



**ISTE Approved**

One Week Short Term Training Program  
on

**GIS**  
**(Geographic Information System)**

**July 19-23, 2021**

Organized by



Department of Computer Engineering  
K. J. Somaiya College of Engineering  
Vidyavihar, Mumbai. 400 077  
(A Constituent College of Somaiya Vidyavihar  
University)

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## Somaiya Vidyavihar

Padmabhushan (Late) Shri K. J. Somaiya, an entrepreneur, philanthropist and visionary, established Somaiya Vidyavihar Trust in 1953. He had the vision and grit to achieve his dreams single-mindedly. He believed that education had to have its roots in strong values. Recognizing the need for imparting value-based education to today's youth, he founded Somaiya Vidyavihar (SVV). Somaiya Vidyavihar is a sprawling campus measuring over 65 acres and having more than 34 institutes with strength of 39,000+ students and 3000+ Faculty members & Staff.

## Somaiya Vidyavihar University

Established in 2019, Somaiya Vidyavihar University, Mumbai, is a self-financed university of Maharashtra recognized by the University Grants Commission (UGC). Somaiya Vidyavihar, with over six decades of rich experience in building and managing educational institutes of great repute, is the sponsoring body. Operational from 26th August 2019, Somaiya Vidyavihar University is a place where you can explore new possibilities, pursue your passion and above all, find yourself.

## About KJSCE

K J Somaiya College of Engineering is a constituent college of the prestigious Somaiya Vidyavihar University. It started in the year 1983. It offers 5 under graduate programmes, 6 postgraduate programmes and Ph.D. centres in Computer, IT, Electronics, Mechanical Engineering and Electronics & Telecommunication. The college has been awarded 'A' grade by the National Assessment and Accreditation

Council (NAAC) in the year 2017, valid for five years. With recommendations from the University Grant Commission (UGC) and the Government of Maharashtra the college has received Autonomous status since 2014. The NIRF (National Institute of Ranking Framework) Ranking of the Institute for the last two consecutive years i.e. 2020, 2019 are 171 and 182 respectively. The campus placement records of our institute are a matter of pride for the students as well as the faculty.

## About ISTE Teachers' Chapter

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 Computer Engineering, KJSCE was established in 1999. At present department is running UG, PG and Ph.D. programs. The Department houses classrooms and laboratories with modern infrastructure to facilitate their learning. The Teaching-Learning-Evaluation paradigm is a mix of traditional as well as active learning pedagogy and use of contemporary Information and communications technology (ICT) tools. The Department takes cumulative efforts to enhance learning by conducting various workshops, seminars and short term training programs.

## Highlights of the Program

Sessions will be conducted by Distinguished Speakers from GISE Lab & CTARA, IIT Bombay, Currently working on many ongoing real time projects based on GIS like "Right to Pee", "Community GIS", "Poshan Vatika", "Swach Worli Koliwada", "Diet Diversity", "Health GIS",

"Nutrition India", "Facility GIS", and many more. Some Sessions and Hands-on activities will also be taken by Faculty members of KJSCE.

## Course Objectives

The course focuses on Geographic Information Systems (GIS) and its applications. The participants will be exposed to Geographic Information Systems (GIS) with hands-on practice. Participants will be introduced to various techniques of map making (using GPS, georeference etc). GIS is a generic term implying the use of computers to create and display digital maps. It allows mapping, modelling, querying, analyzing and displaying large quantities of the various features presented in maps that may relate to physical, chemical, biological, environmental, social, economic or other earth surface properties. The hands-on sessions will empower participants to learn basics of GIS, data collection, explore issues, problem solving (in different sectors like: Health, Education, Waste Management, etc.), and evaluate situations in a geographic and spatial context. Participants will be exposed to various techniques of map making (using GPS, georeference etc). Ultimately the course is to motivate the faculty to utilize knowledge of GIS in their respective fields/ research and applications.

## Course Contents

1. Basics of GIS
2. Map making using GPS
3. Mapmaking using georeference
4. WebGIS- Geoserver basics, Demo of Geoserver, Geonode basics



5. Community GIS
6. Nutrition India
7. Application areas & New Ideas in GIS
8. Data collection to create Maps
9. Hands-on the topics:
  - POSTGIS
  - Database-Visualisation linkage,
  - Kobotoolbox
10. Significant implementation of Various applications like Queries on Mumbai Map, School Map, Census, Health GIS and many more.

### Eminent Speakers

- **Mr. Jitendra Shah** – Consultant (GISE Lab, IIT Bombay) and Consultant (CTARA, IIT Bombay).
- **Ms. Himanshi** - Data Analyst, CTARA, IIT Bombay
- **Mr. Animesh Nautiyal** - Project Research Assistant, TDSC-CSE-IIT Bombay
- **Ms. Shweta Panwar**, Data Analyst, CTARA, IIT Bombay
- **Ms. Monika**, Consultant, CTARA, IIT Bombay
- **Dr. Ujwala Bhangale**, Dept. of Information Technology, KJSCE
- **Prof. Nilkamal More**, Dept. of Information Technology, KJSCE
- **Dr. Archana Gupta**, Dept. of Computer Engineering, KJSCE
- **Prof. Shweta Dhawan Chachra**, Dept. of Computer Engineering, KJSCE

### Patrons

- **Mr. Samir Somaia**  
Chancellor, Somaia Vidyavihar University
- **Prof (Dr). V. N. Rajasekharan Pillai**  
Vice Chancellor, Somaia Vidyavihar University
- **Dr. Nandkumar Gilke**  
Registrar, Somaia Vidyavihar University

### College Advisory Committee

- **Dr. Shubha Pandit**  
Principal
- **Dr. Amey Naik**  
Vice Principal
- **Dr. Sonali Patil**  
Dean Academics

### Convener

- **Dr. Deepak Sharma**  
Head, Department of Computer Engineering

### Course Coordinator(s)

- **Dr. Archana Gupta**  
Associate Head, Department of Computer Engineering  
archana.gupta@somaia.edu  
(Cell No: - 7021687567, 7666966701)
- **Prof. Shweta Dhawan Chachra**  
Assistant Professor, Department of Computer Engineering  
shweta.chachra@somaia.edu  
(Cell No: - 8879002173)

### Organizing Committee

- **Prof. Grishma Sharma**  
Assistant Professor, Department of Computer Engineering
- **Prof. Ruchira Jadhav**  
Chairperson, ISTE Teachers' Chapter, KJSCE

### Course Schedule

**Duration:** July 19-23, 2021

**Timings:** From 10:30 a.m. – 3.30 p.m.

### Target Audience

This course is addressed to faculty members, research scholars, students and working professionals of any discipline of engineering.

### Course Fee

Fees for STTP is **Rs.500/-** per participant  
(Fees include course material).

### Important Dates

Last Date for Registration: **July 15, 2021**

Notification Date: **July 17, 2021**

### Important Links

#### Payment link:

The link for online payment is:

<https://kjscefees.com/DefaultMiscPayment.aspx>

Note: While making payment, Select STTP and add Remark "Computer Department STTP on GIS, 19 July 2021".

#### Registration Link:

The link to register for the STTP is:

<https://forms.gle/gzrYb3BFHAMQmyj58>