

IMPORTANCE AND SCOPE

The Communication engineering is one of the core topics in today's world where there is a scope for enormous research. It is required in most of our day-to-day operations such as the technology of mobile and optical communication. This short-term course (STC) invites some expert talks by distinguished faculties from IITs and other reputed institutes about the state-of-the-art and emerging trends in the field of OFDM, CDMA and photonic devices. The basics and application of the buzz area of photonic devices will be imparted to the participants. There will be demonstration with simulation and realization of the technologies. The STC hopes to ignite minds for future research topics in the area of communication and optical devices.

The STC will be a 5 days program in HBTU Kanpur from 16th August to 20th August, 2019.

TOPICS TO BE COVERED

- Basics with MATLAB demonstration for the CDMA techniques.
- Basics with MATLAB demonstration for the OFDM.
- Introduction to photonic crystal and its significance.
- Application of photonic crystal cavity as a sensor in practical environment.
- Photon phonon interaction in devices.
- Metamaterial devices and their applications.

SOFTWARE DEMONSTRATION

MATLAB coding of CDMA & others, FDTD simulation for photonic crystal and other photonic devices

ABOUT THE INSTITUTION

Harcourt Butler Technical University (Formerly HBTI Kanpur) has been institutionalized in the year 1921. The institute was founded to encourage and enhance the research and development in the field of science, engineering and technology. The institute being one of the oldest in India has a very good reputation of producing motivated UG, PG and PhD students. The institute has earned the status of university since 2016 as per Act No. 11 of 2016 by the Government of Uttar Pradesh from HBTI Kanpur to Harcourt Butler Technical University Kanpur. It is dedicated for being the catalyst to rapid industrial development in the area and above all for being the mediator for people's aspiration in the field of science, engineering and technology.

The University is being operated in two campuses, the east campus has an area of 77 acres while the west campus has an area of 250 acres which are situated 3 km apart. The east campus has all the academic and departmental buildings whereas the west campus is at present residential with planning going on for extension of some departments in that campus Kanpur is very well connected to all parts of the India as it is in a very prime location in being close to the capital of the state. The nearest airport is the Kanpur airport.

ACCOMODATION

Accommodation will be provided on payment basis subject to availability.

WHO CAN APPLY

M.Tech, PhD scholars and faculty members of Engineering and Science institutions are encouraged to apply through email to psaha089@gmail.com. Registration form is available on university website. Kindly, download the form and complete the process as instructed in registration section.

The total number of participants will be 20 and the participants will be selected on the basis of first come first serve.

Contact Persons-

Mr. Partha Saha (9097454763)

Prof. Manoj Kumar Shukla (87355942734)

REGISTRATION

The payment in the form of account payee **Demand Draft (DD)** drawn in favor of "**Finance Controller, Harcourt Butler Technical University (HBTU)**" payable at **Kanpur**.

Participation fees for Research Scholar and faculty members (from other institute) is Rs. 500. While HBTU research scholars and faculty members will pay Rs. 200 as participation fees in the form of DD. Kindly, submit the google form (<https://forms.gle/6i2mHJW2wupc1e988>) available for registration on or before 14th August.

Candidates have to bring DD on the day of registration (on 16th Aug) along with at least one original photo identification proof.

On spot registration will also be done through DD/Cash only in the case of availability of seats.

Certificates will be issued only after the completion of the program.

VENUE

Simulation Laboratory, Dept. of Electronics Engg., H.B.T.U. Kanpur.

WEBSITE

www.hbtu.ac.in

Patron

Prof. N.B. Singh
Honorable Vice Chancellor,
H.B.T.U. Kanpur

Dean, School of Engineering

Prof. Rajive Gupta
H.B.T.U. Kanpur

Co-ordinator TEQIP-III

Prof. Raghuraj Singh
H.B.T.U. Kanpur

Organizing Committee

Chairman

Prof. Krishna Raj
Head of Department, Electronics Engg.
H.B.T.U. Kanpur

Coordinators

Prof. Manoj Kumar Shukla
Professor, Dept. of Electronics Engineering
H.B.T.U. Kanpur

Mr. Partha Saha

Assistant Professor
Dept. of Electronics Engineering
H.B.T.U. Kanpur

Members

Mrs. Rajani Bisht
Associate Professor, ET Dept. H.B.T.U.
Dr. A.K. Shankwar
Associate Professor, ET Dept. H.B.T.U.
Dr. Ashutosh Singh
Associate Professor, ET Dept. H.B.T.U.

A FIVE DAY

SHORT-TERM COURSE

On Emerging trends in Communication and Photonic Devices

16th to 20th August, 2019



ORGANIZED BY
Department of Electronics
Engineering

Harcourt Butler Technical University
Kanpur, U.P. India

List of distinguished speakers

- 1. Prof. S. Anantha Ramakrishna**
Department of Physics
(IIT Kanpur)
- 2. Prof. Vipul Rastogi**
Department of Physics,
(IIT Roorkee)
- 3. Dr. Praveen Chandra Pandey**
Department of Physics
(IIT BHU, Varanasi)
- 4. Prof. R. Vijaya**
Department of Physics
(IIT Kanpur)
- 5. Dr. Amol Choudhary**
Department of Electrical Engineering.
(IIT Delhi)
- 6. Dr. Arvind Sharma**
Department of Electronics &
Communication Engineering.
(NIT Kurukshetra)
- 7. Dr. Vijaya Prakash. G**
Department of Physics
(IIT Delhi)
- 8. Mr. Somil Saxena**
Manager (Technical),
Fiber Optics Services.
(New Delhi)

TENTATIVE SCHEDULE FOR SHORT TERM COURSE on “Emerging Trends in communication and photonic devices” (16th to 20th AUGUST 2019)

-DATE / TIME	9:30-10:00 AM	10:00-11:15 AM	11:15-11:30 AM	11:30-12:45 PM	12:45-2:15 PM	2:15-3:30 PM	3:30-3:45 PM	3:45-5:00 PM
16th Aug (Friday)	REGISTRATION	INAUGURATION	HIGH TEA	Invited Talk by Prof. S. Anantha (IIT Kanpur)	LUNCH	Invited Talk by Dr. Praveen Chandra Pandey (IIT BHU)	TEA	Invited Talk by Dr. Praveen Chandra Pandey (IIT BHU)
17th Aug (Saturday)	-	Invited Talk by Dr. Vijaya Prakash. G (IIT Delhi)		Invited Talk by Prof. S. Anantha (IIT Kanpur)		Invited Talk by Dr. Arvind Sharma (NIT Kurukshetra)		Invited Talk by Dr. Arvind Sharma (NIT Kurukshetra)
18th Aug (Sunday)	-	Invited Talk by Dr. Amol Choudhary (IIT Delhi)		Invited Talk by Dr. Amol Choudhary (IIT Delhi)		Invited Talk by Prof. Vipul Rastogi (IIT Roorke)		Invited Talk by Prof. Vipul Rastogi (IIT Roorke)
19th Aug (Monday)	-	Invited Talk by Prof. R. Vijaya (IIT Kanpur)		Invited Talk by Prof. R. Vijaya (IIT Kanpur)		SOFTWARE DEMONSTRATION By Mr. Somil Saxena Technical Manager (Fiber Optics Services)		SOFTWARE DEMONSTRATION By Mr. Somil Saxena Technical Manager (Fiber Optics Services)
20th Aug (Tuesday)	-	SOFTWARE DEMONSTRATION By Mr. Somil Saxena Technical Manager (Fiber Optics Services)		VALEDICTORY SESSION		END		