



# OU CENTENARY CELEBRATIONS (1917-2017)

Three day Course on

## GNSS TECHNOLOGIES AND ITS APPLICATIONS (GNSS-17)

(Course Code: NERTU/SC/67)

(20-22, OCTOBER 2017)



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

&

### DEPARTMENT OF CIVIL ENGINEERING, UNIVERSITY COLLEGE OF ENGINEERING (A)

**Location** : NERTU Auditorium, OU

**Dates** : 20-22, October 2017

**Time** : 09.30AM – 05.30PM

#### SPEAKERS

1. Sri U.N.Misra, Deputy Surveyor General, IISM,SOI
2. Prof.A.D.Sarma, CBIT (Former Director, NERTU)
3. Dr.Arjun Singh, MD, Sakti Aviation
4. Sri P.Srinivasa Rao, DCF, TFGIS
5. Dr. R. Srinivasa Kumar, CED, UCE, OU
6. Prof.P.Laxminarayana, Director, NERTU, OU

Awaiting for acceptance from some more scientists and professors from research and academic institutions.

**COORDINATORS:** Prof.P.Laxminarayana, Director, NERTU

Ph. 0949 080 5486, [laxminarayana@osmania.ac.in](mailto:laxminarayana@osmania.ac.in)

Dr.R.Srinivasa Kumar, Civil Dept, OUCEA

Ph. 09491124241, [rungoz@yahoo.com](mailto:rungoz@yahoo.com)

#### REGISTRATION FEE :

Students & Research Scholars : Rs. 2000/-  
 Faculty : Rs. 3000/-  
 Industry and R & D Institutes : Rs. 6000/-

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:

13<sup>th</sup> October 2017

For Schedule, other details, please contact

Co-Coordinator, GNSS-17:

Ch.Srinu, Research Scholar, NERTU, OU

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

Mane S R Rohith, Research Scholar, Civil Dept,OUCEA

Ph. 0910 000 0699, [rohithmane9@gmail.com](mailto:rohithmane9@gmail.com)

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 along with DD/Cheque, before 13<sup>th</sup> October 2017,

to "The Co-Coordinator, GNSS-17,

Research and Training Unit for

Navigational Electronics (NERTU),

Osmania University, Hyderabad 500007".

#### COURSE OVERVIEW

The first two GNSS systems GPS and GLONASS were developed by defence departments of USA and Russia. Almost every citizen in the USA, Russia and in other countries are also using GPS or GLONASS for navigation and other applications. Augmentation systems like WAAS, EGNOS, MSAS and GAGAN were developed to improve the accuracy, continuity, availability and integrity of GPS in their regions for civilian aviation and other applications. Further other GNSS constituents COMPASS and Galileo were developed by China and European Union. QZSS is the Japan's Regional Navigational Satellite system cum augmentation system. Similarly IRNSS is the Regional Navigational Satellite system developed by India to cover the India and its surrounding region.

The main objective of this course is to introduce the basic concepts of Global Navigational Satellite Systems, its applications and its limitations. This basic course will cover the topics: Principle of operation of GPS or any GNSS system, architecture of GPS, GLONASS, Galileo, Compass and Navic etc. Errors in GPS or GNSS, principle of operation, architecture and Signal structure of GNSSs, DGSPS, augmentation systems, WADGPS and Applications of GNSS in the areas of Civil Engineering, Aviation, Remote Sensing, Geoinformatics, Forest, Atmospheric and Environmental fields. Expected participants are working engineers, scientists, academicians, research scholars and students interested to understand the mechanism of GNSS and its applications.

#### 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 61 short term courses/workshops/conferences on various topics of signal processing, communications and navigation.

#### ABOUT DEPARTMENT OF CIVIL ENGINEERING, OUCEA

The Dept., of Civil Engineering was started in the year 1929 with in take of 15 students. The Dept., is moved into the present majestic building in the year 1947. The Department of Civil Engineering of UCE-OU offers courses leading to Bachelor of Engineering (BE), Master of Engineering (ME) and Ph.D. in the following branches of civil engineering:

- \* Transportation Engineering,
- \* Geotechnical Engineering,
- \* Infrastructure Engineering and
- \* Structural Engineering,
- \* Water Resources Engineering
- \* Construction Engineering and Management.

The Department provides research and consultancy services to various public and private sector organisations, and receives research and modernisation grants from UGC, DST, MHRD, AICTE and other public private organizations. Platinum Jubilee was celebrated in the year 2004 - 2005.

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### DEPARTMENT OF CIVIL ENGINEERING, UNIVERSITY COLLEGE OF ENGINEERING (A)

**Three day Course on**  
**GNSS TECHNOLOGIES AND ITS APPLICATIONS (GNSS-17)**  
**(Course Code: NERTU/SC/67)**  
**(20-22, OCTOBER 2017)**

## 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 Technologies and Its Applications”, to be held during 20-22, October 2017.

**Place:**

**Date:**

**Signature**

**(Sponsoring Authority)**

The filled registration form along with DD/Cheque should be sent to the following address by 13<sup>th</sup> October 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, NERTU, OU, Ph. 0903 293 0657, [sreenu471.ece@gmail.com](mailto:sreenu471.ece@gmail.com)

Mane S R Rohith, Research Scholar, Civil Dept, OUCEA, Ph. 0910 000 0699, [rohithmane9@gmail.com](mailto:rohithmane9@gmail.com)

Dr.R.Srinivasa Kumar, Civil Dept, OUCEA, Ph. 09491124241, [rungoz@yahoo.com](mailto:rungoz@yahoo.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	2,000
Teachers	3,000
Scientists/Engineers from R & D Organizations, Industries and Commercial Organizations	6,000