



MARATHWADA MITRA MANDAL'S
COLLEGE OF COMMERCE

Affiliated to Savitribai Phule Pune University, Re-Accredited by NAAC with "A" Grade
ISO 9001:2015 Certified, Awarded as Best College by Savitribai Phule Pune University
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Date:-2/09/2024

IIRS ISRO Nodal Center

Report on

The Certificate Course on "Remote Sensing and Digital Image Analysis"

Conducted by IIRS ISRO Nodal Center MMCC
During 27th August 2024 to 20th September 2024

The certificate course on "Remote Sensing and Digital Image Analysis" was conducted online by the IIRS ISRO Nodal Center MMCC from 27th August 2024 to 20th September 2024. The course aimed to provide participants with a comprehensive understanding of the fundamental principles of remote sensing, satellite imagery, and the techniques involved in digital image analysis.

Course Overview:

The course content was designed to cover a wide range of topics essential for the analysis and interpretation of remotely sensed data. The primary focus was on the application of digital image processing techniques using remote sensing data to analyze and derive meaningful information for various purposes, including environmental monitoring, resource management, and urban planning.

The key modules of the course included:



1. **Introduction to Remote Sensing:** Basics of remote sensing and its applications.
2. **Satellite Systems and Sensors:** Overview of different types of satellite sensors, their capabilities, and data acquisition.
3. **Image Preprocessing:** Techniques such as geometric and radiometric corrections, image enhancement, and transformation.
4. **Image Classification:** Supervised and unsupervised classification methods for land use/land cover mapping.
5. **Applications of Remote Sensing Data:** Case studies highlighting the application of remote sensing data in various sectors like agriculture, forestry, disaster management, and urban planning.
6. **Digital Image Analysis Techniques:** Use of software tools for processing and analyzing satellite imagery.

Participant Profile:

A total of 15 participants enrolled in the course from various academic backgrounds. The course was well-received by the participants, with many expressing interest in applying the learned skills in their respective fields of work or study.

Course Delivery and Learning Environment:

The course was conducted entirely online, leveraging the digital platform provided by IIRS ISRO for remote learning. The content was delivered through:

- **Live Sessions:** Engaging lectures by subject matter experts.
- **Hands-On Practical Sessions:** Practical demonstrations of software tools used in remote sensing and image analysis.
- **Assignments and Quizzes:** Regular assignments and quizzes to assess the understanding and application of the course material.

The online mode enabled participants to learn at their own pace while still providing opportunities for interactive discussions and real-time support from instructors.

Course Outcomes:



At the end of the course, all 15 participants successfully completed the required coursework and assessments. Each participant was awarded a certificate from IIRS ISRO in recognition of their successful completion of the course. The skills and knowledge gained from the course equipped the participants with valuable expertise in the field of remote sensing and digital image analysis.

Feedback:

The feedback from participants was overwhelmingly positive. They appreciated the high-quality content, the expertise of the instructors, and the practical exposure provided through hands-on exercises. The course helped participants enhance their understanding of remote sensing technologies and provided them with the tools to effectively analyze satellite imagery for real-world applications.

Conclusion:

The online certificate course on "Remote Sensing and Digital Image Analysis," conducted by IIRS ISRO Nodal Center MMCC, was a successful initiative that imparted valuable knowledge and skills to all participants. The course not only enhanced the participants' technical capabilities in remote sensing but also helped them understand how to apply these skills for practical, real-world applications. The certification from IIRS ISRO adds significant value to the participants' professional profiles, and many are expected to contribute to the growing field of remote sensing and geospatial technologies.



Dr. Sandip Anpat
Coordinator, IIRS ISRO Nodal Center



Dr. Devidas Golhar
Principal





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



COR202414713975

बहिः परिसर 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 **मराठवाडा मित्रा मण्डल कॉलेज ऑफ कॉमर्स, डेक्कन जिमखाना, पुणे** ने भारतीय सुदूर संवेदन संस्थान, इसरो देहारादून द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम **सुदूर संवेदन एवं अंकीय छवि विश्लेषण** में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 2024-08-27 से 2024-09-20 तक किया गया।

This is to certify that **Marathwada Mitra Mandal's College of Commerce, Deccan Gymkhana, Pune**, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehardun on **Remote Sensing and Digital Image Analysis**. This online programme was conducted during August 27, 2024 to September 20, 2024

