PUBLISHED BY
Mapsol Geo
Geospatial Operating System

PROGRAMME
GEOwave™
Geospatial AI, taught online

Brochure
GW-2026-11

GEOwave™

LEARN · THINK · BUILD · SOLVE · PRACTICE

PROGRAMME BROCHURE · NOVEMBER 2026

Learn to solve real problems with *maps and AI.*

A complete programme in geospatial AI: fully online, at your own pace, with an AI tutor beside every lesson.

Created by Dr. Kiran Manchikanti at Mapsol Geo. Rooted in UW-Madison, taught at UC Riverside and USC. Ten courses, three credentials, real client projects.

FORMAT
Fully online · self-paced

CREDENTIALS
2, 7 and 10 courses

FROM
₹20,000 · US$210 a credit

SCAN TO VISIT
GEOWAVE.MAPSOLGEO.COM



Every lesson has a live map
Farm fields from satellite, read the way GEOwave™ students read them

INSIDE

WHY
The science
Geospatial training sharpens problem solving.

PLATFORM
Map plus lesson
A live map, labs and Geosage, the AI tutor.

PROGRAMME
Ten courses
Three credentials, fully online.

CAREER
Real client work
Hired from the work, not the interview.

© 2026 Mapsol Geo, Inc. All rights reserved.

Why GEOwave

PEER-REVIEWED · SCIENCE ADVANCES, 2022

Proven: geospatial training *changes the brain and sharpens problem solving.*

Geospatial Semester research with Dr. Bob Kolvoord

AT A GLANCE

104M	~2M	52:1
people whose work depends on maps	geospatial specialists	map users for every specialist

WHAT THE RESEARCH FOUND

Students who took a school year of geospatial coursework were measured before and after. Three results stand out.

- **Problem solving measurably improved** after one school year of geospatial coursework.
- **The gains carried into verbal reasoning:** the thinking transferred beyond maps.
- **Brain scans showed the change,** and predicted the gain better than grades did.

AI takes on the routine work. The future belongs to thinkers and solvers.

The jobs that last need people who reason about place, cause and consequence: advanced problem solvers that machines cannot replace. Water, roads, farms and cities have always been planned with maps. Satellites, sensors and AI now produce far more spatial data than trained people can read.



Rotterdam, Netherlands
A port city below sea level: the kind of place GEOwave™ students learn to read

Science Advances, 2022 · doi.org/10.1126/sciadv.abo3555

MAPSOL
PRECISION DECISIONS. QUANTUM LEAPS.

© 2026 Mapsol Geo, Inc. All rights reserved.

The platform

One screen. A live map beside every lesson.



01 · MAPS

The map is the lesson

Bring in spatial data, show it as live layers, classify and style it, and let students explore and build on a real map.

02 · GRADEBOOK

Everything a course needs

Lectures, readings, labs, a midterm and a final, graded in one gradebook students see live.

```
# mapR, spatial R in the browser
heat <- read_layer("hemet_heat_blocks")
w    <- poly2nb(heat) |> nb2listw()
moran.test(heat$temp, w)
▶ RUN
  server-side · nothing to install
Moran's I = 0.61   p < 0.001
✓ hot spots added to the map
```

03 · LABS

Real code, nothing to install

R and Python in the browser, on any device, with results going straight to the map.

04 · GEOSAGE

The AI tutor that teaches by asking

Geosage holds the whole course in memory, reads the map with the student, and replies with the question that moves them forward.

GEOSAGE AT WORK

"Three fields near the canal look weaker. Is it the soil?"

Geosage reads 30 days of satellite imagery, compares each field with its neighbours and checks the canal records. Then it asks: where does the canal water reach last, and what would you check on the ground to be sure?

MAPSOL
PRECISION DECISIONS. QUANTUM LEAPS.

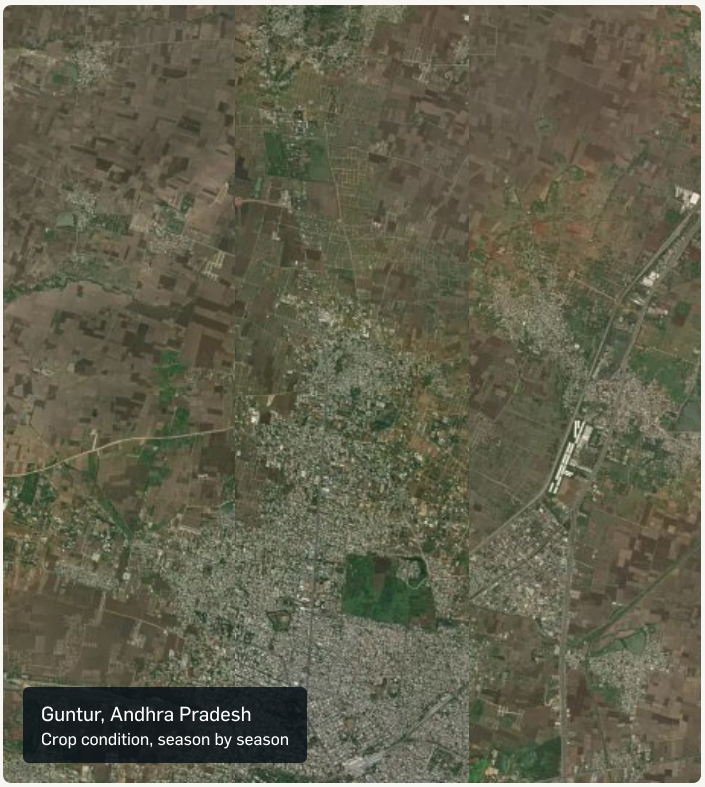
© 2026 Mapsol Geo, Inc. All rights reserved.

