

FULL CURRICULUM • 2026

Natural Language Processing (NLP)

Teach a machine to read, understand and reply like a human.

Every module, every lesson — the complete syllabus, end to end.

25

MODULES

96

LESSONS

7

MONTHS

₹29,000

FULL PROGRAMME

What this course covers

1

Level 1 • Beginner

Fundamentals of Python Programming • Python Libraries-Numpy,Pandas,Matplotlib • Regular Expressions in Python

2 months • 8 modules • 47 lessons • ₹7,000

2

Level 2 • Intermediate

Text Representation Techniques in NLP • Working with Text Files • Sentiment Analysis in NLP

2 months • 8 modules • 25 lessons • ₹9,500

3

Level 3 • Advanced

Sentiment Analysis using Deep Learning • Hate Speech Classification • Poetry Generation in NLP

3 months • 9 modules • 24 lessons • ₹12,500

The whole journey

This is the complete syllabus for Natural Language Processing (NLP) — 25 modules and 96 lessons, in the order you will learn them. The level markers show how far each stage carries you, but the curriculum runs as one continuous path from the first lesson to the last.

1

LEVEL 1

Beginner

Fundamentals of Python Programming · Python Libraries-Numpy,Pandas,Matplotlib · Regular Expressions in Python

2 months · 8 modules · 47 lessons · ₹7,000

1. Introduction to Python-Data Types & Data Structures

7 lessons

- Machine Learning Intuition
- Python Data Types
- Data Types Practical
- List in Python
- Tuples in Python
- Dictionary in Python
- Sets in Python

2. Fundamentals of Python Programming

5 lessons

- Loops in Python
- Comprehension in Python
- Functions in Python
- Lambda Functions in Python
- Exception Handling in Python

3. Python Libraries-Numpy,Pandas,Matplotlib

8 lessons

- Numpy Array Creation
- Numpy Operations
- Numpy Bonus Operations
- Pandas in Python
- Working with CSV Files
- Pandas Operations
- Pandas Bonus Operations
- Matplotlib in Python

4. Regular Expressions in Python

1 lessons

- Regular Expressions in Python

5. Introduction to NLP-Challenges & Applications

3 lessons

- NLP-Introduction, Challenges & Applications
- Text Classification & Translation Pipeline
- Text Clustering & Classification

- **6. Text Cleaning & Preprocessing using NLTK** 10 lessons
 - Introduction to NLTK
 - Tokenization
 - Stop Word Removal
 - Stemming and Lemmatization
 - Named Entity Recognition
 - Introduction to POS Tagging
 - POS Tagging Architecture
 - POS Tagging Approach & Applications
 - Rare Word Removal
 - Correcting Words using NLTK
- **7. Text Cleaning and Preprocessing using SpaCy** 7 lessons
 - Tokenization using SpaCy
 - POS Tagging using SpaCy
 - Dependency Parsing using SpaCy
 - Lemmatization using SpaCy
 - NER using SpaCy
 - Vector Similarity in spaCy
 - NLTK vs spaCy
- **8. Machine Learning Crash Course** 6 lessons
 - Linear Regression
 - Logistic Regression
 - Support Vector Machine
 - K Nearest Neighbors Algorithm
 - Decision Trees
 - Random Forest

2

LEVEL 2

Intermediate

Text Representation Techniques in NLP · Working with Text Files · Sentiment Analysis in NLP

2 months · 8 modules · 25 lessons · ₹9,500

- **9. Text Representation Techniques in NLP** 4 lessons
 - Bag of Words Technique
 - TF-IDF
 - Word Embeddings
 - Sentence Embeddings
- **10. Working with Text Files** 1 lessons
 - Working with Text Files
- **11. Sentiment Analysis in NLP** 9 lessons
 - What is Sentiment Analysis
 - Challenges, Applications & Takeaways
 - How sentiment is detected
 - Sentiment Analysis Implementation
 - Text Preprocessing for Sentiment Analysis
 - Text Cleaning Code
 - Sentiment Analysis with machine Learning
 - ML for Sentiment Analysis Code
 - Training & Hyperparameter Tuning for Sentiment Analysis

- **12. ML Model Deployment using Streamlit** 3 lessons
 - What is Model Deployment
 - Introduction to streamlit
 - Model Deployment using Streamlit
- **13. Multi Label Text Classification** 2 lessons
 - Multi Label Classification
 - Multi Label Binarization
- **14. Sentiment Analysis using WordVec Embeddings** 3 lessons
 - Word2Vec Embeddings
 - Data Preparation for Sentiment Analysis using Word2Vec Embeddings
 - Data preprocessing for sentiment analysis using word2vec embeddings
- **15. Emotion Recognition in Text using GloVe** 1 lessons
 - Emotion Recognition in Text using GloVe
- **16. CV Parsing in NLP** 2 lessons
 - What is CV Parsing in NLP
 - Implementation of CV Parsing using Spacy3

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LEVEL 3

Advanced

Sentiment Analysis using Deep Learning · Hate Speech Classification · Poetry Generation in NLP

3 months · 9 modules · 24 lessons · ₹12,500

- **17. Sentiment Analysis using Deep Learning** 7 lessons
 - What is Deep Learning
 - Machine Learning vs. Deep Learning
 - Sentiment Analysis using Deep Learning
 - Data Preparation for Sentiment Analysis using Deep Learning
 - Train Test Split for Sentiment Analysis Using Deep Learning
 - Artificial Neural Networks
 - Convolutional Neural Networks
- **18. Hate Speech Classification** 4 lessons
 - Introduction to Hate Speech Classification
 - Workflow of Hate Speech Classification
 - Implementation of Hate Speech Classification
 - Testing in Hate Speech Classification
- **19. Poetry Generation in NLP** 3 lessons
 - Understanding RNN and its types
 - Challenges of RNNs
 - Poetry Generation in NLP

○	20. Transformers	4 lessons
	• Introduction to Transformers • Encoder Decoder Architecture • Applications of Transformers • Pretrained Language Models - BERT & GPT	
○	21. Prompt Engineering	1 lessons
	• Prompt Engineering - Techniques & Examples	
○	22. Multi-modal NLP	1 lessons
	• Multi-modal NLP & Applications	
○	23. Intro to Gen AI	1 lessons
	• Introduction to GEN AI	
○	24. Capstone Project	1 lessons
	• Capstone Project Hands-On	
○	25. Conclusion	2 lessons
	• NLP - Conclusion • NLP - Future & Scope	

Certificates & what comes next

You receive a certificate at the end of every level you finish. Join for a single level or the full programme — the choice is yours. Learners who stand out may be invited to work on live client projects as interns; these places are merit-based, limited, and depend on projects being available.