#### Report on

## 131- IIRS ISRO Outreach Programme

on

## "Geo-data Sharing and Cybersecurity"

## (Human Resource Development Center, Integral University, Lucknow)

### November 28 to December 11, 2023

Human Resource Development Centre (HRDC), Integral University Lucknow is the Nodal Center of Indian Institute of Remote Sensing (IIRS), Indian Space Research Organization (ISRO), Department of Space, Govt. of India, Dehradun, India. HRDC had successfully organized the 131- IIRS ISRO Outreach Programme on "Geo-data Sharing and Cybersecurity" from November 28 to December 11, 2023 for working professionals and students in association with IIRS, ISRO.

The 131<sup>st</sup> Indian Institute of Remote Sensing (IIRS) ISRO Outreach Programme, held from November 28 to December 11, 2023, focused on two critical themes: Geo-data Sharing and Cybersecurity. Hosted by the Indian Space Research Organisation (ISRO), the program aimed to foster collaboration, knowledge exchange, and capacity building among participants in the fields of remote sensing, geospatial data management, and cybersecurity.

#### **Key Objectives:**

**Promoting Geo-data Sharing:** Encourage the sharing and utilization of geospatial data for various applications, including environmental monitoring, urban planning, agriculture, disaster management, and natural resource management.

**Enhancing Cybersecurity Measures:** Raise awareness about cybersecurity threats and best practices to safeguard sensitive geospatial data and infrastructure against cyberattacks.

#### **Program Highlights:**

**Lectures and Workshops:** Renowned experts delivered lectures and conducted workshops on topics such as remote sensing techniques, geospatial data analysis, data sharing protocols, encryption methods, and cybersecurity frameworks.

Case Studies and Demonstrations: Real-world case studies and demonstrations showcased the practical applications of geospatial data sharing in disaster response, land use mapping, infrastructure development, and climate change mitigation. Additionally, cybersecurity experts demonstrated cyberattack simulations and mitigation strategies to safeguard critical infrastructure.

**Interactive Sessions:** Participants engaged in interactive sessions, panel discussions, and group activities to exchange ideas, share experiences, and address challenges related to geo-data sharing and cybersecurity.

**Networking Opportunities:** The program facilitated networking opportunities for participants to establish professional connections, collaborations, and partnerships with peers, industry experts, and government stakeholders in the fields of remote sensing and cybersecurity.

#### **Outcomes and Impact:**

Enhanced Capacity: Participants gained valuable insights, skills, and knowledge to effectively utilize geospatial data for decision-making and to implement robust cybersecurity measures to protect sensitive information.

Strengthened Collaboration: The program fostered collaboration and knowledge exchange among participants from diverse backgrounds, including government agencies, research institutions, academia, industry, and non-governmental organizations (NGOs).

Promotion of Best Practices: Participants learned about international best practices, standards, and guidelines for geo-data sharing and cybersecurity, contributing to the development of standardized protocols and frameworks in India.

Empowerment of Stakeholders: By empowering stakeholders with the necessary tools and knowledge, the program aimed to accelerate India's progress in leveraging space technology and cybersecurity for socioeconomic development and national security.

The 131<sup>st</sup> IIRS ISRO Outreach Programme served as a platform for promoting geo-data sharing and cybersecurity awareness, fostering collaboration, and building capacity among stakeholders in India's remote sensing and cybersecurity ecosystem. By equipping participants with the requisite skills and knowledge, the program aimed to contribute to India's sustainable development goals and enhance its resilience to cyber threats in an increasingly interconnected world.

Overall, Thirty One Participants (Students and Working Professional) attended the program in fully online mode and got benefitted.

#### **Programme Schedule:**

S.No.	Date	Course topics	Resource
1.	28 Nov, 2023	Overview of Geo-data Models and Standards	Dr. Harish Karnatak, Head, GIT&DL/IIRS
2.	29 Nov, 2023	Overview of Cyber security- Threats and challenges	Shri. Jigar Raval, Head, CC/PRL
3.	30 Nov, 2023	Demonstration on online Geo-data repositories & Geo-portals	Dr. Kamal Pandey, IIRS
4.	01 Dec, 2023	Geo-data access through Cloud GIS	Shri. Ravi Bhandari, IIRS
5.	04 Dec, 2023	Software tools and products for secure data and information access	Shri. Dharmendra Kumar, IIRS
5.	05 Dec, 2023	Best practices for Cyber Security	Shri. Rohit Tyagi, SAC, Ahmedabad
6.	06 Dec, 2023	Online Geo-data sharing and cyber security	Dr. Harish Karnatak, Head, GIT&DL/IIRS
7.	07 Dec, 2023	Safe transactions and data accessing in web and mobile applications	Dr. Rajiv Chetwani, Director, DISM/ ISRO Hq.
8.	08 Dec, 2023	Network Security Protocols & best practices	Shri. Kishor, NRSC
9.	11 Dec, 2023	Demonstration on Cyber Security tools (NMAP etc.)	Shri. Ashutosh Kumar Jha, IIRS

## **Certificates by ISRO:**

## **Institute Certificate by ISRO**



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



COR2024131642

बहि : पॉरसर संपर्क/ विस्तार कार्यक्रम प्रमाण पत्र OFF - CAMPUS OUTREACH CERTIFICATE PROGRAMME

संस्थान की सहभागिता का प्रमाण पत्र CERTIFICATE OF PARTICIPATION OF INSTITUTE

यह प्रमाणित किया जाता है कि इंटेग्नल विश्वविद्यालय, लखनऊ ने भारतीय सुदूर संवेदन संस्थान, इसरो देहारादून द्वारा संचालित ऑनलाइन प्रशिक्षण पाठचकम भू-डेटा साझाकरण और साइबर सुरक्षा मे भाग लिया। इस ऑनलाइन पाठचकम का संचालन दिनांक 28 नवंबर, 2023 से 11 दिसंबर, 2023 तक किया गया।

