

Five-Day Intensive Course on RADAR SIGNAL PROCESSING (RSP-16)

(25-29, JULY 2016) (Course Code: NERTU/SC/64)

RESEARCH AND TRAINING UNIT FOR NAVIGATIONAL ELECTRONICS OSMANIA UNIVERSITY - HYDERABAD

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY - HYDERABAD

DATES : July 25-29, 2016 TIME : 09.30AM – 05.30PM VENUE :NERTU Auditorium, OU REGISTRATION FEE

Rs. 3,000/- for Full Time Students

Rs. 6,000/- for Teachers Rs. 10,000/- for Scientists from Research Organizations

Rs. 15,000/- for Engineers from Industries and Commercial

Organizations

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

Limited Accommodation: Available at university guest house on payment basis. LAST DATE FOR REGISTRATION:

JULY 18, 2016

SPEAKERS

- 1. Prof.V.U.Reddy, IITH
- 2. Prof.V.M.Pandhari Pande, ECE, OU
- 3. Sri O.K.Singh, DLRL
- 4. Sri Hara Prasad, DLRL
- 5. Sri D.D.Sharma, DLRL
- 6. Dr.S.K.Patra, ADRIN
- 7. Dr.A.K.Singh, DLRL
- 8. Prof.S.P.Singh, MGIT
- 9. Prof.T.D.Bhatt, MGIT
- 10. Prof.M.V.Krishna Rao, VJIT
- 11. Prof.N.V.Koteshwar Rao, CBIT
- 12. Prof.K.Subba Rao, CBIT
- 13. Prof.P.Laxminarayana, NERTU,OU

COORDINATORS

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OR

Contact the Co-Coordinators

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Course Overview

Most of the early radar development was driven by military applications, with typical operating distances of hundreds of meters or more. However, technological progress, enabled new radar applications in the areas like air traffic control, remote sensing, weather monitoring, biomedical and police departments to detect and find the material or the speed of the object, with target ranges in meters or less. The design of most of the new radars heavily rely on digital processing. The main objective of the course is to train the participants in the basics of Radar Signal Processing to start their research or to design new systems in the area of radars. The lectures of the course cover the topics: Basics and Review of Signal Processing, Introduction to Radar Systems, Antennas for Radars, Radar Signal Models, Radar Waveforms, Doppler Processing, Detection of Radar Signals, LPI Radar Signals: Phase Coding Techniques, LPI Radar Signals: Detection, Analysis & Classification, LPI Radar Signals Analysis: Parameter Estimation, Synthetic Aperture Radar: Image Formation, Processing, MIMO Radars and Electronic Warfare (EW).

Expected Participants

Targeted participants are working engineers, scientists, academicians, research scholars and students interested to work or do the research in the area of Radars. Participants are expected to have the UG level knowledge in digital signal processing, Radar systems and communication engineering.

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. Since its inception, NERTU has successfully executed **50** sponsored and consultancy projects funded by DRDO, ISRO, DST, MIT, ECIL, HAL, BEL, AICTE and ASL, in different areas related to signal processing, communications and navigation. NERTU staff has guided more than 30 PhD and 150 ME/M.Tech. students for their dissertations. It has also conducted **63** short term courses/workshops/conferences on various topics of signal processing, communications and navigation. Scientists, engineers, academicians and research scholars from many organizations have participated and benefited from these courses.

About Department of ECE, CBIT

The department of ECE was established from the inception of the institute in the year 1979. The department offers Under Graduate (B.E.,) and two Post Graduate (M.E.) programmes one in "Communication Engineering" and the other in "Embedded Systems & VLSI" specializations. The Department has faculty with rich experience in teaching and research. Good infrastructural facilities, thirteen (13) full-fledged laboratories with well equipped hardware and softwares. The department has established one research center in the area of "Navigation and Communication". The department is granted with several R&D and consultancy projects from the funding agencies like DST/AICTE/ISRO/RCI/CBIT etc. Recently, two sponsored FDP programs and National Seminar which are funded by AICTE were conducted successfully. The research areas of the department faculty include Microwave Antennas, GPS/GNSS, Signal and Image Processing, Mobile Communication, VLSI, Embedded Systems, Data Communication and Computer Networks. The department is rated as one of the best departments in the self financed sector.

Interested candidates can download the registration form from <u>www.osmania.ac.in</u> or <u>http://www.uceou.edu</u> or <u>www.cbit.ac.in</u> and send the filled form along with DD/Cheque, on or before July 18, 2016, to "The Coordinator, RSP-16, Research and Training Unit for Navigational Electronics (NERTU), Osmania University, Hyderabad 500007".