The programme

From first course to client work. Fully online.

LEVEL	COURSES	CREDENTIAL	CREDITS
Foundation 2 courses · about 2 months	Spatial and Decision Intelligence · The GOS™ and Real Objectives	Foundation Certificate	4 credits
Core 5 courses · about 6 months	Frames and Reference · Data Systems · Observation · Analytics and GeoAI · Intelligence Products	Certified Intelligence Associate	14 credits in all
Practice 3 courses · about a year	Applied Operations · Capstone · a six-month Residency	Certified Intelligence Practitioner	20 credits in all

F	Frameworks	Learn the idea and why it holds
R	Representation	Learn the principles and tools
A	Acquisition	Build and check real data
M	Methods	Run the method end to end, with AI
E	Engagement	Deliver a result and check it



Guntur, Andhra Pradesh
Crop condition, season by season

EVERY COURSE, FIVE CLEAR STEPS

Short pages, one idea each. Practice follows reading, and Geosage answers with a question.

4 weeks per course

10 graded labs

10 quizzes with Geosage

Stop at any level with a credential, or keep going and pay only the difference. For credit: a minor at seven courses and a PG Diploma at ten, with university approval.

REAL PROBLEMS, FROM REAL PLACES

- **Crop condition, Andhra Pradesh:** season by season, for district officers.
- **Heat islands, Hemet, California:** find the blocks that stay hottest at night.
- **Material recovery, CYCLEsmart™:** help a city bring waste back into use.

₹20,000 (US$210) a credit · a course is 2 credits · contact us for campus pricing and discounts

MAPSOL
PRECISION DECISIONS. QUANTUM LEAPS.
© 2026 Mapsol Geo, Inc. All rights reserved.

For universities, government and industry

A flagship programme on your campus, or training on your own data.

UNIVERSITIES

Your own programme

From a first cohort to a Master's: credit as a minor, a PG Diploma or a Master's, with reasoning measured for every cohort.

GOVERNMENT

Officers on their own data

Each group brings one real problem from its department, solves it during the course, and keeps people who can solve it again.

INDUSTRY

Teams and talent

Staff cohorts on your own problem, plus first pick of our students and graduates.



Example track
Farm fields, canals and villages, read from satellite

YOUR OWN TRACK, UP TO A FULL MASTER'S

Departments build their own shape from thirty base courses around one core: water, terrain, imaging and computation. The Master's takes the ten spine courses, twelve base courses and a thesis over two years, awarded by the university.

EXAMPLE · FARM AND AGRO INTELLIGENCE

A new career: Agricultural Intelligence Officer

Five sciences in one discipline: geospatial sciences, environmental biophysics, soil science, biological systems engineering and agronomy, retuned to farm data.

WE TEACH FIRST. YOUR FACULTY LEAD NEXT.

Semester 1	Mapsol teaches	
Semester 2	Mapsol	Your faculty
Semester 3 on	Your faculty lead	

Sections of forty or fewer, taught online.

CERTIFIED TO TEACH

- **Nominate** four teachers per campus.
- **Learn** alongside the first cohort.
- **Certify** with a portfolio and their students' results.
- **Renew** with two days online each year.

Three ways to begin: fully online cohorts, courses inside your own degrees, or a custom programme with an optional launch on campus.

See the custom programme example on the live site

MAPSOL
PRECISION DECISIONS. QUANTUM LEAPS.

© 2026 Mapsol Geo, Inc. All rights reserved.

