RESEARCH AND TRAINING UNIT FOR NAVIGATIONAL ELECTRONICS
OSMANIA UNIVERSITY. HYDERABAD

A SCHOOL ON

Probability Theory and Stochastic Processes (PTSP-19)

(For Scientists and Engineers)

(Course Code: NERTU/SC/72)

JANUARY 21ST –APRIL 13TH, 2019 (Thee Days in a Week: Mon, Wed, Sat)

Location : NERTU Auditorium, OU

DATES : January 21st to April 13th, 2019
DAYS : Lectures : Mon & Wed.
: Tutorials : Saturday
Time : 06.30AM – 08.00AM

Faculty : Prof.P.Laxminarayana
Director, NERTU, OU
Tutorials : Mr.Ch.Srinu & Mrs.S.Saraswathi
PhD Research Scholars, NERTU

Registration Fee (INR) : Rs.3,500/-
18%GST will be extra.

Online payment through NEFT to

The Director, Eqpt. Maint., NERTU, OU
A/C No. : 52198270713
IFSC Code: SBIN0020071
Osmania University Branch
State Bank of India

Or by DD/Cheque should be drawn in favor of
The Director, NERTU, OU

Last Date for Registration: 10th January 2019

For Schedule, Other Details please contact

COORDINATORS, PTSP-19
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COURSE OVERVIEW

Probability theory, Stochastic Processes and Statistical Signal Processing are essential for research in the area of Artificial Intelligence(AI), Signal Processing (SP) and Communication Engineering (CE) and many other fields, where there is uncertainity or randomness. Uncertaninty or randomness is the common phenomina in the world. However, the probability theory and stochastic processes is a rich and sophisticated field of mathematics with a reputation for being confusion. This is due to either lack of basic concepts and knowledge of interpretation of these concepts to the real world problems where there is uncertainity. If some are good enough in the solving algebraic equations, they are not able to model or interpret the uncertinity of real world applications. If some people are able to model or interpret the real world applications with probabilistic equations, they are not able to solve them.

So the subject, PTSP, which is eseential for scientists and engineers working in the area of Artificial intelligence, Signal processing and communication, requires lot of practice for clear in-depth understanding to interpret and solve the problems. The goal of this school is to train the participants by teaching and practice to learn the basics of probability theory and stochastic processes, required for research in AI, SP and CE. In this course, the theory of probability, random variables, and stochastic processes will be covered. Few topics: Definitions and Laws of probability, random variables, functions of random variables, bounds and approximations, Random processes, autocorrelation, Moment-generating and characteristic functions, stationarity, ergodicity, and power spectral density functions of real and wide sense stationary processes.

TARGETED PARTICIPANTS

Faculty interested to teach PTSP, Research scholars and PG students in Science and Engineering subjects, interested to pursue research/ Ph.D., are the expected participants. This is an intensive school. The Participants are expected to solve the given assignments at home. There will be tutorials to give the feedback to the students on the solutions to the Assignments. Grading will be given in the certificate based on the performance.

REGISTRATION

Interested candidates can download the registration form from **www.osmania.ac.in or http://www.uceou.edu** and send the filled form along with receipt of online payment, before **10th January 2019, to nertu.courses@osmania.ac.in and copied to** sreenu471.ece@gmail.com & sirikondasaraswathi@gmail.com or hard copy with DD/Cheque to "The **Coordinator, PTSP-19, Research and Training Unit for Navigational Electronics (NERTU), Osmania University, Hyderabad 500007".**

ABOUT NERTU: The Research and Training Unit for Navigational Electronics (NERTU) is established in 1982. It is the focal point for research and training in the areas of Electronic Navigation in India. It is the first University centre to work in the area of Global Positioning System (GPS) and GPS Aided Geo Augmented Navigation (GAGAN) System. Since its inception, NERTU has been conducting almost one or two short term courses per year in the area of GNSS, since 1992. Scientists, engineers, academicians and research scholars from many organisations have participated and benefited from these courses NERTU has successfully **executed 61 sponsored and consultancy projects** funded by DRDO, ISRO, DST, MIT, ECIL, HAL, BEL, AICTE and ASL. It has also conducted **66 short term courses/workshops/conferences** on various topics of signal processing, communications and navigation.