

One Week
2nd Short Term Training Programme
Online Mode

**Computational
Intelligence through
Multi Objective
Optimization Models
and Evolutionary
Algorithms
(CIMOOMEA)**

28th March to 1st April, 2026

Under
Centre for Continuing Education (CCE)

Organized By



**Department of
Mathematics**
S. V. National Institute
of Technology

Organizing Committee

- Patron**
- Prof. Anupam Shukla
Director, SVNIT, SURAT
- Coordinators**
- Dr. Jayesh M. Dhodiya
Associate Professor, DoM
 - Prof. V. H. Pradhan
Professor, DoM

Registration Fees

The registration fees for the program shall be

- Rs.1180/- for faculty from academic institutions, Staff and Research Scholars;
- Rs.590/- for Degree/P.G. Students/ Science/ Diploma.

The non-refundable registration fees should be paid online through the internet (NEFT).

Details for Online Transfer

Bank Account Name : DIRECTOR SVNIT CCE
SBI Account No. : 37030749143
Bank Name : State Bank of India
IFSC Code : SBIN0003320
Branch : SVRCET Branch
Branch Code : 003320
SWIFT Code : SBININBB260
IBAN No. : 37030749143
MICR No. : 395002012

QR Code

SCAN & PAY



Registration Form

Registration Link

QR Code



Last Date for Registration

- The last date for Registration is 26th March 2026.

Coordinators

- Dr. Jayesh M. Dhodiya
Associate Professor, DoM
- Prof. V. H. Pradhan
Professor, DoM

Address for Correspondence

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About Surat

Surat, situated on the banks of the holy river Tapti, is a top-ranking industrial yet green city of the country, with a network of flyovers and clean, wide roads. It is well known worldwide for the textile, Zari & Diamond industries. Several large-scale industries & establishments, such as RIL, L&T, ESSAR, etc., are located in and around Surat. It is situated on the main Western Railway route between Vadodara and Mumbai, at a distance of 129 km from Vadodara and 263 km from Mumbai. Further, daily flights connect Surat with New Delhi and Mumbai. The Institute is located at Ichchhanath on the Surat-Dumas road, about 10 km from Surat railway station and airport.

About SVNIT

The Institute, one of the pioneering engineering institutions of the country, was established in 1961 as Sardar Vallabhbhai Regional College of Engineering & Technology and was given the status of a National Institute of Technology in 2002. The Institute has been granted the status of '*Institute of National Importance*' w.e.f. Aug. 15, 2007. At present, there are six undergraduate courses, eighteen postgraduate courses, and three M.Sc. Five-Year Integrated Programmes in Mathematics, Physics and Chemistry and PhD programmes in all disciplines of engineering and sciences. It has an excellent placement record with several top-ranking companies visiting the campus.

About CCE

The Centre for Continuing Education (CCE) was established in February 2017 at SVNIT with the primary objective of imparting skill-developing training programs to faculty, research scholars, UG/PG students, and industry professionals through planning and organising workshops/ STTPs/ Expert talks on the concept of the Self-Sustainability approach as per MHRD Guidelines.

About the Department

The Department of Mathematics is actively engaged in both teaching and research. All sixteen faculties of the department hold a PhD degree. The Department offers a PhD. Program in Mathematics, B.Tech. in Mathematics and Computing and 5 years Integrated M.Sc. Programme in Mathematics. Faculty members have covered a vast area, such as Classical and Numerical Techniques in Fluid Dynamics, Fluid flow through Porous Media, Magnetic Fluid Dynamics, Special functions, Integral Transforms, Approximation theory, Mathematical and Computational Biology, Bioinformatics/ Biomathematics, Data mining, Finite element method, Operations Research, Statistics, Knowledge Mining and Mathematical Analysis. Over the years, the department has been organising several seminars, symposia, training programmes & conferences at the national and international levels. Research papers are being published in various National and International journals of repute. The department has completed several research projects funded by DST/DBT/UGC/CSIR/INSA/SGU. More than 110 research scholars have been conferred PhD degrees, and 18 scholars have been awarded M.Phil. degrees in Mathematics from this department.

About the Program

The study of computational intelligence is a new area of research which has gained popularity nowadays. It aims to investigate the possibility and capacity of computers and other machines to think, reason, and perform tasks in ways similar to humans. Computational intelligence is a subfield of artificial intelligence that focuses on developing algorithms and systems for multi-objective optimisation, mathematical models for information processing, and learning from that information to make necessary decisions. By merging these disciplines, we can create solutions that are both computationally faster and more precise than before.

It uses the fundamentals of statistics, engineering, mathematics, and computer science to build artificial systems capable of handling challenging problems. This field covers numerous techniques, such as Fuzzy theory and Fuzzy logic, Evolutionary algorithms, Nature-inspired algorithms, Neural Networks, and Uncertainty Theory. By using heuristics rather than conventional algorithms, soft computing techniques such as fuzzy logic will enable the construction of systems with capabilities akin to those of biological nerve systems.

Topics to be Covered

- Computational Intelligence for AI
- Multi-objective optimization Models
- Classical Techniques to solve Multi-Objective Optimization
 - Fuzzy Programming Technique
- Evolutionary Algorithms
 - Genetic algorithm
 - Hybrid Genetic Algorithm
 - Non-dominated Sorting Genetic algorithms
 - Jaya Algorithm
 - Quasi-oppositional Multi-Objective Jaya Algorithm
- Applications of Multi-Objective Optimization to generate computational Intelligence in Engineering and Industry

Eligibility for Participation

The training program is open to faculty members from engineering institutes (degree & diploma), Universities & Science colleges, and research scholars, PG Students (M. Tech. and M.Sc.). However, participants will be selected on a first-come, first-served basis.

The list of selected participants will be displayed on the institute's website on **26th March 2026**.