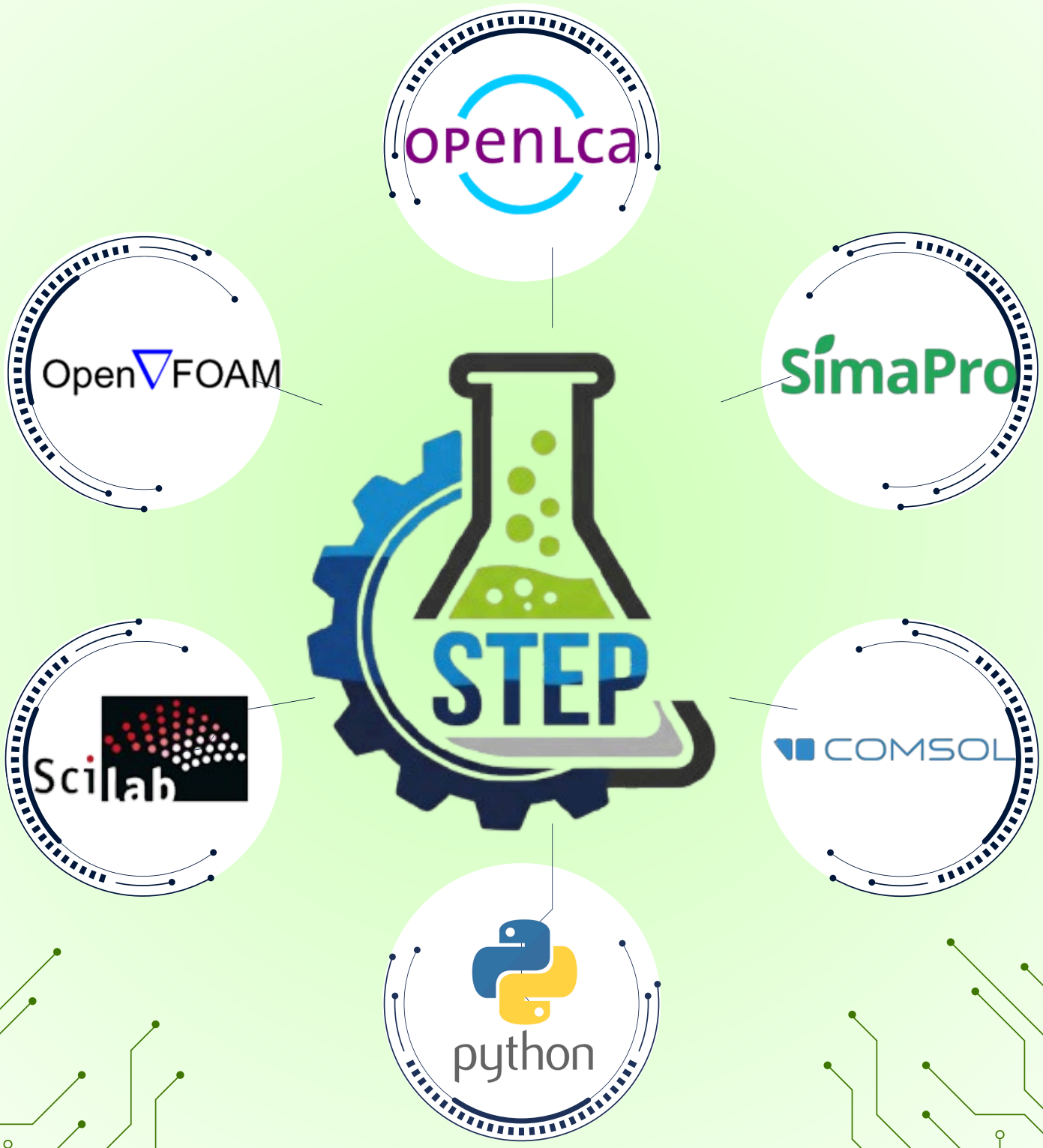
3RD EDITION OF THE HYBRID MODE
SHORT-TERM TRAINING PROGRAM (STTP) ON

SIMULATION TOOLS FOR ENGINEERING PROBLEMS (STEP-3.0)



