

## **L. D. College of Engineering Ahmedabad**

L.D. College of Engineering, Ahmedabad popularly known as L.D.C.E is Gujarat's premier engineering college situated at city's heart surrounded by elite organization Like PRL, ATIRA, ISRO, IIM and CEPT. Started in 1948 with an aim of imparting quality higher education in various fields of engineering, it has seen unprecedented growth. It is affiliated with Gujarat Technological University & administrated by Department of Technical Education, Government of Gujarat. Civil engineering is a professional engineering discipline which deals with the design, construction and maintenance of the physical and naturally built environment. It provides knowledge and skills to plan, analyse, design, estimate and execute projects using appropriate scientific, mathematical and engineering principles and concepts. The field is further broken into several sub-disciplines including water resources engineering, environmental pollution control, urban transportation planning, traffic engineering and pavement design, geotechnical engineering, advance structural mechanics.

### **OBJECTIVES OF THE STTP**

STTP's prime objective is to provide a common platform to all engineering researchers, post graduates, academicians, and field engineers to learn basics and detailed knowledge of optimization, Computing Techniques, Modeling & GIS to resolve engineering problems. It is a common knowledge gaining program to gain and increase the basic of research in Computing & GIS analysis in engineering in which experts will elaborate and explain the course content in details. Separate hands-on-practice-session on soft computing & GIS will be demonstrated and performed digitally.

### **PATRON**

Dr. R. K. Gajjar, Principal, LDCE Ahmedabad

### **CONVENER**

Dr. R. B. Khasiya, H.O.D. (Civil), L.D.C.E-A'bad.

### **FACULTY MENTOR**

Dr. R.K.Jain, Prof. (Civil), L.D.C.E-A'bad.

### **COORDINATOR**

Prof. Utkarsh Nigam, Asst. Prof., Civil Engineering Department, L.D.C.E. Ahmedabad

### **OTHER COORDINATORS**

Prof. A. M. Mirza, Asst. Prof., Civil Engineering Department, L.D.C.E. Ahmedabad

Prof. Sudhanshu Dixit, Asst. Prof., Civil Engineering Department, L.D.C.E. Ahmedabad

Prof. Jitisha Kamble, Asst. Prof., Civil Engineering Department, L.D.C.E. Ahmedabad

### **STTP ATTRACTION**

It is a common knowledge gaining program in which experts of Optimization, Soft Computing, Modeling & GIS from the eminent institutes such as IIT/NIT and Engineering and Technology institutes will elaborate and explain the course content in details. Hands-on-session on Optimization Techniques/software/ GIS will be carried out.

### **SPONSORSHIP**

The 5-Days (One Week) Online Short Term Training Program on “*Application of Optimization, Soft Computing, Modeling with GIS in Engineering and Technology*” sponsored by Gujarat Knowledge Society (GKS) approved by Directorate of Technical Education, Government of Gujarat.

### **HOST AND ORGANISOR**

Civil Engineering Department  
[NBA Accredited Department]

L. D. College of Engineering Ahmedabad



Directorate of Technical Education  
Education Department - Government of Gujarat



Gujarat Knowledge Society

Commissionerate of Technical Education

Government of Gujarat



L. D. College of Engineering,  
Ahmedabad, Gujarat, India

Organizing

5-Days (One Week) *Gujarat Knowledge Society Sponsored Online Short Term Training Program (STTP)*

on

*“Application of Optimization, Soft Computing, Modeling with GIS in Engineering and Technology”*

at

L.D. College of Engineering,  
Ahmedabad.

**7<sup>th</sup> to 11<sup>th</sup> March, 2022**

**Venue**

L. D. College of Engineering Ahmedabad

Website: [www.ldce.ac.in](http://www.ldce.ac.in)

## OUTLINE OF THE CONTENTS

- Objective and Description of various Optimization, Modern Computing Techniques, Modeling with GIS quantitative analysis. Identification of opportunities for researchers/Academicians/Professionals.
- Importance of Soft-computing tools in various engineering disciplines. The use of soft computing techniques in coherent communications phase synchronization provides an alternative to analytical or hard computing methods.
- AHP, is analytical hierarchy process, structural technique for organizing and analyzing complex decisions based on mathematics and psychology. It is based on choice, ranking, prioritization and quality management. TLBO (Teaching Learning Based Algorithm) will be demonstrated with research applications.
- Fuzzy Logic, Genetic Algorithm, ANN and other computing techniques will be Explained and demonstrated.
- Geographical Information System (GIS) and its practical Applications in Modeling and Optimization will be dealt in the STTP.
- Description and analysis of other Computing techniques such as Artificial neural network, Genetic algorithm and Hybrid Techniques.

## HOW TO APPLY

The applicants are required to register by filling the registration form and mail it on [civilevent@ldce.ac.in](mailto:civilevent@ldce.ac.in) on or before **25<sup>th</sup> February 2022**. Applicants have to send the scanned copy of the filled registration form with sign and seal of the parent institution/ Concerned Authority. Kindly register as early as possible. Also fill the Google Form compulsorily:

<https://forms.gle/f7YovK3gHHj5KGYz8>

Maximum seats is limited to 50 only and the Mode of all type of communication is digital only. The participants may contact Coordinators for any query/ problem. **GEC/ GP Faculties need to apply through TNA, DTE compulsorily.**

### Address for Correspondence:

**To, Civil Engineering Department,  
L. D. College of Engineering, Ahmedabad  
Opp Gujarat University, Navrangpura,  
Ahmedabad - 380015 GJ IN**

### **ONLINE COURSE REGISTRATION FEE:**

For Research scholars/ PG Students: NIL  
For Academicians & Field Researchers: NIL  
For Professionals & Field Experts: Rs. 100

### **DETAILS OF RESOURCE PERSONS**

**Prof. Utkarsh Nigam, Asst. Prof., LDCE**

Email ID: [utkarsh.gecj@gmail.com](mailto:utkarsh.gecj@gmail.com)

**Prof. Sudhanshu Dixit, Asst. Prof., LDCE**

Email ID: [sudhanshu.civil04@gmail.com](mailto:sudhanshu.civil04@gmail.com)

## REGISTRATION FORM

**Name:**

**Designation:**

**Branch:**

**Institute Name:**

**University:**

**Staff ID:**

**Mobile No.:**

**E-Mail ID:**

Date:

Signature of the Applicant

Sign and Seal of Head of the Institution

Verification and sign of STTP Coordinator