## 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 ptimizaion and Computing Techniques to resolve engineering and optimization problems. It is a common knowledge gaining program to gain and increase the basic of research methodology and quantitative analysis in engineering in which experts will elaborate and explain the course content in details. Separate hands-on-practice-session on soft computing techniques 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.

### STTP COORDINATORS

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

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

### STTP ATTRACTION

It is a common knowledge gaining program to gain and increase the basics and advanced level research in which experts of Optimization and Soft Computing Techniques from the eminent institutes such as IIT/NIT and other institutes from the field of fields of Engineering and Technology will elaborate and explain the course content in details. Separate hands-on-session on Optimization Techniques and Computing Techniques will be carried out.

# SPONSORSHIP

The 5-Days (One Week) Online Short Term Training Program on "Application of Optimization and Computing Techniques in Engineering" sponsored by Gujarat Knowledge Society (GKS) and Approved by Directorate of Technical Education (DTE), Government of Gujarat.

### HOST AND ORGANISOR

. Civil Engineering Department [NBA Accredited Department]

L. D. College of Engineering Ahmedabad Website: www.ldce.ac.in





# **Gujarat Knowledge Society**

Commissionerate of Technical Education Government of Guiarat



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

Organizing

5-Days (One Week) Gujarat Knowledge Society (GKS) Sponsored & DTE Approved Online Short Term Training Program (STTP) on

"Application of Optimization and Computing Techniques in Engineering"

at

L.D. College of Engineering, Ahmedabad.

# 18<sup>th</sup>-22<sup>nd</sup> January, 2021

# Venue

L. D. College of Engineering Ahmedabad

Website: www.ldce.ac.in

### OUTLINE OF THE CONTENTS

- Objective and Description of various
   Optimization and Modern Computing
   Techniques with quantitative analysis.
   Identification of opportunities for researchers/Academicians/Professionals.
- Importance of many Soft-computing tools in various engineering disciplines. AHP is analytical hierarchy process, structural technique for organizing and analyzing complex decisions based on mathematics and psychology.
- Fuzzy Logic is a form of many valued probabilistic logic in which truth values of variables may be any real number between 0 & 1. It is based on linguistic variables and fuzzy set theory in which fuzzification is done using if-then principles/rules. ANN & GA will be discussed.
- Description and analysis of other Computing techniques such as Artificial neural network, Genetic algorithm and Hybrid Techniques in the disciplines of Engineering

## DETAILS OF RESOURCE PERSONS

**Prof. Utkarsh Nigam, Asst. Prof., LDCE** - 7597832470

Email ID: utkarsh.gecj@gmail.com

Prof. Sudhanshu Dixit, Asst. Prof., LDCE

Email ID: sudhanshu.civil04@gmail.com

### HOW TO APPLY

The applicants are required to register by filling the registration form and mail it on <a href="mailto:civilevent@ldce.ac.in">civilevent@ldce.ac.in</a> on or before 10<sup>th</sup> January 2021. Applicants have to send the scanned copy of the filled registration form with sign and seal of the parent institution/ Concerned Authority. Also fill the Google Form compulsorily:

# https://forms.gle/F9YztJnfwUqOOweB7

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. ©EC/ GP Faculties need to apply through TNA, DTE.

### **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. 250

### BANK DETAILS [NEFT Only]

Payee Name: PRINCIPAL, L D College of

Engineering

Bank Name: State Bank of India, Gujarat

University, Ahmedabad

IFSC Code: SBIN0002651

Account number: 30769133013

Name:

Pruthviraj vala Mr

Water resource engi.
Branch:

Institute Name:

MEU BARODA
University:

Staff ID:

9512498092

<sup>E-Mail ID:</sup>praj∨04@gmail.com

Date:

18 jan 2021

p.n.vaSignature of the Applicant

Sign and Seal of HOD/ Head of the Institution

Verification and sign of STTP Coordinator