दिनांक/ Date: 21-10-2024
देहारादून/ 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

COR202414713975

समन्वय का प्रमाणपत्र
CERTIFICATE OF COORDINATION

यह प्रमाणित किया जाता है कि **मराठवाडा मित्रा मण्डल कॉलेज ऑफ कॉमर्स, डेक्कन जिमखाना, पुणे** कार्यरत **???** **संदीप एम. अनपत**, ने **सुदूर संवेदन एवं अंकीय छवि विश्लेषण** विषय पर इस संस्थान द्वारा दिनांक 2024-08-27 से 2024-09-20 तक संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम को समन्वित किया।

This is to certify that **DR. SANDIP M. ANPAT**, working with **Marathwada Mitra Mandal's College of Commerce, Deccan Gymkhana, Pune**, has coordinated the online training course on **Remote Sensing and Digital Image Analysis** conducted by this institute during August 27, 2024 to September 20, 2024

दिनांक/ Date: 21-10-2024
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

नामांकन सं. / Enrolment No. : 20241472503247



CERTIFICATE OF ATTENDANCE ONLINE COURSE

यह प्रमाणपत्र

MR. TUSHAR RAJESH BADEKAR

को “ सुदूर संवेदन एवं अकीय छवि विश्लेषण ”

में ऑनलाइन पाठ्यक्रम पूर्ण करने पर प्रदान किया जाता है।

इस ऑनलाइन पाठ्यक्रम का आयोजन 2024-08-27 से 2024-09-20 (कुल पाठ्यक्रम की अवधि = 24 घंटे) के दौरान किया गया।

(संबन्धित आई.आई.आर.एस नोडल केंद्र- मराठवाडा मित्रा मण्डल कॉलेज ऑफ कॉमर्स, डेक्कन जिमखाना, पुणे)

THIS CERTIFICATE IS

AWARDED TO

MR. TUSHAR RAJESH BADEKAR

ON COMPLETION OF THE ONLINE COURSE ON

“Remote Sensing and Digital Image Analysis”

THIS ONLINE COURSE WAS CONDUCTED DURING **27 August 2024 to 20 September 2024** (Total course duration = 24 hrs).

(Concerned IIRS Nodal Centre- **Marathwada Mitra Mandal's College of Commerce, Deccan Gymkhana, Pune**)

Attendance: **100 %**


Date: **21-10-2024**

Place: Dehradun

UID- 42be4b7626c99b5c4e8acbbf07d2d489 .This Certificate can be validated using URL- <https://certificate.iirs.gov.in>



समन्वयक, विश्वविद्यालय/संस्थान
Coordinator, University/ Institution



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

नामांकन सं. / Enrolment No. : 20241472520134



CERTIFICATE OF MERIT ONLINE COURSE

यह प्रमाणपत्र

MR. OMKAR DHANVE

को “ सुदूर संवेदन एवं अकीय छवि विश्लेषण ”

में ऑनलाइन पाठ्यक्रम पूर्ण करने पर प्रदान किया जाता है।

इस ऑनलाइन पाठ्यक्रम का आयोजन 2024-08-27 से 2024-09-20 (कुल पाठ्यक्रम की अवधि = 24 घंटे) के दौरान किया गया।

(संबन्धित आई.आई.आर.एस नोडल केंद्र- मराठवाडा मित्रा मण्डल कॉलेज ऑफ कॉमर्स, डेक्कन जिमखाना, पुणे)

THIS CERTIFICATE IS

AWARDED TO

MR. OMKAR DHANVE

ON COMPLETION OF THE ONLINE COURSE ON

“Remote Sensing and Digital Image Analysis”

THIS ONLINE COURSE WAS CONDUCTED DURING **27 August 2024 to 20 September 2024** (Total course duration = 24 hrs).

(Concerned IIRS Nodal Centre- **Marathwada Mitra Mandal's College of Commerce, Deccan Gymkhana, Pune**)

Online Exam Grade: **B+**

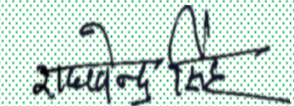
Attendance: **100 %**

Date: **21-10-2024**

Place: Dehradun

UID- 085977720d34e11ed66ef595b96144a5 .This Certificate can be validated using URL- <https://certificate.iirs.gov.in>


समन्वयक, विश्वविद्यालय/संस्थान
Coordinator, University/ Institution


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

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