DATES: 1-5 NOVEMBER 2025

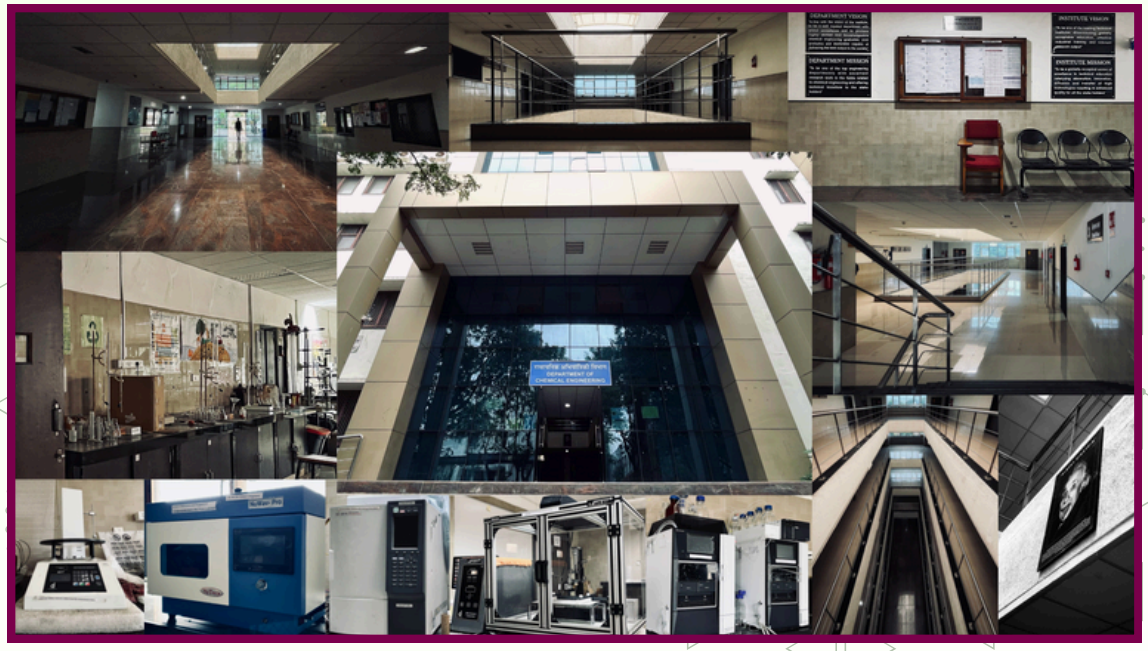
ABOUT INSTITUTE

Sardar Vallabhbhai National Institute of Technology, Surat was established in 1961 as one of the RECs for imparting technical education in Civil, Mechanical and Electrical Engineering. In the year 1983-84 the Under Graduate programs in Electronics Engineering were introduced and in the year 1988- 89 the UG programs in Computer Engineering and Production Engineering was started. In the year 1995-96, UG programme in Chemical Engineering was introduced. In exercise of the powers conferred by section 3 of the University Grants Commission (UGC) Act, 1956, the Central Government on the advice of the University Grants Commission, has declared the Sardar Vallabhbhai Regional College of Engineering & Technology (SVREC), Surat to Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat with status of "Deemed University" with effect from 4th December 2002. The Institute has been granted the status of 'Institute of National Importance'.

w.e.f. Aug. 15, 2007

ABOUT DEPARTMENT

Established in 1995, the Department of Chemical Engineering, SVNIT, Surat offers programs leading to Bachelor's, Master's and Ph.D. Degree in Chemical Engineering. The department is proud to have a strong faculty- student relation. The department has built a comprehensive research infrastructure with some topnotch facilities for carrying cutting- edge research. The department strives to provide conducive environment for creative and dynamic research work. The faculty members are granted several R&D projects from organizations like DST, SERB, GUJCOST, CSIR, etc. and have high quality research publications and patents. The department actively conducts faculty development programs, short term training programs and workshops for engineering faculty and industry personnel. Currently, the Department has 18 faculty members with expertise in various domains of chemical engineering having focus on sustainable and greener approach in the field of chemical engineering.



ABOUT S.T.E.P. – 3.0

AIM OF STEP

The aim of STEP 2025 is to provide a forum for academicians, engineers, scientists and practitioners from all around the world to study and have hands on practice of sophisticated instruments used for the environmental remediation and other allied areas. This short-term training program will also provide opportunities for the delegates to establish business and research relations, and to find partners for future collaboration.

