

**TEQIP-III sponsored
Online
Short Term Training Program
on
"Intelligent Systems and Networks"
(ISN-2020)
(Under Twinning Program)**

(31 Aug – 04 Sep 2020)



**ORGANIZED JOINTLY
BY:**

**Dept. of Electronics & Communication
Engineering,**

SLIET, LONGOWAL

(CFTI under MHRD, Govt. of India)

&

Dept. of Electronics Engineering

NIT, UTTARAKHAND

<http://www.sliet.ac.in>

<http://nituk.ac.in>

About SLIET

Sant Longowal Institute of Engineering & Technology is a Deemed-to-be-University, established by MHRD, Government of India, and controlled by SLIET Society. This Institute has a beautiful sprawling green area of 451 acres, with many topographically featured picturesque landscape and presents a spectacle of harmony and natural beauty. The study programs include various courses at Integrated Certificate and Diploma, Degree, M. Tech. & Ph. D. levels in 11 departments of Engineering and Science. It caters to the technical human resources requirements at various levels in Industries/Institutions by imparting professional education with an emphasis on industrial training and entrepreneurship development.

About NIT, Uttarakhand

National Institute of Technology, Uttarakhand (NITUK), is one of the 31 National Institutes of Technologies in the country. Since its inception, this Institute has grown many folds and has established itself as one of the best Technical Educational Institutes. NITUK is established in 2009 under the Act of Parliament by the Ministry of Human Resource Development.

NITUK has made very rapid growth in the recent past in terms of starting new academic programs, revision of academic curriculum, development of laboratories, and infrastructure. The under-graduate programs have been made credits based, and many electives are offered to the students. At present, NITUK has a faculty strength of 51.

The Department

The Department of ECE at SLIET, Longowal offers Integrated Certificate & Diploma (ICD) Programme, Undergraduate (B. Tech.) and Postgraduate (M.Tech.) courses as well as Ph.D. Programme in the discipline of Electronics & Communication Engineering. The ECE department has highly qualified faculty, and the same is actively involved in quality teaching and research. Several research projects sponsored by different external agencies are also being undertaken vigorously by the department.

About the Course

Intelligent Systems and Networks are indispensably crucial to the development of state-of-the-art systems and information technology-based society. Smart systems are technologically advanced machines that perceive and respond to the world around them. Intelligent systems can take many forms, such as facial recognition programs, personalized shopping suggestions, etc. These are the subjects of intensive study in the domain of Intelligent Systems and Networks. The field of intelligent systems also focuses on how these systems interact with human users in changing the dynamics of physical and social environments. This course emphasizes building smart systems, including computers, networks, and robots that can plan and act in complex, fast-changing situations and how the Internet can better respond to the Quality of Service requirements of its users. Smart systems can also help us to understand biological

intelligence better.

As networks and computers become ever more pervasive in commerce, industry, and the home, they constitute some of the most critical lines of inquiry open to contemporary academia that are being addressed by cutting edge research in this domain by teams of scientists and engineers across the globe.

Course Objectives

- To provide broad exposure to the participants about the various aspects of Intelligent Systems and Networks.
- To enrich the knowledge of participants by exposing them to the latest trends in Intelligent Systems and Networks for developing applications in their respective fields of teaching and research.
- To equip the participants with skills & knowledge of state-of-the-art intelligent systems to improve the teaching, learning process, and arouse interest in the field.
- To provide interaction with experts, which will help the participants to initiate their research in a new area of Intelligent Systems & Networks.
- Offer a platform to share and discuss the research ideas to stimulate scientific insight.

Target Audience

This STTP is open for participants from Industries, PSUs, and Academic Institutions, Faculty members, Ph.D. Research Scholars and Undergraduate, Post-graduate students. The number of participants for the course is limited to **50** participants on a first-come, first-serve basis.

Topics

The broad topics to be covered in the short-term training program are:

- Introduction to Intelligent Systems
- Application of IoT in smart systems
- Computer vision for smart systems
- Virtual Instrumentation
- Wearable Electronics
- Deep Learning-based Image Processing.
- System for biomedical application
- Remote Sensing Applications
- Face recognition systems
- Network Security & Big Data Analytics
- Image and Video-Based Gesture Analysis.
- Major challenges and opportunities in IoT
- Physical sensors for smart systems
- intelligent sensor network

Resource Persons

Experienced faculty members from the reputed educational institutions/industry experts shall be covering the topics by delivering expert talks.

Registration

The registration will be done online using the following link. The link is also available at <http://sliet.ac.in/> <http://nituk.ac.in/>

Link for Registration: (or scan the QR code)

<https://forms.gle/SCnEe97z8bFir1PbA>

Time: 10:30 AM onwards (daily)

Last date of Registration: August 30, 2020. Registration will be restricted to the first 50 participants. The intimation to eligible participants shall be sent by August 30, 2020. No registration fees for students, faculty, researchers from TEQIP institutes. Rs. 200/- from students, faculty, research scholars from non-TEQIP institutes, and Rs. 500/- from industry people. For online-payment, the



bank account details are as follows: -

A/C Name: - National Institute of Technology Uttarakhand

Bank Name: - SBI, Srinagar-Garhwal

Account No: - 37843015175

IFSC Code: - SBIN0003181

Organizing Committee

Chief Patron(s):

Prof. Shailendra Jain, Director, SLIET
Prof. Shyam Lal Soni, Director, NIT UK

Patron

Prof. A. S. Arora, Dean (Academics), SLIET

Co- Patron:

Prof. Surinder Singh, HOD (ECE), SLIET

Conveners:

Dr. A. P. Singh Pharwaha, Professor, SLIET

Dr. Tajinder Singh Arora, Assistant Professor, NIT UK

Coordinators:

Er. Vivek Harshey, Assistant Professor, SLIET

Dr. Sarika Pal, Assistant Professor, NIT UK

Mode of Conduction

The training program will be conducted online on a suitable platform. All the sessions will be held online. Every participant who will attend all the meetings will be issued e-certificates post successful verification of their attendance. Soft copy of study material, training PPT's will be shared with all the participants.

Address for Communication

Dr. A. P. Singh Pharwaha, Convener (ISN-2020)

Er. Vivek Harshey, Coordinator (ISN-2020)

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