

Report on
107- IIRS ISRO Outreach Programme on
“Overview of Global Navigation Satellite System”
(Human Resource Development Center, Integral University, Lucknow)
19th September to 30th September, 2022

Human Resource Development Centre (HRDC), Integral University Lucknow is one of the Nodal Center of Indian Institute of Remote Sensing (IIRS), Indian Space Research Organization (ISRO), Department of Space, Govt. of India, Dehradun, India. Human Resource Development Centre, Integral University, Lucknow had successfully organized the 107-IIRS ISRO Outreach Programme on “Overview of Global Navigation Satellite System” from September 19-30, 2022 for working professionals and students in association with Indian Institute of Remote Sensing, Indian Space Research Organization, Department of Space, Govt. of India, Dehradun.

The course coordinator of this program was Dr. Ahsutosh Bhardwaj

The technical sessions constituted of a wide variety of topics taken by a team of expert’s viz.:

Date	Day	Time	Topic	Speaker
19/09/2022	Monday	1600-1700hrs	Satellite Navigation*-I	Dr. Suresh Kannaujiya
		1700-1730hrs	Interactive Session	
20/09/2022	Tuesday	1600-1700hrs	Satellite Navigation*-II	Dr. Suresh Kannaujiya
		1700-1730hrs	Interactive Session	
21/09/2022	Wednesday	1600-1700hrs	GPS receivers, processing methods, errors and accuracy	Dr. Ashutosh Bhardwaj
		1700-1730hrs	Interactive Session	
22/09/2022	Thursday	1600-1700hrs	Satellites based Augmentation systems & GPS Aided and GEO Augmented Navigation (GAGAN)	Dr. Ashutosh Bhardwaj
		1700-1730hrs	Interactive Session	
23/09/2022	Friday	1600-1700hrs	GPS signal characteristics, Data formats (broadcast, precise ephemeris)	Dr. Ashutosh Bhardwaj & Shri Ashish Joshi
		1700-1730hrs	Interactive Session	
26/09/2022	Monday	1600-1700hrs	Indian Regional Navigation Satellite System (IRNSS)	Dr. Ashutosh Bhardwaj & Shri Kamal Pandey
		1700-1730hrs	Interactive Session	
27/09/2022	Tuesday	1600-1700hrs	DGPS demonstration (Pre-recorded Followed by live query session)	Offline
		1700-1730hrs	Interactive Session	Dr. Ashutosh Bhardwaj
29/09/2022	Thursday	1600-1700hrs	Advance GNSS processing	Dr. Suresh Kannaujiya
		1700-1730hrs	Interactive Session	
30/09/2022	Friday		Panel Discussion	

Dr. Ashutosh Bhardwaj appreciated the partisans of Integral University for their active response. Participants learned a lot about global navigation satellite system in these program 35 participants attended this outreach program.

Institute, Coordinator and Participant Certificate by ISRO:

 सत्यमेव जयते	भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA	
	बहिः पॉलिसर लॉक/ विस्तार कार्यक्रम प्रमाण पत्र OFF - CAMPUS OUTREACH CERTIFICATE PROGRAMME	COR2022107642
	संस्थान की सहभागिता का प्रमाण पत्र CERTIFICATE OF PARTICIPATION OF INSTITUTE	
<p>यह प्रमाणित किया जाता है कि इंटेग्रल यूनिवर्सिटी, लखनऊ ने भारतीय सुदूर संवेदन संस्थान, इसरो देहरादून द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम वैश्विक नौवहन उपग्रह प्रणाली का अवलोकन में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 19 सितंबर, 2022 से 30 सितंबर, 2022 तक किया गया।</p> <p>This is to certify that INTEGRAL UNIVERSITY, LUCKNOW, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on Overview of Global Navigation Satellite System. This online programme was conducted during September 19, 2022 to September 30, 2022</p>		
दिनांक/ Date: 08-12-2022 देहरादून/ Dehradun	 प्रमुख, जियोवेब सर्विसेस, सूचना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग Head, Geoweb Services, IT & Distance Learning Department, IIRS	 समूह प्रमुख, भू-स्थानिक प्रौद्योगिकी एवं आउटरीच कार्यक्रम समूह Group Head, Geospatial Technologies & Outreach Programme Group, IIRS



भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING
भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION
अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



ऑनलाइन दूरस्थ अधिगम कार्यक्रम
ONLINE DISTANCE LEARNING PROGRAMME

COR2022107642

समन्वय का प्रमाणपत्र
CERTIFICATE OF COORDINATION

यह प्रमाणित किया जाता है कि **इंटेग्रल यूनिवर्सिटी, लखनऊ** कार्यरत **श्री इमरान उल्लाह खान**, ने **वैश्विक नौवहन उपग्रह प्रणाली का अवलोकन** विषय पर इस संस्थान द्वारा दिनांक 19 सितंबर, 2022 से 30 सितंबर, 2022 तक संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम को समन्वित किया।

This is to certify that **DR. IMRAN ULLAH KHAN**, working with **INTEGRAL UNIVERSITY,LUCKNOW**, has coordinated the online training course on **Overview of Global Navigation Satellite System** conducted by this institute during September 19, 2022 to September 30, 2022

दिनांक/ Date: 08-12-2022
देहरादून/ Dehradun

प्रमुख,
जियोवेव सर्विसेस, सूचना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग
Head, Geoweb Services, IT & Distance Learning Department, IIRS

समूह प्रमुख,
भू-स्थानिक प्रौद्योगिकी एवं आउटरीच कार्यक्रम समूह
Group Head, Geospatial Technologies & Outreach Programme Group, IIRS



अंतरिक्ष विभाग /DEPARTMENT OF SPACE
भारत सरकार/GOVERNMENT OF INDIA
भारतीय अंतरिक्ष अनुसंधान संगठन /INDIAN SPACE RESEARCH ORGANISATION
भारतीय सुदूर संवेदन संस्थान, देहरादून / INDIAN INSTITUTE OF REMOTE SENSING, DEHRADUN



नामांकन सं. / Enrolment No.: 20221071648126



CERTIFICATE OF COMPLETION
ONLINE COURSE

यह प्रमाणपत्र

MR. MOHD LAREB KHAN

का " वैश्विक नौवहन उपग्रह प्रणाली का अवलोकन "

में ऑनलाइन पाठ्यक्रम पूर्ण करने पर प्रदान किया जाता है।

इस ऑनलाइन पाठ्यक्रम का आयोजन 19 सितंबर, 2022 से 30 सितंबर, 2022 (कुल पाठ्यक्रम की अवधि = 12 घंटे) के दौरान किया गया।

(संबन्धित आई.आई.आर.एस नोडल केंद्र- इंटेग्रल यूनिवर्सिटी, लखनऊ)

THIS CERTIFICATE IS

AWARDED TO

MR. MOHD LAREB KHAN

ON COMPLETION OF THE ONLINE COURSE ON

"Overview of Global Navigation Satellite System"

THIS ONLINE COURSE WAS CONDUCTED DURING 19-09-2022 to 30-09-2022 (Total course duration = 12 hrs).

(Concerned IIRS Nodal Centre- INTEGRAL UNIVERSITY,LUCKNOW)

Online Exam Grade: **B+**
Attendance: **100 %**

Date: 09-12-2022
Place: Dehradun

Imran Ullah Khan
समन्वयक, विश्वविद्यालय/संस्थान
Coordinator, University/ Institution

रमेश चंद्र
निदेशक/ Director
आई.आई.आर.एस, देहरादून/ IIRS, Dehradun

UID: 4fe387a3693e717590a76bf2ff91a26e .This Certificate can be validated using URL- <https://certificate.iirs.gov.in>

*>80% -(A+), 70-80% -(A), 60-70% -(B+), 40-60% -(B)