

**Online short-term course  
(e-STC)**

**“Future Prospects in Chemical  
Engineering: AI/ML, Microfluidics,  
Bioprocess Engineering and Green  
Technology”  
(FPCE-2024)**

**1<sup>st</sup> – 5<sup>th</sup> April, 2024**

**REGISTRATION DETAILS**

**Online Registration Link:**

<https://forms.gle/4pQJ8bn197oSDMvw6>

**Fees Payment Procedure:**

Open SBI Collect

(<https://www.onlinesbi.sbi/sbicollect/icollecthome.htm>)

Under Select Category - Click on Educational Institutions - Filter by state (Himachal Pradesh) Educational Institutions (NIT Hamirpur) - Payment Category (Workshop/STC/FDP/Conference)

**Address for Correspondence:**

**Dr. Radhe Shyam**

Assistant Professor

Department of Chemical Engineering

National Institute of Technology Hamirpur

Hamirpur, Himachal Pradesh – 177 005, India

Email: [rshyam@nith.ac.in](mailto:rshyam@nith.ac.in)

Mob: +916307494507

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**Prof. H. M. Suryawanshi**  
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**National Institute of Technology  
Hamirpur**



**Organized by**

**Department of Chemical Engineering,  
National Institute of Technology Hamirpur**

Hamirpur, Himachal Pradesh – 177 005, India

Phone: +91-1972-254880

[www.nith.ac.in](http://www.nith.ac.in)

### About the Institute

National Institute of Technology Hamirpur is one of the thirty one NITs of the country, established in 1986 as Regional Engineering College, as a joint and cooperative enterprise of the Govt. of India and Govt. of Himachal Pradesh. The goals of the institute as embodied in the logo are truly remarkable in their scope of vision. The college provides Undergraduate, Postgraduate and Doctorate Education in Engineering, Sciences & Humanities; fostering the spirit of national integration among the students, a close interaction with industry and a strong emphasis on research, both basic and applied.

### About Department

The department of Chemical Engineering was established in the year 2013, with a mission to impart high quality engineering education and to mould the students to meet the ever growing demand of technical manpower in the area of Chemical Engineering. The department offers four years B. Tech and two year M. Tech Programme in Chemical Engineering with a total intake of 75 students. The admission to the B. Tech. program is based through the JEE (Joint Entrance Examination) main score. The department has a strong core curriculum complemented by electives in the important emerging areas of Chemical Engineering. The department comprises of eleven different laboratories for the undergraduates catering to the needs of the curriculum. In addition, analytical instruments, computer facilities and research laboratories for the postgraduates and doctoral resources are already in place. All the faculties are highly qualified and well dedicated to teaching and research in various fields of chemical engineering as well as in different interdisciplinary areas of engineering.

### Objectives and Scope

The e-STC will be an opportunity to explore the contemporary technological advancement in Chemical Engineering. It will assist the participants to achieve the information related to the future research prospects in chemical engineering and its evolution in experiment and simulation research arena. This short-term course is designed to train participants on assessing the industrial and research challenges in the area of environmental, energy and medical diagnostics. The participants will get the exposure of advanced simulation and experimental techniques like soft-lithography, device fabrication, Microscopic image analysis, and applied machine learning.

The objective of this e-STC is designed such that it should be able to lighten the undergraduate, graduate, research scholars, faculty and industrial participants about the latest developments and research aspects in the field of simulation and process technology.

### Resource Persons/Speakers

Faculties/Experts from IITs, NITs, IIITs and other premier Institutions/Organizations will deliver the lectures.

### Targeted Participants

Faculty from engineering institutes, universities, research scholars, UG/PG students, and other educational institutes and employees of the industries.

### Number of Participants

Number of participants is limited for this STC. Application will be accepted on *first-cum-first serve basis*.

### Topics to be Covered

- AI/ML in chemical processes
- Fluid in microscale
- Point of care diagnostics
- Lab-on-chip
- Bioreactor
- Circular economy
- Life cycle assessment
- Microbial fuel cell
- Fermentation technology for biofuel production
- Novel techniques in Bio-separation

### Registration Fee Details

Participants	Amount (Rs.)
Participants from Academia/ R&D Labs	500
Students	200
Participants from Industries	500
Delegates from NIT Hamirpur	NIL

Registration is compulsory for all the delegates. Maximum limit of participants is 50. Participants should have 100% attendance.

### Certificate

e -certificate will be issued to the participants after successful submitting the feedback form on completion of the online short-term course.

### How to apply

Application in the prescribed format, must reach the coordinators on or before **25<sup>th</sup> March, 2024** to the address of correspondence. Also you can register online on the link <https://forms.gle/4pQJ8bn197oSDMvw6>

### Fees Payment

Through SBI Collect