This is to certify that INTEGRAL UNIVERSITY, LUCKNOW- NODAL CENTER, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehardun on Geo-data sharing and Cyber Security. This online programme was conducted during November 28, 2023 to December 11, 2023

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दिनाँक/ Date: 06-02-2024 देहरादून/ Dehradun

अनुष्य, जियोवेन सर्विसेस, सूचना प्रौद्योगिकी एवं दूरस्य अधिगम विभाग Head, Geoweb Services, IT & Distance Learning Department, IIRS Sgranal

समूह प्रमुख, मू-स्थानिक प्रौद्योगिकी एवं आउटरीच कार्यक्रम समूह Group Head, Geospatial Technologies & Outreach Programme Group, IIR:

## **Coordinator Certificate by ISRO**



#### भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING

भारतीय अंतरिक्ष अनुसंघान संगठन/ INDIAN SPACE RESEARCH ORGANISATION अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



ऑनलाइन दूरस्थ अधिगम कार्यक्रम ONLINE DISTANCE LEARNING PROGRAMME COR2024131642

समन्वय का प्रमाणपत्र
CERTIFICATE OF COORDINATION

यह प्रमाणित किया जाता है कि इंटेग्रल विश्वविद्यालय, लखनक कार्यरत श्री इमरान उल्लाह खान, ने भू-डेटा साझाकरण और साइवर सुरक्षा विषय पर इस संस्थान द्वारा दिनांक 28 नवंबर, 2023 से 11 दिसंबर, 2023 तक संचालित ऑनलाइन प्रशिक्षण पाठ्यकम को समन्वित किया।

This is to certify that DR. IMRAN ULLAH KHAN, working with INTEGRAL UNIVERSITY, LUCKNOW-NODAL CENTER, has coordinated the online training course on Geo-data sharing and Cyber Security conducted by this institute during November 28, 2023 to December 11, 2023

दिनाँक/ Date: 06-02-2024 देहरादन/ Dehradun - Santas

प्रमुख, जियोवेब सर्विसेस, सूवना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग Head, Geoweb Services, IT & Distance Learning Department, HRS Sgrana

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

## **Participant Certificates by ISRO**



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



नामांकन सं. / Enrolment No.: 20231312278339



# CERTIFICATE OF ATTENDANCE

#### यह प्रमाणपत्र

MR. MOHAMMAD MOHSIN

को "भू-देटा साझाकरण और साइवर सुरक्षा "

में ऑनलाईन पाठचक्रम पूर्ण करने पर प्रदान किया जाता है।

इस ऑनलाइन पाठचक्रम का आयोजन 28 नवंबर, 2023 से 11 दिसंबर, 2023 (कुल पाठचक्रम की अविध = 15 घंटे ) के दौरान किया गया।

(संवन्धित आई आई आर एस नोडल केंद्र- इंटेग्रल विश्वविद्यालय, लखनक )

#### THIS CERTIFICATE IS

AWARDED TO

MR. MOHAMMAD MOHSIN

ON COMPLETION OF THE ONLINE COURSE ON

"Geo-data sharing and Cyber Security"

THIS ONLINE COURSE WAS CONDUCTED DURING 28-11-2023 to 11-12-2023 ( Total course duration = 15 hrs ).

(Concerned IIRS Nodal Centre- INTEGRAL UNIVERSITY, LUCKNOW- NODAL CENTER)

Attendance: 90 %

Date: 07-02-2024 Place: Dehradun ्री mran Ullah Khan समन्वपक, विश्वविद्यालप/संस्थान Coordinator, University/ Institution

निदेशक/ Director आई.आई.आर.एस, देहरादून/ IIRS, Dehradu

UID- 515887edd8a9aa27d3bf0ad59e938509 .This Certificate can be validated using URL- https://certificate.iirs.gov.in



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



नामांकन सं. / Enrolment No.: 20231312281504



## CERTIFICATE OF MERIT

## ONLINE COURSE

यह प्रमाणपत्र

MR. SUNEEL

को "भू-डेटा साझाकरण और साइबर सुरक्षा "

में ऑनलाईन पाठचक्रम पर्ण करने पर प्रदान किया जाता है।

इस ऑनलाइन पाठचक्रम का आयोजन 28 नवंबर, 2023 से 11 दिसंबर, 2023 ( कुल पाठचक्रम की अविध =15 घंटे ) के दौरान किया गया ।

(सर्वान्धित आई आई आर एस नाडल केंद्र- इंटेग्रल विश्वविद्यालय, लखनऊ )

#### THIS CERTIFICATE IS

AWARDED TO

MR. SUNEEL

ON COMPLETION OF THE ONLINE COURSE ON

"Geo-data sharing and Cyber Security

THIS ONLINE COURSE WAS CONDUCTED DURING 28-11-2023 to 11-12-2023 ( Total course duration = 15 hrs ).

(Concerned IIRS Nodal Centre- INTEGRAL UNIVERSITY, LUCKNOW- NODAL CENTER)

Online Exam Grade: A+ Attendance: 100 %

Date: 07-02-2024 Place: Dehradun Amran Ullah Khan

समन्वयक, विश्वविद्यालय/संस्थान

Coordinator, University/Institution

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राज्येन्द्र कि

ानदशक/ Director आई.आई.आर.एस, देहरादुन/ IIRS, Dehradun

\*>80% -{A+}, 70-80% -{A}, 50-70% -{B+}, 40-60% -{8}



