



**OU CENTENARY CELEBRATIONS (1917-2017)**  
**ONE WEEK SCHOOL ON**  
**GNSS SIGNAL PROCESSING (GNSS-17-SR)**  
 (Course Code: NERTU/SC/68)  
**04-09, DECEMBER 2017 (REVISED)**



**RESEARCH AND TRAINING UNIT FOR NAVIGATIONAL ELECTRONICS**  
**OSMANIA UNIVERSITY, HYDERABAD**

**Location** : NERTU Auditorium, OU  
**Dates** : 04-09, December 2017  
**Time** : 09.00AM – 06.00PM  
**Faculty**  
 Most of the lectures will be taken by Dr.P.Laxminarayana, Director, NERTU  
 And few invited lectures will be given by the Scientists/Professors working in research and academic institutions.

**COORDINATORS:** Prof.P.Laxminarayana, Director, NERTU  
 Ph. 0949 080 5486, [laxminarayana@osmania.ac.in](mailto:laxminarayana@osmania.ac.in)

**Registration Fee :**

Students & Research Scholars : Rs. 8000/-  
 Faculty : Rs. 10000/-  
 Industry and R & D Institutes : Rs. 15000/-  
**+18%GST**

**DD/Cheque should be drawn in favor of**

**The Director, NERTU, OU**

**Or 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**

**Last Date for Registration:**

**25<sup>th</sup> November 2017**

**For Schedule, Other Details**

**please contact Co-Coordinator, GNSS-17-SR:**

**Ch.Srinu, Research Scholar, NERTU, OU,**

Ph. 0903 293 0657, [sreenu471.ece@gmail.com](mailto:sreenu471.ece@gmail.com)

**COURSE OVERVIEW**

Many engineers developing applications with GPS, are treating the GPS receiver as a black box, which will give position, Velocity and Time. Very few people are working to develop the GNSS receivers and simulators, where the signal processing and communication concepts are required. The development of GNSS receiver is a challenging problem for entry level Scholars, Scientists and Engineers. So the present school (Phase-1) will give the overview and concepts of Signal Processing and Communication; and Coding Principles required for development of a GNSS software receiver. Further another school (phase-2) will be conducted for two weeks probably during June-August, 2018 on advances in the development of software receiver.

**The main objective of the present school (phase-1) is** to give the basic concepts of signal processing and communication; and coding techniques required for development of a GNSS software receiver. This course will have theory lectures in the morning and coding practice for development of modules of the GNSS software receiver, in the afternoon. The topics to be covered are: Overview of GNSS, Signal structure of GNSS systems, Overview of GNSS receiver, Antennas and front ends, Signal Acquisition, Carrier and Code Tracking, Navigation Data Decoding, Navigation Solution, Kalman Filtering.

**TARGETED PARTICIPANTS**

**As the course is designed for intensive practice, only the** engineers, scientists, academicians, and research scholars, already working or decided to work in development of software receiver, are encouraged to register for the school. **Participants are expected to have the UG level knowledge in signal processing and communication engineering.** The participants have to bring their own laptop for participating in the school.

Interested candidates can download the registration form from [www.osmania.ac.in](http://www.osmania.ac.in) or <http://www.uceou.edu> and send the filled form to the following address along with DD/Cheque, before **25<sup>th</sup> November 2017**.

**“The Co-Coordinator, GNSS-17-SR,  
 Research and Training Unit for Navigational Electronics (NERTU),  
 Osmania University, Hyderabad 500007”.**

**ABOUT NERTU**

The Department of Electronics (DoE), Government of India, recognizing the importance of Navigational Electronics to the country and the specific needs of the Department of Civil Aviation and the Indian Air Force, decided to create a national centre for expertise in this area. Proposals were invited, and the one submitted by the Department of Electronics and Communication Engineering, Osmania University was selected. Thus the Research and Training Unit for Navigational Electronics (in brief NERTU) came into being on 1st April, 1982 as a sponsored project of the DoE. It continued to enjoy this status until September 1992. In recognition of the excellent services rendered by it to the user organizations, then the Government of Andhra Pradesh has made it as permanent establishment, a research centre of Osmania University by funding its recurring expenditure.

Today, NERTU is the focal point for research and training, in the frontier areas of Navigational Electronics 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. 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 60 sponsored and consultancy projects** funded by DRDO, ISRO, DST, MIT, ECIL, HAL, BEL, AICTE and ASL. It has also conducted **63 short term courses/workshops/conferences** on various topics of signal processing, communications and navigation.

# OU CENTENARY CELEBRATIONS (1917-2017)

## RESEARCH AND TRAINING UNIT FOR NAVIGATIONAL ELECTRONICS OSMANIA UNIVERSITY, HYDERABAD

### ONE WEEK SCHOOL ON GNSS SIGNAL PROCESSING (GNSS-17-SR)

4-9, December 2017 (Revised)

(Course Code: NERTU/SC/68)

### Registration Form

1. Name	
2. Designation	
3. Educational Qualifications	
4. Email	
5. Phone	
6. Organization with Address	
7. Registration fee a. Amount b. DD/Cheque No.	
8. Professional Experience a. Teaching b. Research/Industry	
9. Signature of the Candidate	

Dr./Mr./Ms. .... is sponsored to attend the one week school on “GNSS Signal Processing”, to be held during **4-9, December 2017**.

**Place:**

**Date:**

**Signature**  
**(Sponsoring Authority)**

The filled registration form along with DD/Cheque should be sent to the following address by **25<sup>th</sup> November 2017**.

**The Coordinator, GNSS-17-SR,  
Research and Training Unit for Navigational Electronics,  
Osmania University, Hyderabad – 500 007**

**Fax: 040-27091762**

Email Ids/Phone Numbers for correspondence:

Ch.Srinu, Research Scholar, Co-Coordinator, GNSS-17-SR: NERTU, OU, Ph. 0903 293 0657, [sreenu471.ece@gmail.com](mailto:sreenu471.ece@gmail.com)

Dr.P.Laxminarayana, Ph. 949 080 5486 [plaxminarayana@yahoo.com](mailto:plaxminarayana@yahoo.com)

**Registration Fee(in INR) (Includes Course material, Breakfast, Lunch, Snacks and Tea)**

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

Full Time Students	8,000
Teachers	10,000
Scientists/Engineers from R & D Organizations, Industries and Commercial Organizations	15,000 +18% GST