M&E in AI and Automation Training Course

Professional Development Training Course Outline

Category	Monitoring and Evaluation	**Duration**	10 Days
Base Fee	$3,000 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In the era of rapid digital transformation, integrating Artificial Intelligence (AI) and automation into organizational processes has revolutionized monitoring and evaluation (M&E). This training course equips professionals with cutting-edge skills to leverage AI-driven analytics, predictive modeling, and automation technologies for real-time program monitoring, performance optimization, and impact assessment. Participants will gain hands-on experience in applying machine learning, data visualization, and process automation to enhance decision-making, efficiency, and accountability in both private and public sector initiatives.

M&E in AI and Automation Training Course is designed for M&E specialists, data analysts, and technology enthusiasts aiming to harness AI-powered solutions to strengthen program effectiveness. Through practical case studies, participants will explore real-world applications such as automated data collection, anomaly detection, AI-assisted dashboards, and predictive outcome modeling. By the end of this course, learners will be equipped with a robust understanding of how automation and AI can transform traditional M&E frameworks into intelligent, scalable, and adaptive systems.

Programme Curriculum

M&E in AI and Automation Training Course

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Course Objectives

By the end of this training, participants will be able to:

1. Understand the role of AI and automation in modern M&E systems.
2. Apply predictive analytics and machine learning for program monitoring.
3. Design automated data collection and reporting pipelines.
4. Use AI-powered dashboards for real-time insights.
5. Implement process automation to reduce human error and inefficiencies.
6. Integrate natural language processing (NLP) for qualitative data analysis.
7. Analyze big data for M&E using cloud-based AI tools.
8. Apply risk detection algorithms for program compliance.
9. Use visual analytics to enhance decision-making and reporting.
10. Assess AI model performance and reliability in M&E contexts.
11. Optimize resource allocation through automation-driven insights.
12. Develop ethical AI practices for M&E, ensuring data privacy and bias mitigation.
13. Foster innovation and continuous improvement in monitoring processes using AI.

Target Audience

1. M&E Specialists and Officers
2. Data Analysts and Data Scientists
3. Program Managers and Directors
4. ICT and Automation Professionals
5. Policy Makers and Government Officials
6. NGO and Development Sector Professionals
7. Technology Consultants and AI Practitioners
8. Graduate Students in Data Analytics or Public Policy

Course Modules

Module 1: Introduction to AI and Automation in M&E

- Overview of AI, automation, and M&E integration
- Key trends and emerging technologies
- Benefits of AI in program evaluation
- Challenges and limitations
- Case study: AI-driven M&E in health programs

Module 2: Fundamentals of Machine Learning for M&E

- Introduction to supervised and unsupervised learning
- Predictive modeling for monitoring outcomes
- Feature selection and data preprocessing
- Model evaluation metrics
- Case study: Predictive analytics for education programs

Module 3: Automated Data Collection Techniques

- Web scraping and IoT data collection
- Mobile and sensor-based data capture
- Data cleaning and validation processes
- Automated survey tools
- Case study: Automation in agriculture project monitoring

Module 4: AI-Powered Dashboards and Visualization

- Design principles for M&E dashboards
- Real-time data visualization tools
- KPI tracking using AI insights
- Interactive visual reporting
- Case study: Government health dashboard implementation

Module 5: Process Automation in M&E

- Robotic Process Automation (RPA) basics
- Automating repetitive data tasks
- Workflow optimization
- Case study: Automation in NGO reporting systems

Module 6: Natural Language Processing (NLP) for Qualitative Data

- Text analysis and sentiment detection
- Topic modeling for large datasets
- AI-assisted report generation
- Case study: Social media analysis for public health programs

Module 7: Big Data Analytics for M&E

- Introduction to big data tools
- Cloud-based AI platforms
- Handling large datasets efficiently
- Case study: Big data analytics in disaster response

Module 8: AI for Risk Detection and Compliance

- Fraud detection using AI
- Anomaly detection in program data
- Early warning systems
- Case study: Risk management in microfinance programs

Module 9: Predictive Modeling for Program Impact

- Forecasting outcomes with ML models
- Scenario analysis
- Monitoring performance trends
- Case study: Predicting student performance outcomes

Module 10: Ethical AI Practices in M&E

- Data privacy and security
- Bias mitigation strategies
- Responsible AI governance
- Case study: Ethical AI adoption in government programs

Module 11: AI-Enhanced Resource Allocation

- Optimizing program budgets
- Predictive resource planning
- Real-time allocation adjustments
- Case study: Resource optimization in healthcare distribution

Module 12: Advanced Visualization and Storytelling

- Data storytelling principles
- Interactive visual narratives
- Communicating AI insights to stakeholders
- Case study: Visual storytelling in climate change programs

Module 13: Integrating AI with Existing M&E Systems

- Compatibility with traditional M&E frameworks
- System integration challenges
- Migration strategies for automation
- Case study: AI integration in NGO monitoring systems

Module 14: Continuous Improvement through AI Feedback Loops

- Setting up AI-driven feedback systems
- Adaptive program evaluation
- Real-time course corrections
- Case study: Adaptive M&E in social protection programs

Module 15: Capstone Project

- Participants design an AI-enabled M&E system
- Apply automation and analytics techniques
- Present solutions to peers and trainers
- Receive feedback and optimization suggestions
- Case study: Simulated multi-sector program evaluation

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.

- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	04 Dec 2026	Online	$2,000
23 Nov 2026	04 Dec 2026	Physical	$3,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

Start Date	End Date	Location	Price
23 Nov 2026	04 Dec 2026	Physical	$9,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com