WHO CAN PARTICIPATE

This short-term course is specifically designed for UG/PG/PhD students, researchers, faculties, and technical staff from the branches of engineering/ Science who are interested in the field of biomedical signal processing, machine learning, artificial intelligence, healthcare and data analytics, data science, and predictive technologies.

REGISTRATION

Name:_____
Designation:_____
Institute:_____
Address:_____

_____

_____

Email ID: _____
Contact No:_____
Undertaking:
I shall abide by rules and regulations and shall attend course. Failing which certificate may not be issued.

_____
Signature of Participant

CONTACT

Dr. Mohan Bansal and Dr. Ramesh Saha
Assistant Professor
Indian Institute of Information Technology Sonepat
bmohan@iiitsonepat.ac.in; rameshs@iiitsonepat.ac.in

Dr. Om Jee Pandey
Assistant Professor
Department of Electronics Engineering
Indian Institute of Technology (BHU), Varanasi
Email: omjee.ece@iitbhu.ac.in

ABOUT NM-ICPS

The National Mission on Cyber-Physical Systems (NM-ICPS) is identified as one such emerging field to have a significant impact on health care, urban transportation, water distribution, energy, urban air quality, manufacturing and governance. The activities envisioned under this Mission will give an impetus to Indian manufacturing via the invention of new products, services and the creation of skilled young human resource from technicians to, researchers and entrepreneurs. It will have modernisation and digitalisation of socio-technical systems and services.

ABOUT I-DAPT

The Interdisciplinary Data Analytics and Predictive Technologies (I-DAPT) has been regarded as one of the most prominent fields whose progress will add significant impact on various socio-economic issues. At IIT (BHU) the verticals 1) Telecommunications, 2) Power, 3) Road Transport and Highways, 4) Defense Research and Development, 5) Health and Family Welfare and 6) Other Areas such as Energy, Environment and Agri-Tech have been identified under IDAPT. The endeavour shall catalyse the creation of skilled young engineers, researchers, technicians, and entrepreneurs, together with human resource at all levels, besides becoming a key contributor to realizing the vision of "Digital India", "Innovate in India", and "Make in India".

Health & Family Welfare Research & Development in I-DAPT

Health & Family Welfare Research & Development in IDAPT aims at providing technology development support in the area of healthcare systems such as (i) Screening or Diagnosis, (ii) Therapy or Treatment, while other collateral aspects are modalities that enable the following attainments: (iii) Disease Prevention, (iv) Rehabilitation, and (v) Health Promotion etc. To achieve these goals, this program will give participants with a platform to learn about the next generation healthcare technologies.

.

Short Term Course on

AI-Enabled Healthcare Analytics and Explainable Predictive Technologies for Digital Health Applications

A TECHNOLOGY INNOVATION HUB
ON
INTERDISCIPLINARY DATA ANALYTICS AND PREDICTIVE TECHNOLOGY (IDAPT)
Under
NATIONAL MISSION ON INTERDICIPLINARY CYBER PHYSICAL SYSTEM (NM-ICPS)

December 21-25, 2026

Coordinators

Dr. Mohan Bansal, IIIT Sonepat
Dr. Ramesh Saha, IIIT Sonepat
Dr. Om Jee Pandey, IIT-BHU

ABOUT INSTITUTE



The Indian Institute of Technology (Banaras Hindu University) owes its existence to Mahamana Pandit Madan Mohan Malviya, Bharat Ratna-the founder of the first residential university of modern India, the Banaras Hindu University. The three of the erstwhile engineering colleges of BHU, namely BENCO, MINMET and TECHNO, were merged to form the Institute of Technology (IT-BHU) in 1968 to provide an integrated educational base. The IT-BHU has been admitting students through the JEE conducted by the IIT's since 1972, and has been consistently ranked amongst the top few engineering institutions of the country. IT-BHU became IIT (BHU) in June 29, 2012 by an Act of Parliament. The Institute has maintained high academic standard since its inception. It has turned out luminary engineers and administrators who served the nation with great distinction.



Indian Institute of Information Technology Sonepat (IIIT Sonepat) was established in 2014 by the Ministry of Education (MoE), Government of India, in collaboration with the Government of Haryana and industry partners: Haryana State Industrial and Infrastructure Development Corporation (HSIIDC) and the Haryana State Electronics Development Corporation Limited (HARTRON). The Institute was mentored by the National Institute of Technology (NIT) Kurukshetra, one of India's premier technical institutions. IIIT Sonepat is envisioned as a hub of academic excellence and research in Information Technology, with a focus on producing industry-ready graduates and contributing to cutting-edge research in leading areas.

EMINENT SPEAKERS

Prof. Ram Bilas Pachori, IIT Indore

- **Prof. Rajesh M Hegde, IIT Kanpur**
- **Prof. Bikesh Kumar Singh, NIT Raipur**
- **Dr. Sheffali Gulati, AIIMS Delhi**
- **Dr. Anuj Sharma, NIT Delhi**
- **Dr. Lalan Kumar, IIT Delhi**
- **Dr. Sandeep Kumar, IIT Delhi**
- **Dr. Varun Bajaj, MANIT Bhopal**
- **Dr. Varun Gupta, NIT Sikkim**
- **Dr. Om Jee Pandey, IIT-BHU, Varanasi**
- **Dr. Ramesh Saha, IIIT Sonepat**
- **Dr. Mohan Bansal, IIIT Sonepat**

- COURSE CONTENTS (Tentative)

Artificial Intelligence (AI), biomedical signal processing, and digital health technologies are transforming modern healthcare through intelligent disease prediction, remote patient monitoring, and clinical decision support. This STC aims to provide participants with an understanding of AI-enabled healthcare analytics, explainable AI, and digital health technologies for developing next-generation healthcare solutions.

This STC will cover:

- **Overview of Biomedical Signals and Healthcare**
- **Biomedical Signal Processing and Feature Extraction**
- **Machine Learning for Healthcare Applications**
- **Deep Learning for Biomedical Data Analysis**
- **XAI and Trustworthy Healthcare Systems**
- **Multimodal Healthcare Data Fusion**
- **IoT and Cyber-Physical Systems for Healthcare**
- **Hands-on Machine Learning and Deep Learning using Python**
- **Emerging Trends in Digital Health and Personalized Healthcare**

REGISTRATION DETAILS

Registration Link:
https://www.idapthub.org/applications/stc

Last Date of Registration: October 20, 2023

Registration Fees (Including 18% GST)

Participation	Online	Offline
For UG, PG and PhD students:	Rs. 750	Rs. 1,500
Staff (Technical, Administrative and Others	Rs. 1,500	Rs. 3,000
For faculties, scientists and Post-doctoral Fellow	Rs. 2,000	Rs. 4,000
Industry Participants	Rs. 3,500	Rs. 7,000
International Participants	USD 100	NA

NOTE **Registration fees will be Non-Refundable**

Payment Mode:

Branch: SBI, IT(BHU), Varanasi
IFSC: SBIN0011445
Name: I-DAPT-HUB-FOUNDATION
Account No: 40298890505

Course Mode:
Both online and offline

In case of any difficulty, you can contact us at

bmohan@iiitsonepat.ac.in,
rameshs@iiitsonepat.ac.in
omjee.ece@iitbhu.ac.in