

# Natural Language Processing for Evaluation 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

Natural Language Processing (NLP) is revolutionizing the way organizations analyze qualitative data, uncover insights, and enhance decision-making in monitoring and evaluation (M&E). Natural Language Processing for Evaluation Training Course equips participants with practical skills to leverage NLP techniques for evaluating program performance, understanding stakeholder feedback, and automating text-based analysis. Through hands-on exercises, real-world case studies, and advanced analytical tools, learners will gain the confidence to transform unstructured textual data into actionable intelligence, optimizing impact assessment and evidence-based decision-making.

Participants will explore cutting-edge NLP methodologies, including sentiment analysis, topic modeling, entity recognition, and automated reporting, while integrating these approaches into M&E frameworks. The course emphasizes practical applications for program evaluation, policy analysis, and data-driven storytelling, ensuring that learners can immediately apply skills to real-world M&E challenges. By the end of the training, participants will be capable of extracting meaningful insights from complex textual data, enhancing the accuracy, efficiency, and relevance of evaluation processes.

### Programme Curriculum

#### Natural Language Processing for Evaluation Training Course

##### Introduction

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### **Course Duration**

10 days

### **Course Objectives**

1. Understand the fundamentals of Natural Language Processing and its relevance in M&E.
2. Apply text preprocessing techniques for high-quality data analysis.
3. Perform sentiment analysis to evaluate stakeholder feedback.
4. Implement topic modeling to uncover hidden trends and patterns.
5. Conduct named entity recognition for program data extraction.
6. Automate qualitative data coding using NLP tools.
7. Integrate NLP with dashboards for real-time evaluation insights.
8. Use machine learning models for predictive evaluation analytics.
9. Enhance decision-making through NLP-driven data visualization.
10. Leverage social media and survey text data for program monitoring.
11. Assess program impact using NLP-enhanced evaluation techniques.
12. Develop actionable reports using automated text summarization.
13. Address ethical considerations and data privacy in NLP applications.

### **Target Audience**

1. Monitoring and Evaluation Officers
2. Program Managers and Coordinators
3. Data Analysts and Research Assistants
4. Policy Analysts
5. Social Scientists
6. Impact Evaluation Consultants
7. NGO and Development Practitioners
8. IT Professionals working in Data Analytics and AI

### **Course Modules**

#### **Module 1: Introduction to NLP and Evaluation**

- Definition and scope of NLP in evaluation
- History and evolution of NLP techniques
- Applications in program monitoring and evaluation
- Key NLP tools and frameworks
- Case Study: NLP use in evaluating social development programs

## **Module 2: Text Data Preprocessing**

- Tokenization and normalization
- Stop words removal and stemming/lemmatization
- Handling special characters and emojis
- Text vectorization techniques
- Case Study: Preparing survey data for sentiment analysis

## **Module 3: Sentiment Analysis**

- Understanding sentiment in textual data
- Rule-based vs. ML-based sentiment approaches
- Analyzing feedback from beneficiaries
- Visualization of sentiment trends
- Case Study: Sentiment analysis for public health campaigns

## **Module 4: Topic Modeling**

- Latent Dirichlet Allocation (LDA)
- Non-negative Matrix Factorization (NMF)
- Identifying key themes in program reports
- Practical exercises with Python or R
- Case Study: Topic modeling in NGO impact reports

## **Module 5: Named Entity Recognition (NER)**

- Concept of entities in text
- Techniques for automated entity extraction
- Application in stakeholder mapping
- Integration with dashboards
- Case Study: Extracting entities from policy documents

## **Module 6: NLP for Surveys and Feedback**

- Textual survey analysis
- Open-ended question coding
- Automated insight generation
- Combining NLP with traditional metrics
- Case Study: Feedback analysis for education programs

## **Module 7: Text Classification**

- Supervised machine learning for text
- Categorizing program data automatically
- Model evaluation metrics
- Real-world applications in M&E
- Case Study: Classifying beneficiary reports by outcome

## **Module 8: Text Summarization**

- Extractive vs. abstractive summarization
- Generating concise reports

- NLP for executive decision-making
- Automating routine reporting tasks
- Case Study: Summarizing NGO evaluation reports

### **Module 9: NLP and Social Media Analytics**

- Social listening and monitoring programs
- Hashtag and keyword analysis
- Detecting emerging trends
- Case Study: Evaluating public campaigns via Twitter data

### **Module 10: Predictive Analytics with NLP**

- Forecasting program outcomes
- Regression and classification models
- Integrating NLP insights with structured data
- Case Study: Predicting dropout rates in education programs

### **Module 11: Visualization of NLP Insights**

- Word clouds, graphs, and dashboards
- Interactive data visualization tools
- Communicating findings to stakeholders
- Case Study: Visualization of beneficiary feedback trends

### **Module 12: Ethical Considerations in NLP**

- Data privacy and security
- Bias in NLP algorithms
- Responsible AI practices in evaluation
- Case Study: Addressing ethical challenges in social media monitoring

### **Module 13: Integrating NLP in M&E Systems**

- Linking NLP outputs to KPIs
- Automation in monitoring systems
- Case Study: NLP-driven M&E platform for health interventions

### **Module 14: Advanced NLP Techniques**

- Deep learning for text analysis
- Transformer models (e.g., BERT, GPT) in evaluation
- Fine-tuning NLP models for specific programs
- Case Study: Using transformer models for large-scale evaluation

### **Module 15: Capstone Project**

- Hands-on project using real evaluation data
- NLP pipeline development
- Reporting and visualization
- Peer review and feedback sessions
- Case Study: Comprehensive NLP evaluation report for an NGO

## 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.com](mailto:info@fineskilltrainingcenter.com) 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   |
|-------------|-------------|----------|---------|
| 07 Sep 2026 | 18 Sep 2026 | Online   | \$2,200 |
| 14 Sep 2026 | 25 Sep 2026 | Online   | \$2,200 |
| 21 Sep 2026 | 02 Oct 2026 | Online   | \$2,200 |

| Start Date  | End Date    | Location | Price   |
|-------------|-------------|----------|---------|
| 28 Sep 2026 | 09 Oct 2026 | Online   | \$2,200 |
| 05 Oct 2026 | 16 Oct 2026 | Online   | \$2,200 |
| 12 Oct 2026 | 23 Oct 2026 | Online   | \$2,200 |
| 19 Oct 2026 | 30 Oct 2026 | Online   | \$2,200 |
| 26 Oct 2026 | 06 Nov 2026 | Online   | \$2,200 |

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

Register Online Now

Email: [info@fineskilltrainingcenter.com](mailto:info@fineskilltrainingcenter.com) | Website: [www.fineskilltrainingcenter.com](http://www.fineskilltrainingcenter.com)