

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

**“Advanced Computational
Methodologies in Industrial
Applications”
(ACMIA-2024)**

17th – 21st January, 2024

REGISTRATION FORM

Name:

Designation:

Organization:

Qualification:

Field of specialization:

Correspondence Address:

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Tel. (O/R)

(M)

E-Mail:

**Date
Place**

Signature of candidate

**Signature & Name of Supervisor/HoD/
Principal/Director along with the
Institute seal.....**

Chief Patron

Prof. H. M. Suryawanshi
Director

Patron

Dr. Anoop Kumar
Dean (FW) NIT Hamirpur

Chairman

Dr. Alok Garg
HoD, DoCHE

Convener

Dr. Arvind K Gautam, DoCHE

Co-ordinator(s)

Dr. Manish Kumar Dhiman, DoCHE

Treasurer

Dr. Manish Kumar Dhiman

Organizing Committee

All faculty members of DoCHE

Address for Correspondence:

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Online short-term course (e-STC)

**“Advanced Computational
Methodologies in Industrial
Applications”
(ACMIA-2024)**

17th – 21st January, 2024

An Initiative of

**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

About the Institute

National Institute of Technology Hamirpur, HP

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 Programme in Chemical Engineering with a total intake of 60 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

Over the past few decades, owing to a phenomenal rise in processing power, a plethora of new simulation methods have emerged to investigate various aspects of science and engineering in a variety of interdisciplinary areas like nanotechnology, energy and environment. Hence, in modern-day chemical engineering, the complete understanding of a given problem needs a thorough analysis at various length and associated time scales. The course is designed to provide a comprehensive exposure to the computational techniques, covering all ranges of length and time scales, employed in various fields of Industrial research within chemical and allied engineering branches. The short term course will be designed to expose the participants to the fundamentals as well as the relevant software packages. The short term course will be designed to expose the participants to the fundamentals as well as the relevant software packages. These tools will include state-of-the-art packages like ASPEN PLUS, ANSYS FLUENT, OPENFOAM, UNISIM, MATLAB, DoE CHEMCAD, PRO/II, LAMMPS, GAUSSIAN, or COMSOL.

Persons/Speakers

Faculties/Experts from Industry, IITs, NITs, 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 e-STC. Application will be accepted on *first-cum-first serve basis*.

Topics to be Covered

- Computational Fluid Dynamics
- Dissipative Particular Dynamics
- Granular Physics
- Molecular Dynamics
- Density Functional theory
- Process Modelling and Dynamics
- Waste valorisation
- CO₂ Sequestration
- Green Hydrogen
- Gas Explosion Modelling

Registration Fee Details

Participants	Amount (Rs.)
Internal Participants(UG/PG/PhD/Faculty)	Nil
External Students	200
External Participants from Academia/R&D Labs	500
External Participants from Industries	1000

Registration is compulsory for all the delegates.. Maximum limit of participants is 100.

Certificate

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

How to apply

Application in the prescribed format, must reach to the coordinators on or before **15th Jan, 2024**.

Registration Link:

https://docs.google.com/forms/d/e/1FAIpQLSdAlzg9Mbc_n0dq2wwfYB00dVrcygtgb7QOq36YVDV2FLzk9Dg/viewform