One Week Hybrid Short Term Training Program (STTP) on Advances in Deep Learning and High Performance Computing (DL-HPC 2026)

21-25 July, 2026

Organized by the Department of

Computer Science and Engineering

S.V. NATIONAL INSTITUTE OF TECHNOLOGY Surat Gujarat, India– 395007

(An autonomous Institute under the aegis of the Ministry of Education, Govt. of India)
website: http://www.svnit.ac.in

Introduction

Deep learning and high performance computing have witnessed remarkable advancements in recent years, transforming industries and shaping the future of technology. Advances such as CNNs, autoencoders, and generative models, enabled accurate data analysis and human-like interactions in applications ranging from healthcare to autonomous vehicles. High performance computing powered by CUDA and OpenMP enhanced the capabilities of computing hardware for solving large-scale real-world problems. General purpose graphics processing units (GPGPUs) are well developed to provide accelerated computing for solving various AI related tasks.

Many computational problems can be solved in real time by exploiting the power of GPUs and multiple processing cores inside a processor chip. This short term training programme helps participants to enrich their knowledge for solving problems related to diverse computational fields using deep learning and high performance computing.

Course Contents

The program is focused on discussing various aspects of deep learning and high performance computing. The following are the topics to be covered in this program:

- Deep Learning
- Generative Adversarial Networks
- Graph Neural Networks
- Transformer and LLM
- Explainable Artificial Intelligence
- Introduction to HPC
- Parallel Programming using OpenMp
- Parallel Programming using CUDA
- Real World Applications of OpenMP and CUDA
- **Hands-on: Python/Pytorch/Keras for Deep Learning**
- **Hands-on: GCC, OpenMP, and CUDA for HPC**

Resource Persons

Eminent academicians from IITs, NITs, IIIT's and Industry experts will deliver the sessions with practical demonstrations.

Eligibility

Students/faculty members from academic institutes and universities, research scholars/UG, PG students, and industry personnel working in the concerned /allied discipline.

Seats are limited to 70 participants. Selection will be based on eligibility and a first-come, first-served basis. Certificates will be awarded to the participant who attends 75% of the sessions and successfully completes them.

Important Dates

Last date for Registration: 15 July 2026

List of Eligible Candidates: 17 July 2026

STTP Dates : 21-25 July, 2026

About SVNIT Surat

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 National Institute of Technology in 2002. At present, there are 11 undergraduate courses, seventeen postgraduate courses, and Ph.D. programs in all disciplines of engineering and applied sciences. It has an excellent placement record, and many top-ranking companies visit the campus.

About Computer Science and Engineering

The department is running the UG program B.Tech. Computer Engineering since 1989 and M.Tech. Computer Engineering since 2006. The department has also offered Ph.D. programs since 2005. The department has well-qualified and dedicated faculty members with specializations in niche areas like AI, motion analysis, Robotics, computer vision, information security, cloud computing, image processing, data mining, wireless sensor networks, etc.

Patron

Prof. Anupam Shukla
Director, SVNIT Surat

Convener

Dr. Sankita J. Patel
HoD CSE, SVNIT, Surat

Program Coordinator

Dr. Anugrah Jain,
Assistant Professor, CSE
M: 9461030669, ajain@coed.svnit.ac.in

Dr. Abhilasha Chaudhuri,
Assistant Professor, CSE
M: 9752691565, abhilasha@coed.svnit.ac.in

Dr. Naveen Kumar,
Assistant Professor, CSE
M:7275473622
naveenkumar@coed.svnit.ac.in

Registration Fee Registration

Participants Category	Registration Fee
Students: UG/PG/Ph.D	590 ₹
Academicians/Researchers	1180 ₹
Industry Person/Engineers	2360 ₹

Registration Information

Participants are requested to complete the registration process using the QR link provided. Please upload the necessary documents after paying the registration fee.

https://forms.gle/d3oJSwnZqUeLVEWd7

The non-refundable registration fee should be paid online through net banking to

"Director, SVNIT-CCE"
A/c No.: 37030749143,
State Bank of India, SVRCET Branch, SVNIT Campus, Ichchhanath, Surat,
IFSC: SBIN0003320

While paying through net banking, the purpose should be written in the remarks as "DL-HPC 2026 Registration Fee". (Kindly save the receipt or take a screenshot of the payment).

ACCOMMODATION/TRAVEL

Efforts will be made to provide accommodation for participants, subject to availability, on a chargeable basis at the SVNIT Guest House.