PROGRAM OUTCOMES

By the end of this training, participants will:

- Gain working knowledge of various simulation tools
- Be able to model, simulate, and analyze real-world systems
- Enhance their employability and research potential

DATES

Last Date of Application Submission:	15 Oct. 2025
STTP Dates:	**1-5 Nov. 2025**

PROGRAM SCHEDULE

DAY-1: PROGRAMMING ESSENTIALS FOR SIMULATION

Introduction to Python for Scientific Computing

- Numpy, Scipy, Matplotlib
- Hands-on simulations (ODEs, PDEs)

SCILAB Essentials

- Matrix operations, symbolic math

DAY-2: SIMULATION IN ENGINEERING DESIGN

CFD Simulations

- Structural & thermal analysis
- CFD simulations: Flow and heat transfer

COMSOL Multiphysics

- Coupled physics problems

DAY-3: SUSTAINABILITY & ENVIRONMENTAL MODELING

Life Cycle Assessment (LCA) Tools

- OpenLCA, SIMAPRO, GaBi
- Environmental impact modelling and database handling

DAY-4: ADVANCED VISUALIZATION & CASE STUDIES

- Integrating simulation tools for realworld engineering problems
- Visualization, validation, and optimization

DAY-5: CAPSTONE PROJECT & TOOL INTEGRATION

- Mini-project using at least two simulation platforms
- Report preparation and presentation

REGISTRATION FEES

	ONLINE	OFFLINE
Practicing Engineers/Professionals	Rs 1,770/-	Rs 2,124/-
Academicians/Scientists/ Researchers	Rs 1,180/-	Rs 1,770/-
Students (UG/PG)	Rs 590/-	Rs 885/-
PhD Students/JRF/SRF	Rs 1,180/-	Rs 1,770/-

- The above fees include all instructional materials, free internet facility, working lunch, tea and snacks.
- The course fee is inclusive of 18% GST as per institute norm.
- The participants may avail single bedded shared accommodation, if requested in advance, on an additional Payment basis.

HOW TO APPLY

Interested candidates need to pay the registration fees by NEFT/IMPS/UPI to the following bank details/QR code

Account Number: 37030749143

IFSC Code: SBIN0003320

NAME: Director, SVNIT

For confirmation of registration, fill out the following Google form: https://forms.gle/VRG6o8zxNFyxbqfJ9

SCAN TO PAY!

PATRON

Prof (DR). ANUPAM SHUKLA

DIRECTOR, SVNIT,
Surat-395 007

ORGANIZING TEAM

CONVENERS

DR. MOUSUMI CHAKRABORTY
PROFESSOR,
DEPT. OF CHEM ENGG,
SVNIT, Surat-395 007

DR. ARVIND KUMAR MUNGRAY
PROFESSOR,
DEPT. OF CHEM ENGG,
SVNIT, Surat-395 007

COURSE COORDINATORS

DR. V.N. LAD
PROFESSOR,
DEPT. OF CHEM ENGG, SVNIT,
SURAT-395 007

DR. ALKA MUNGRAY
PROFESSOR,
DEPT. OF CHEM ENGG, SVNIT,
SURAT-395 007

DR. JOGENDER SINGH
ASSISTANT PROFESSOR, DEPT. OF CHEM ENGG,
SVNIT, SURAT-395 007

DR. PARAG THAKUR
ASSISTANT PROFESSOR, DEPT. OF CHEM ENGG, SVNIT,
SURAT-395 007

CONTACT US

FACULTY COORDINATORS

- Dr. Jogender Singh, Asst. Professor
  (jogendersingh@ched.svnit.ac.in)
  Ph. No. : 8287505262

- Dr. Parag Thakur, Asst. Professor
  (paragthakur@ched.svnit.ac.in)
  Ph. No. : 8999254795

STUDENT COORDINATORS

- Zoher Mohammadi Nalawala
  Ph. No. 9499754676
- Shiv Pratap Gupta
  Ph. No. 9462287503
- Moiz Khojema Ratlamwala
  Ph. No. 7016327127
- Abhinav S Chaudhary
  Ph. No. 6352834072