One week
Short Term Training Program (STTP)
On
"Medical Signal and Image Processing- IV"
(MSIP-2019)

14th - 19th October, 2019

REGISTRATION FORM

Name:……

Designation:……..……

Organization:……

Qualification:……

Correspondence Address: :……

Mobile No…….

E-Mail:…..……..……..

Registration Fee : Paid herewith in the form of Cash /

DD/Online Amount ……

DD No.....…….. Date:…….……

Name of Bank……..……

Accommodation Required: Yes / No

Date:

Place:

Signature of the Participant

Note: Demand draft (DD) should be made in the favour of 'Director, NIT Raipur', Payable at 'Raipur'

Chief Patron

Prof. A. M. Rawani,
Director, NIT Raipur

Patron

Dr. (Mrs.) S. Gupta,
Dean (R&C), NIT Raipur

Convener

Dr. Narendra. D. Londhe
Electrical Engg., NIT Raipur

Course Coordinator

Dr. Narendra. D. Londhe
Electrical Engg., NIT Raipur

Address for Correspondence

Dr. Narendra. D. Londhe
Mr. Ghanahshyam B. Kshirsagar
Department of Electrical Engg., NIT Raipur,
C.G., India 492010
Email: nlondhe.ele@nitrr.ac.in
ghana8492@gmail.com

Important Dates:

Last Date of receipt of application: 5th October 2019
Notification about selection: By email

One Week
Short Term Training Program (STTP)
On

"Medical Signal and Image Processing- IV"
(MSIP-2019)

14th - 19th October, 2019

Department of Electrical Engineering,

NIT Raipur

National Institute of Technology
Raipur-492010, Chhattisgarh

About the Institute:

National Institute of Technology Raipur (Formerly Government Engineering College Raipur), situated in the capital of a newly incepted state of Chhattisgarh, has proven to be "Avant-grade' in the field of science and technology over past few decades in this region. With sweet memory of foundation ceremony by our president Hon'ble Dr. Rajendra Prasad on 14th September 1956. the institute started with two departments namely Metallurgical and Mining Engineering. Later the inauguration of the Institute building was done by our Prime Minister Hon'ble Pt. Jawahar Lal Nehru on 14th March 1963. From 1st December 2005, the institute has become the National Institute of Technology. It is well connected with Mumbai, Delhi, Hyderabad, Kolkata, Bhopal, Ahmedabad, Bangalore, Chennai and Chandigarh by regular flights and is on the main Howrah-Mumbai railway route. The institute is 5 km from the Raipur railways station and 18 km from airport on NH-6, the Great Eastern Road.

About Department:

The department of Electrical Engineering came in existence in 1958. The department offers undergraduate as well as postgraduate programs. These are leading departments of NIT Raipur, running several sponsored projects from the government organizations These departments provide an outstanding research environment and offers academic program leading to the award of Ph.D. degree. Various multidisciplinary research programs are running in these departments. The academy is envisioned to become a central hub of research and training activity.

Objective:

The aim of this training program is to provide an exposure to both basics and recent advances in medical signal and image processing to the students, teaching and research community associated with the Departments of Electrical Engg, Electronics Engg, Computer Science, IT, MCA, Bio Medical etc. This workshop mainly divided into three parts, basics to recent trends biomedical signal and images processing, tools for implementation: MATLAB basics, python and hands-on practice over biomedical signal and images.

Apart from the traditional tract of this STTP, this time more attention is given on the Machine learning/deep learning applications in Medical signal and Image processing. We will explore some databases and discuss case studies related to them.

Real time EEG signal recording is also demonstrated. A very interesting field, Brain Computer Interface and its applications are also demonstrated.

Theme/Scope:

At present day, automation and computation are required to enhance these biomedical technologies. Various types of computer methods have been adapted to automate and enhance such medical technologies. This course will provide a concrete base and hands-on experience on well known medical signal and images and their processing for Computer Aided Diagnosis Systems. Real time data acquisition from EEG machine is also demonstrated.

Expert lectures will be de livered by medical professionals and Institute Faculties to introduce the medical signal and image and discuss the challenges. This will benefit the candidates to gain knowledge of medical applications of signal and image processing.

Case studies of Machine Learning Applications over different medical databases are demonstrated to learn the concept and use it in your M.Tech or PhD research. Real time EEG recording will provide the solution for different issues of real data recording and analysis. Hands-On Sessions will be suitably designed to supplement classroom discussions using softwares and databases.

Course Contents:

- Introduction to Medical Signal and Imaging Methods (from medical experts).
- Introduction to Medical Signal and Image processing techniques.
- Electrocardiogram (ECG) signal processing.
- Electroencephalogram (EEG) signal processing.
- Intravascular Ultrasound (IVUS) Image Processing.
- Carotid Ultrasound Image Processing.
- Psoriasis Disease Image Processing.
- Lung CT Image Processing

New Contents:

- Introduction to Deep Learning using Python
- Pain Assessment using Deep Learning
- Brain computer interface demonstration using BCI2000
- Real time EEG acquisition using ActiCAP Xpress V amp 16 EEG recorder and BCI 2000

Targeted Participants:

- UG/PG Students, Research Scholars, Academicians, and Industry

Registration Fess:

Participants	Fees (₹)
Students/Research Scholars	1500.00
Faculty /Industry delegates	2500.00

Applications in prescribed format with registration fee in the form of Demand Draft drawn in favour of **"Director, NIT Raipur**" must reach the coordinator on or before 5th Oct, 2019. Registration fee includes registration kit, tea and lunch during the program. Fee is non-refundable. Since the number of seats is limited to 30, the selection will be made on first cum first serve basis and intimation will be sent to the candidates by email as per the schedule. Certificates will be issued to the participants only after attending the complete course. No TA/DA will be paid to the participants.

Account details for online payment of registration fees:

NATIONAL INSTITUTE OF TECHNOLOGY, RAIPUR
BANK DETAILS OF TEQUIP-III

ELECTRONIC CLEARING SERVICE / REAL TIME GROSS SETTELEMENT (RTGS) FACILITY FOR RECEIVING PAYMENTS

A. DETAILS OF ACCOUNT HOLDER

NAME OF THE ACCOUNT HOLDER	DIRECTOR NIT RAIPUR
COMPLETE CONTACT ADDRESS	G.E.ROAD, RAIPUR (C.G.) 492010
E-Mail Id of the Account Holder	director@nitrr.ac.in

B. BANK ACCOUNT DETAILS

BANK NAME	STATE BANK OF INDIA
BRANCH NAME WITH COMPLETE ADDRESS	G.C.E.T.BRANCH, G.E.RAOD RAIPUR (C.G.)
IFSC CODE OF THE BRANCH	SBIN0002852
MICR CODE	492002004
SWIFT CODE	SBININBB646
TYPE OF BANK ACCOUNT	SAVING ACCOUNT
COMPLETE BANK ACCOUNT NUMBER	34349680351

Banker's Signature and Seal

Authorized Signatory with seal
By. Registrar (F & A)
NIT, Raipur (C.G.)