

Professional Geographic Information Systems (GIS)

Comprehensive Training for Spatial Data Experts

Admissions Open - Enroll Now!

Introduction



Preet Sandhuu Founder and MD AVPL International

"Welcome to the cutting-edge world of **Geographic Information Systems (GIS) and Drone Technology**. This advanced course is designed to equip young professionals with the skills and knowledge needed to excel in the field of spatial analysis. Whether you're a recent graduate or a career enthusiast looking to enhance your skill set, this program offers a comprehensive learning experience that combines theoretical knowledge with hands-on practical training."





Introduction to GIS



What is GIS

Geographic Information System (GIS) is a powerful framework that enables the collection, management, analysis, and visualization of spatial and geographic data to help solve real-world problems.

How does GIS work?

RONE PLANET

GIS combines various types of data—such as maps, satellite imagery, and sensor data—and uses sophisticated tools to analyze patterns, relationships, and trends, helping users make informed decisions.



Why GIS

GIS is essential in modern decision-making, empowering industries like urban planning, agriculture, disaster management, and more to leverage geographic data for better outcomes.

Who uses GIS?

From city planners and environmental scientists to businesses and government agencies, GIS is utilized by professionals across a wide range of fields to optimize operations, predict future trends, and improve strategic planning



Why GIS Matters

01

Confusing Learning Path

Many novice GIS analysts struggle to navigate the overwhelming information and lack structured guidance, leading to confusion.

Lack of Mentorship

Finding experienced mentors is difficult, leaving learners without hands-on support to truly master GIS concepts.



High Course Costs

02

Expensive GIS programs create barriers for aspiring professionals, preventing many from accessing quality training.

Information Overload

The sheer volume of GIS resources can be intimidating, making it hard for beginners to identify and focus on key learning areas.



Who should take this course?



And more.....



Key Features





Course Overview

Parameters	Details
Format	Offline (in-person training sessions with live instruction and group work)
Duration	4 Weeks (Immersive, structured learning path)
Weekly Hours	25 to 30 hours/week
Level	Beginner to Intermediate (No prior GIS experience required)
Mode of Instruction	Instructor-led sessions, peer discussions, and guided tool-based exercises
Certification	Yes – Industry-recognized certificate issued on successful completion
Placement Support	Yes – Resume review, mock interviews, company connections and 2 job interviews guarantee.
Batch Size	Limited to ensure personalized learning
Venue	Building No. 464, 2nd floor, Kadipur Enclave, Gali Number 7, opposite Sector - 10 Bus Depot, Kadipur Industrial Area, Gurugram, Haryana 122002





Course Modules

Module 1 : Introduction to Remote Sensing & GIS

Gain an overview of Remote Sensing and understanding of Geographic Information Systems (GIS) and its diverse applications across various fields. Explore the basics of spatial data and coordinate systems that form the foundation of GIS.

Module 3: GIS Software and Tools

Become proficient in using industry-standard GIS software like ArcGIS and QGIS. Understand data conversion techniques and how to interpret remote sensing images for spatial analysis.



Module 2: Spatial Data Types and Management

Learn about various spatial data types and the methods for acquiring them, such as remote sensing, GPS, and public data sources. Discover best practices in data management and metadata documentation for efficient GIS workflows.

Module 4: Cartography and Visualization

Master the principles of cartography and map design to effectively communicate spatial information. Learn visualization techniques that enhance data representation and decision-making.



Course Modules

Module 5: Geospatial Data and Analysis

Explore advanced geospatial analysis methods, including buffering, overlay analysis, and spatial interpolation. Delve into photogrammetry and Digital Elevation Model (DEM) generation for precise spatial modeling.

Module 7: GIS Project Management

Learn key project management principles for GIS projects, focusing on planning, execution, and evaluation. Develop skills in organizing and coordinating GIS workflows to ensure successful project outcomes.

Module 6: Application of GIS

Understand how to apply GIS in real-world scenarios across different industries. Build on cartographic principles and visualization skills to address practical spatial challenges.

Tools & Technology

GIS Software:

· ArcGIS, QGIS, Google Earth Pro,

Drone Technology:

 High-resolution aerial imagery, LiDAR, and multispectral sensors.

Data Formats:

 Vector (Shapefiles, GeoJSON), Raster (GeoTIFF, JPEG 2000), Point Clouds (LAS, PLY).

Advanced Tools:

 AI, machine learning, and cloud-based GIS platforms (e.g., Google Earth Engine).





Applications of GIS

Urban Planning:

Smart city development, traffic management,

and infrastructure planning.

Agriculture:

• Precision farming, crop monitoring, Crop Yield Estimation and soil analysis.

Disaster Management:

• Flood mapping, earthquake risk assessment, Forest Fire Risk Assessment and emergency response.

Environmental Monitoring:

• Deforestation tracking, climate change analysis, and water resource management.

Military and Defense:

• Terrain analysis, surveillance, and strategic planning.

Real World		GIS Layers		Data
	\rightarrow		\rightarrow	Full View
			\rightarrow	Elevations
			\rightarrow	Buildings
			\rightarrow	Routes
			\rightarrow	Boundaries
			\rightarrow	Water Bodies
			\rightarrow	Your Data



AVPE ORONE PLANET

Perks of the Program

Practical Training

Work directly with industry-standard GIS software and drone tools to build real-world technical expertise.

Soft Skills

Strengthen your communication, teamwork, problem-solving, and CV-building skills to excel in the GIS and IT sectors.



Placement Support

Get dedicated placement assistance and access opportunities with top industry leaders.

DRONE PLANET

The Future of GIS

•Al and Machine Learning:

Automated data processing, predictive modeling, and object detection.

•loT and Real-Time Data:

 Integration with IoT for smart city planning and environmental monitoring.

•3D Mapping and AR/VR:

• Immersive geospatial experiences for urban planning and disaster simulation.

•Space Exploration:

• GIS for planetary mapping and space traffic management.





Where Can GIS Take You?







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DRONE PLANET

















AVPE DRONE PLANET

Key Learning Outcomes

By the end of this course, you will be able to

Grasp the core principles of GIS, its components, and real-world relevance.

Understand spatial data types, acquisition methods, and effective data management.

Use industry-standard GIS software for data processing, visualization, and analysis.

Apply GIS techniques to real-world challenges in urban planning, agriculture, and disaster management.

> Explore emerging trends such as Al, IoT, and drone integration in the evolving GIS landscape.







Certification & Assessment







100-hour duration including theory and practicals.

Final assessment includes viva, theory and practical.

Certification aligned to NSQF Level 4.



FAQs

Q1: What are the prerequisites for this course?

A: A bachelor's degree in GIS, geography, environmental science, or a related field is recommended. Basic computer skills are required

Q2: Is there any financial aid available?

A: Yes, we offer scholarships of up to 20%, based on your profile and early-bird registration.

Q3: What software will I learn during the course?

A: You will gain proficiency in industry-standard software such as ArcGIS, QGIS, and remote sensing tools like ERDAS Imagine

.Q4: Will I receive a certification?

A: Yes, upon successful completion of the course, you will receive an industry-recognized certification from AVPL International.

Q5: What kind of job roles can I expect after completing this course?

A: Graduates typically secure roles such as GIS Analyst, Drone Data Specialist, Spatial Data Scientist, and Urban Planner.

Q6: Is there any placement assistance?

A: Yes, we offer job placement assistance with 2 guaranteed interviews through top partners like IndiGIS, Raynas, Unique Solutions and more.