Career

AI takes the routine. *Become the solver it can't replace.*

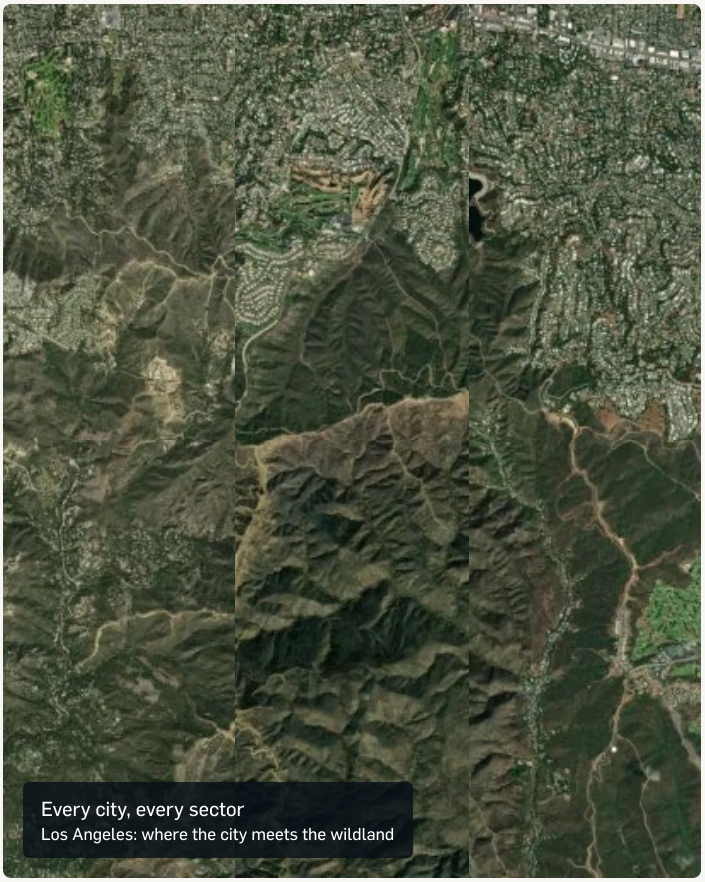
1 **Learn** — Credentials earned

2 **Think** — Reasoning measured on entry and exit

3 **Build** — A portfolio of working products

4 **Solve** — Work a real client accepts

5 **Practice** — Residency, placement or a venture



Every city, every sector
Los Angeles: where the city meets the wildland

HIRED FROM THE WORK, NOT THE INTERVIEW

The strongest students from each cohort practise for six months on live client work under Mapsol mentors. Employers meet them mid-delivery, with a portfolio in place of a CV.

WHAT AN EMPLOYER GETS

- Every answer carries its uncertainty
- Products people act on
- Reasoning tested on entry and completion
- Someone who has already shipped

THE NEED

52:1

map users for every geospatial specialist. Most of the 104 million are engineers, planners, agronomists and officers whose decisions are spatial.

WHERE GRADUATES LAND

Foundation Certificate
A stronger engineer, scientist, officer or planner in their own field

Certified Intelligence Associate
Spatial data and decision analyst

Certified Intelligence Practitioner
Geospatial intelligence practitioner in government and industry

Master's
Research, leadership and new ventures

MAPSOL
PRECISION DECISIONS. QUANTUM LEAPS.
© 2026 Mapsol Geo, Inc. All rights reserved. · 6 / 8

Prices and how to start

₹20,000 a credit. *Campus pricing on request.*

Contact us for campus pricing and discounts.

PER CREDIT
₹20,000 · US$210
Online, per student · about 30 hours of study

ONE COURSE
₹40,000 · US$420
2 credits, at your own pace, with Geosage

THE FIRST TWO COURSES
₹80,000 · US$840
4 credits · Foundation Certificate

SCAN TO VISIT

geowave.mapsolgeo.com

Demos, prices, the STAT 150 class and a custom programme example.

TALK TO US

- India +91 93909 23257
- United States +1 909 801 9183
- Book a time through the live site

Fees per student. Labs and Geosage included. Move up any time and pay only the difference.

NEXT LIVE WEBINAR

Tuesday, 1 December 2026

9:00 AM Pacific · 10:30 PM IST · online, live. A walkthrough of GEOwave™ with Dr. Kiran Manchikanti.



Nairobi, Kenya
One of the fastest-growing cities in Africa: GEOwave™ is taught online, anywhere

MAPSOL
PRECISION DECISIONS. QUANTUM LEAPS.

© 2026 Mapsol Geo, Inc. All rights reserved.

GEOwave™

GEOwave™ teaches people to solve real problems with maps and AI: online, at their own pace, with an AI tutor that teaches by asking, on real data for real clients.

10
courses · Foundation, Core and Practice

3
credentials · from two months to a year

52:1
map users for every geospatial specialist

SCAN FOR THE LIVE SITE
GEOWAVE.MAPSOLGEO.COM

Mapsol Geo

The geospatial operating system for land, cities and resources. Hyderabad, India and Beaumont, California.

Contact

India +91 93909 23257 · United States +1 909 801 9183
geowave.mapsolgeo.com

MAPSOL
PRECISION DECISIONS. QUANTUM LEAPS.

© 2026 Mapsol Geo, Inc. All rights reserved.