



**J.B. INSTITUTE OF ENGINEERING AND TECHNOLOGY
(UGC AUTONOMOUS)**

(Accredited by NBA&NAAC, Approved by AICTE & Permanently Affiliated to JNTUH
Hyderabad)

Yenkapally (Vi), Moinabad (M). P.O. Himayat Nagar, RR District, Hyderabad 500075

Department of Electronics and Computer Engineering



Add on Program on

**NATURAL LANGUAGE PROCESSING
Report**

Module Number: 3

Key Topics Covered: INTERMEDIATE NLP & DEEP LEARNING

Neural networks overview

Word embeddings revisited

Using pre-trained Word2Vec, GloVe

Train-test split

Test Classification pipeline

Resource Person(s): Mrs.K.Pooja and Mr.M.Syam Babu

Date and Time of Session: 1.11.2025 and 1.30pm to 3.30pm

Duration: 2h

Mode of Delivery: Face to Face and Power point presentation

Target Audience: 2nd, 3rd and 4th year students

Number of Participants: 52

Venue: A-403

Objectives of the Course Module:

- To make human-computer communication more intuitive and efficient by allowing computers to understand and process language in its natural form.
- To develop machines that can comprehend and react to spoken and written text, accounting for complexities like slang, accents, and grammar.
- To enable computers to produce coherent, contextually appropriate, and useful text or speech in response to human input.



**J.B. INSTITUTE OF ENGINEERING AND TECHNOLOGY
(UGC AUTONOMOUS)**

(Accredited by NBA&NAAC, Approved by AICTE & Permanently Affiliated to JNTUH Hyderabad)

Yenkapally (Vi), Moinabad (M). P.O. Himayat Nagar, RR District, Hyderabad 500075

Department of Electronics and Computer Engineering



Expected Learning Outcomes of the Module:

By the end of the module, students could:

- The ultimate goal is to enable computers to understand and process human language as effectively as humans do.
- NLP used for processing Chatbots, translation and summarization.
- Types of Neural networks FNN, CNN, LSTM, TRANSFORMER, GAN.
- NLP provides valuable insights from text and speech data, making interactions with technology more intuitive and efficient.

Summary:

Natural language processing (NLP) is a subfield of computer science and artificial intelligence (AI) that uses machine learning to enable computers to understand and communicate with human language.


Signature of the Head of the Department
Dept. of ECM
J.B Institute of Engineering & Technology
Bhaskar Nagar, Yenkapally (V)
Moinabad (M), R.R. Dist.- 500 075