment in 1983, it has been deeply committed to excellence in education and affordability for all students. It strives to provide an environment to master the fundamentals, create and apply knowledge, and also encourage students to discover a new solutions using multidisplinary approach, and thus preparing them to be dynamic and multifaceted engineers who are more equipped with required life skills to face various challenges and serve society. The college offers ten undergraduate, eight post graduate and six Ph.D programs in various disciplines and cutting-edge technology fields.

## About ISTE Teachers' Chapter KJSCE

KJSCE ISTE Teachers' Chapter, KJSCE MH103 established in 1997, at present has more than 140 life members. The chapter regularly conducts STTPs and workshops.

## About the Department

Department of Electronics and Telecommunication Engineering, KJSCE was established in 1996. At present department is running UG, PG and Ph.D. programs. The Department houses classrooms and laboratories with modern infrastructure to facilitate their learning. Department has well equipped laboratories with various licensed tools related to wireless, IoT and Embedded systems, Antennas, CISCO centre of excellence. The department has always been an active in conducting various workshops, seminars and Short Term Training Programs in the field of telecommunication and allied courses.

## Highlights

In this STTP, leading speakers from industry and academia will deliver expert talks on 5G and beyond wireless technologies. Hands-on workshop will be conducted on industry grade equipment and setup, thereby giving profound insights about concepts related to wireless domain.

## Course Objectives

Wireless communication has witnessed notable advancements in recent years, revolutionizing the way we interact, work, and access information. This short term training program will provide an overview of the vital developments in wireless technologies, their impact on society and the potential future trends.

It will further explore the evolution of wireless communication from its inception to the present day and will discuss the challenges and opportunities that lie ahead. The primary objectives of STTP are to:

- Acquaint the participants with basic principles of wireless communication.
- Introduce aspects of advanced wireless communication dealing with 5G and beyond systems.
- Extend theoretical concepts in practical domain through use of SDR, network emulator and related software.
- Explore the capabilities of these devices and tools for extensive academic activities and research work.

## Course Contents

1. Expert sessions
2. Demonstration and hands-on session- SDR, network emulator
   - Handoff
   - Carrier aggregation
   - Throughput
   - SA and NSA mode of 5G
3. Practice session- MATLAB/Simulink, network emulator, Network Simulator
   - MATLAB wireless app- 4G and 5G
   - Design of wireless system
   - Network design and analysis in NETSIM
4. Field Visit

### Chief Patrons

- **Shri Samir Somaiya**
  Chancellor, Somaiya Vidyavihar University

- **Hon Let Gen Jagbir Singh**
  Hon Secretary, Somaiya Vidyavihar

- **Prof. V. N. Rajashekharan Pillai**
  Vice Chancellor, Somaiya Vidyavihar University

- **Dr. Raghunath Shevgaonkar**
  Provost, Somaiya Vidyavihar and Somaiya Ayurvihar

- **Dr. N.R. Gilke**
  Registrar, Somaiya Vidyavihar University

### Patrons

- **Dr. Suresh Ukarande**
  Principal, K J Somaiya College of Engineering
  Dean Faculty of Engineering and Technology
  Somaiya Vidyavihar University

- **Dr. Deepak Sharma**
  Vice Principal & Professor
  K J Somaiya College of Engineering

### Eminent Speakers

- **Dr. Aditya Abhyankar-** Director School of Technology (Ex-Dean, Faculty of Technology) Savitribai Phule Pune University
- **Dr. Raghunath Shevgaonkar**
  Provost, Somaiya Vidyavihar and Somaiya Ayurvihar
- **Mr. Padghane P.N**
  Sub Divisional Engineer BSNL, Nanded
- **Dr. Megha Kolhekar**
  Associate Professor & Head, EXTC, FCRIT, Vashi
- **Mr. Satish Thakare**
  Chief Technology Officer (CTO), Scientech
- **Mr. Nikhil Sonavane**
  Education Technical Evangelist, MathWorks

### Convener

- **Dr. Bharati A. Singh**
  Head, Department of Electronics & Tele communication Engineering

### Course Coordinator(s)

- **Prof. Kartik R. Patel**
  Assistant Professor, Department of Electronics & Telecommunication Engineering

- **Dr. Ameya K. Naik**
  Professor, Department of Electronics & Telecommunication Engineering

### Course Co-coordinator(s)

- **Dr. Kiran V. Ajetrao**
  Assistant Professor, Department of Electronics & Telecommunication Engineering

- **Prof. Nitin S. Nagori**
  Assistant Professor, Department of Electronics & Telecommunication Engineering

### Course Schedule

- Date: **8$^{th}$ July to 12$^{th}$ July 2024**
- Timings: **10:00 am to 5:00 pm**

### Target Audience

This course is addressed to faculty members, research scholars, students and working professionals of electronics, electronics and communication and allied domains of engineering.

### Course Fees

- Rs. 4500/- per participants
- Rs. 1250/- per participants for students
  (Fees include course material, breakfast, lunch and tea).

### Important Dates:

- Last Date for Registration: **July 01, 2024**

### Important Links:

- **Payment link and procedure:** Click here

- **Google Registration Form:** Click here

- **Join WhatsApp group after registration:** Click here

**Note:**
- Certificates will be awarded to each participant after completion of graded activity and attending sessions.
- Participants having ISTE membership will be provided the separate certificate from ISTE.

### Contact Details
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