

# GIS for Environment Management

**Value Addition | Offline/Online**

**Duration: 80 Hours**

GIS | GNSS | Remote Sensing | LiDAR

**REGISTER NOW**



# **KHAGOLAM**

**Institute of Geoinformatics**

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## Course Information

Course Title: **Geospatial Technologies for Environment Management**

Duration: **80 Hours**

Training Modes: **Offline/Online/Hybrid | Full Time/Part-time**

Timing: **Min 3 hours/day | Max 8 hours/day**

## Course Eligibility

- Basic knowledge of windows operating system
- Knowledge of Environmental Concepts
- Students of M.SC or BE/ME in Environment
- Biologists, geologists, conservationists, and other responsible for managing the environment increasingly rely on Geographic Information System (GIS) to even the odds

## Fee

27,000 INR, for resident Nationals of India, Nepal, Bhutan, Bangladesh, Sri Lanka and Maldives, & Myanmar.

850 USD, For Non-Residents of India

**INSTALMENTS:** 5,000 on registration  
23,000 - before course start

Software's	Technologies
<ol style="list-style-type: none"><li>1. ArcGIS Pro</li><li>2. GPS/GNSS</li></ol>	<ol style="list-style-type: none"><li>1. GIS</li><li>2. GNSS/DGNSS</li><li>3. Remote Sensing</li><li>4. LiDAR</li></ol>

## Overview

Earth environment is a single, vast interdependent system. We cannot make demands on the environment in one part of the world without creating consequences in another. Earth's increasingly complex



environmental challenge demand increasingly sophisticated solutions. Geographic information system (GIS) is one solution to humanity's need to better manage. Protect and preserve our environment.

Environmental GIS describes the use of geo-spatial management methodology and tools in order to assist in developing an Environmental Management strategy. As GIS applications reach a broader audience, and the utilization of GIS spreads into new industries every day, the demand within the private and public sectors continues to grow. GIS has become a primary means of communicating spatial information in a multitude of settings in environmental applications.

In this class, you will learn about basic GIS concepts including spatial data structures, data sources and transfer methods, projections and coordinate systems, geo-referencing, fundamental of spatial analysis, with the hands on exercise in Open source GIS Tools. Course exercise specially emphasis on environmental case studies and related tasks. Concepts presented in lecture will be put into practice through hands-on laboratory exercises utilizing the GIS software product like: ArcGIS, QGIS, and GRASS

## You will learn to

1. Understand Map concepts, how GIS works, technical terms in GIS, common task in GIS
2. Describe types of data model and its uses, difference between vector and raster, consideration of scale and generalization
3. Give example on analysis unit and aggregation considerations
4. Explain types of coordinate system, and their need
5. Explain types of maps and their comparison, appropriateness to map variables for different application
6. Describe use of thematic maps in planning and decision making
7. Explain types of measurement scale and difference among them, use of scale specific theme
8. Describe kinds of classification terms and data exploration terms
9. Explain related geo-technologies like GPS, LiDAR, and Remote Sensing etc.
10. Understand 3D mapping, mobile mapping and its advantage



11. Understand map elements and consideration for effective map composition
12. Understand database tables, importing exporting data from spreadsheets, text files etc.
13. Describe SQL querying language, and compose conditional queries
14. Understand joining of the data based on a unique field, view statistics and grouping data tables
15. Explain procedure of geo-referencing, digitization and errors occurs while digitization
16. Understand GIS data sources and formats from local, state and central government
17. Define point to consider for data appropriateness, analyze the relevance and quality of the data, importance of metadata,
18. Describe type of analysis can be perform in GIS, functions and their input, outputs
19. Give example on how GIS can be used for problem solving
20. Describe methods of Surface interpolation and its applications
21. Perform above GIS tasks such as data modeling, geo-database creation, visualization, digitization, map clean up, topology, geo-referencing, data linking, Symbology, geo- processing, overlay analysis and map composition in most popular GIS packages like ArcGIS Desktop or Quantum GIS

### **Case Studies Demonstrated on (any two):**

1. Case Studies Demonstrated on (any two):
2. Biodiversity
3. Pollution
4. Coastal Zone Management
5. Wetlands
6. Change Detection
7. Urban forest management
8. Wildlife management
9. Public Policy and regulation







## How to Apply

Step 1: register at: <https://www.khagolam.com/home/register>

Step 2: Check mail for course & bank details

Step 3: Transfer payment & share transaction receipt on What's App

Step 4: You will receive registration confirmation, by SMS/Call/Whats App.

**REGISTRATION SHALL CLOSE 4 DAYS BEFORE THE START DATE. SPOT REGISTRATIONS ARE NOT ALLOWED.**

## FAQ's:

*Q: Does fees include accommodation and food?*

A: No, but we can help you to get the nearest accommodation.




## Why Khagolam:

- Specialize institute for geospatial technologies
- Job oriented curriculum
- Comprehensive training material
- 100% placement assistance
- Professional Trainers
- Exposure to live projects
- Flexible timings
- Exposure to 3D GIS
- Practice, aptitude and interview rounds
- e-library facility



## Khagolam Institute of Geoinformatics

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