# Natural Language Processing (NLP) **Program**

#### Master NLP. Teach Machines to Understand Language.

Natural Language Processing (NLP) is the core of human-machine interaction. From chatbots and sentiment analysis to language translation and text summarization, NLP powers intelligent applications across industries.

At Certed Technologies, our NLP Program helps you build expertise in deep linguistic processing, transformer models, and real-time text-based applications—equipping you for high-demand roles in AI and data science.



### Why NLP? Why Now?

Text data is exploding—emails, chats, social media, customer reviews, medical transcripts. NLP enables businesses to derive insights and build smart interfaces from unstructured text. With the rise of Generative AI, tools like ChatGPT, BERT, and Whisper have become mainstream. The industry needs experts who can build and optimize these systems.



### Learn from NLP Practitioners

Our instructors are NLP researchers, language model developers, and AI product architects who bring deep industry and research knowledge. Learn both traditional NLP and cutting-edge transformer-based techniques with real-world examples.

## 🜐 Program Highlights

**Feature Description** 

**Duration** 6 Months / 450 Hours

**Delivery Mode** Hybrid (Online + Offline)

Tools & Platforms NLTK, spaCy, Hugging Face, TensorFlow, PyTorch, OpenAl

**Project Work** 5+ Projects + 1 NLP Capstone

**Certifications** Industry Certificate + NLP Competency Badge

Career Support Resume Building, Mock Interviews, Hiring Support

### What You'll Learn

A **comprehensive NLP curriculum**—from basics to transformer models.

### Module 1: Introduction to NLP

- What is NLP? Applications & Challenges
- Tokenization, Lemmatization, Stop Words
- Bag of Words, TF-IDF, Word Embeddings

### Module 2: Text Preprocessing & Linguistic Fundamentals

- Regular Expressions for Text Cleaning
- POS Tagging, Chunking, Dependency Parsing
- Named Entity Recognition (NER)

### Module 3: Traditional NLP Techniques

- Text Classification (Spam Detection, Review Sentiment)
- Topic Modeling (LDA, NMF)
- Document Similarity & Clustering

### Module 4: Deep Learning for NLP

Word2Vec, GloVe, FastText

- RNNs, GRUs, LSTMs for Sequence Modeling
- Seq2Seq Models for Translation & Summarization

### Module 5: Transformers & Pre-trained Models

- Attention Mechanism & Self-Attention
- BERT, RoBERTa, DistilBERT
- Hugging Face Transformers Library
- Prompt Engineering with LLMs

### Module 6: Building NLP Applications

- Sentiment Analysis Dashboard
- Chatbots with Transformers & Rasa
- Resume Screening, Auto Email Replies
- GenAl Text Generation & Summarization

### Module 7: Deployment & Ethics

- Creating NLP APIs with Flask/Streamlit
- Hosting on Hugging Face Hub or AWS
- Bias in Language Models, Responsible AI in NLP

### Career Outcomes

Prepare for in-demand NLP roles like:

NLP Engineer

- Data Scientist (NLP Focus)
- Al Chatbot Developer
- Language Model Specialist
- Research Analyst in Al Labs

#### **Industries Hiring NLP Experts:**

Healthcare | EdTech | LegalTech | HRTech | FinTech | Marketing | SaaS



### **Tools & Technologies Covered**

Python | NLTK | spaCy | Scikit-learn | TensorFlow | PyTorch | Hugging Face | OpenAl API | Streamlit | Google Colab | Rasa | Git & GitHub

### Capstone Project Examples

- Al-Powered Chatbot for Customer Queries
- Sentiment & Emotion Detection in Tweets
- Resume Ranker using NLP & Transformers
- Legal Document Classification System
- News Headline Summarization with BERT

### Certification

Earn a **Joint Certificate** from Certed Technologies + Industry Partners and a **Badge showcasing NLP & LLM competencies**, shareable on LinkedIn and your resume.

### What Makes This Course Unique?

- Real-World NLP Project Exposure
- Access to Transformer & LLM Ecosystem
- Generative AI & Prompt Engineering Modules
- Lifetime Access to Learning Hub
- Mentorship & Career Community Access

### To Upcoming Batch

Batch Start Date	Mode	Status
15 July 2025	Online	Open
22 July 2025	Offline	Few Seats Left
05 August 2025	Hybrid	Open

### Custom NLP Training for Corporates

### **® NLP Enablement for Enterprise Teams**

We help organizations **leverage text intelligence** across departments—be it customer support, HR automation, market sentiment, or internal document processing. Our NLP programs are fully **customizable** to your data, teams, and workflows.

### Customization Options:

- Curriculum Personalization: Chatbot development, document AI, voice-to-text, or GenAI
- Enterprise Projects: Use your datasets for custom solutions
- **Delivery Formats**: Onsite, online, hybrid, or self-paced
- Certifications: With internal skill validation

• Post-Training Consulting: Ongoing implementation help & support

### **!!** Ideal for Teams:

- Data Science & ML Engineers
- Business Intelligence Analysts
- CX & Customer Support Automation Teams
- HR Tech & Talent Teams (NLP in Screening & Evaluation)
- Research & Knowledge Management Teams
- CxOs & Al Strategy Leaders

### **L** Talk to an Advisor

Email: support@certedtechnologies.com

Call/WhatsApp: +91-8920158923 | +91-9009015026

### Ready to Build Language Intelligence?

"NLP turns raw text into insight. Be the one who builds the intelligence behind every conversation."

[ Penroll Now] [ Request a Callback]

### Prequently Asked Questions (FAQs)

Who is this course for?
Graduates, professionals, and tech enthusiasts who want to master Natural Language

Processing.

#### 2. Do I need prior AI or ML knowledge?

Not mandatory. Basic Python helps. NLP fundamentals are covered from scratch.

#### 3. Will I learn Transformer models?

Yes. BERT, GPT-like models, Hugging Face, and prompt engineering are included.

#### 4. Is there a certification?

Yes. Industry-recognized joint certification + LinkedIn shareable skills badge.

#### 5. Are hands-on projects part of the course?

Absolutely! Every module has projects, including a real-world capstone.

### 6. What delivery formats are available?

Online (live), Offline (classroom), Hybrid (your choice).

#### 7. Is career support included?

Yes. Resume reviews, mock interviews, and hiring connections are part of the program.

#### 8. Will I work with large language models?

Yes. Hugging Face Transformers, OpenAl GPT APIs, and prompt engineering are taught.

#### 9. Will I get access to course content post-completion?

Yes. You get lifetime access to videos, codebases, slides, and updates.

#### 10. Can this be customized for corporate teams?

100%. We offer NLP courses tailored for corporate use cases and team roles.