



## Certificate Course

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# AI/ML for Public Sector and Development Professionals





## About the Course

The development sector is evolving—and so must we.

You design interventions. You generate evidence. You shape narratives and influence outcomes. But with rising volumes of data, tighter timelines, and growing complexity on the ground, the traditional toolkit is no longer enough.

At the same time, artificial intelligence is flipping the narrative on how knowledge is created, shared, and acted upon. Thus, the question now is no longer if you will engage with AI—but how.

Through this course, **AI/ML for Public Sector and Development Professionals**, we invite you to explore that ‘how’—ethically, practically, and powerfully.

To apply AI not as a buzzword, but as a tool to sharpen your insight, amplify impact, and stay rooted in the human stories that inspire your work.



# Reimagining What You Can Do With AI

We have designed this course to equip you with the tools and knowledge to meet the challenge of doing more with less time, fewer resources, and growing complexity.



## Imagine Being Able To:

**Rapidly distill insights** from thousands of interviews, focus group transcripts, or field notes using Natural Language Processing.

**Forecast program outcomes** and **anticipate risks before scaling** an intervention.

**Detect patterns of exclusion**—by gender, geography, caste, or income—through real-time data analysis.

**Automate resource-intensive processes** such as data cleaning, sentiment analysis, and dashboard generation.

**Inform high-stakes decisions** with clarity, speed, and a deeper evidence base.

This course is not about becoming a programmer. It is about becoming a more effective leader and practitioner who can apply technology with intention and center people while embracing progress.



# Core Outcomes of the Course

By the end of this course, you'll be able to:

- | Understand core AI concepts and their relevance in the development sector.
- | Apply AI tools to qualitative and quantitative data for research and evaluation.
- | Use AI to inform program design, track impact, and improve communication.
- | Work ethically with data—respecting consent, context, and community voice.
- | Confidently engage in tech-forward conversations within your organization and sector.



## Why This Course is Different

- | **Designed by and for the public sector** and **development professionals.**
- | Rooted in the **realities of the Global South**, not Silicon Valley.
- | Values **ethics, inclusion, and practical usability.**
- | No technical background required, just a willingness to explore.

## Our Methodology

Our approach blends theoretical knowledge with hands-on learning:

- | **Interactive Online Workshops:** Led by AI, policy and development sector experts.
- | **Cutting-Edge Coding Sessions:** Engage in practical coding exercises using popular programming tools like Python and R to elevate your skills.
- | **Empirical Case Studies:** Understand how Artificial Intelligence and Machine Learning are applied in real life scenarios.
- | **Expert Mentorship:** Receive valuable guidance and advice from experienced AI professionals and policymakers who will mentor you.
- | **Capstone Project:** Work on a major project where you'll create and showcase an AI solution aimed at addressing a public sector problem.

# Course Modules

## Quarter 1: Foundations & Ethical Grounding

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### Theme: Understanding AI and in the Development Context

#### Module 1.1 : AI Demystified

- What AI is (and isn't)
- Types of AI: ML, NLP, computer vision, generative AI
- Historical context + key concepts relevant to development
- Case Study: UN Global Pulse: Using AI to predict food insecurity

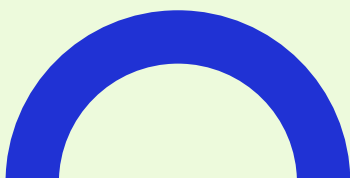
#### Module 1.2 : AI in the Global South

- Challenges of applying AI in low-resource settings
- Localization, equity, data gaps
- Case Study: Aadhaar in India – a discussion on scale, ethics, and exclusion

#### Module 1.3 : Ethics, Bias & Inclusion in AI

- Data justice, responsible AI, gendered data
- Designing for community trust
- Case Study: Algorithmic bias in credit scoring & women entrepreneurs

**Output:** Ethical impact map for your own organization or sector



## Quarter 2: Data Fluency for the Social Sector

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### Theme: Working with Data You Already Have

#### Module 2.1 : Quantitative Data + AI Tools

- Cleaning, organizing, preparing data
- Predictive modeling for outcome forecasting
- Case Study: Togo's cash transfer targeting using mobile data and ML

#### Module 2.2 : Qualitative Data & NLP

- Using NLP to analyze open-ended responses, interviews, FGDs
- Language challenges and low-resource NLP models
- Case Study: NLP for child protection hotline data in South Africa

#### Module 2.3 : Geospatial Data & Remote Sensing

- Mapping need, targeting services
- Satellite + drone data for monitoring
- Case Study: Forest Watch / AI for climate action in tribal belts

**Output:** Data story or insight dashboard using sample data

## Quarter 3: Applying AI to Program Design & M&E

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### Theme: Enhancing Program Design, Implementation, and Feedback

#### Module 3.1 : AI-Driven Program Design

- Adaptive learning systems
- Identifying emerging needs & feedback loops
- Case Study: Gram Vaani's IVR + NLP integration for real-time program refinement

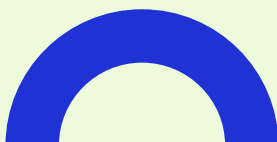
#### Module 3.2 : AI for Monitoring and Evaluation

- Automating M&E dashboards
- Real-time vs. longitudinal impact tracking
- Case Study: WFP's AI-based supply chain monitoring in East Africa

#### Module 3.3 : Generative AI for Development Communication

- Using LLMs to write policy briefs, generate reports, craft summaries
- Creating content for multilingual, local contexts
- Case Study: ChatGPT-powered education content for community radio

**Output:** AI-augmented M&E plan or communication brief



## Quarter 4: Strategic Leadership & Systems Thinking

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### Theme: Driving Change, Scaling Responsibly

#### Module 4.1 : Building an AI Roadmap for Your Organization

- Tech readiness, data governance, capacity building
- Procurement & partnerships in AI deployment
- Case Study: DataKind's collaboration model with nonprofits

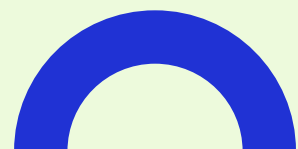
#### Module 4.2 : Leading with Evidence in AI-Enabled Systems

- Storytelling with data + influencing decisions
- Framing policy narratives using AI insights
- Case Study: AI-generated insights in education reform in Bangladesh

#### Module 4.3 : Capstone Project & Peer Feedback

- Apply AI to a real challenge in your organization or sector
- Present to a panel of peers and mentors
- Receive technical and ethical critique

**Output:** Final project + publication-ready brief or dashboard





# Program Features



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**Monthly live sessions +  
self-paced video modules**



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**Guest lectures from  
global and local experts**



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**Peer learning circles &  
mentor support**



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**Downloadable tools,  
prompts, and checklists**



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**Final showcase event  
with certification**

# Apply Now

[Click here to apply](#)

## Early Bird Deadline:

**30% discount** for  
**first 20 participants**

## Have Questions?

Reach Out to us at:  
[ranjan.yadav@educationnest.com](mailto:ranjan.yadav@educationnest.com)

### Duration:

6 Months

### Start Date:

30th May 2025

### Time Commitment:

2 – 4 hours per week

### Fee: :

Rs. 100,000/-

### Format:

Online

### Requirement:

Laptop

### Certification:

Issued by Sambodhi

### Total Number of Seats:

50

### Scholarships:

Available for grassroots  
organizations and  
nonprofit professionals

### Group Discounts:

For 3 or more  
participants from the  
same organization



## Contact Details

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For all admission and scholarship related queries, please write to

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