

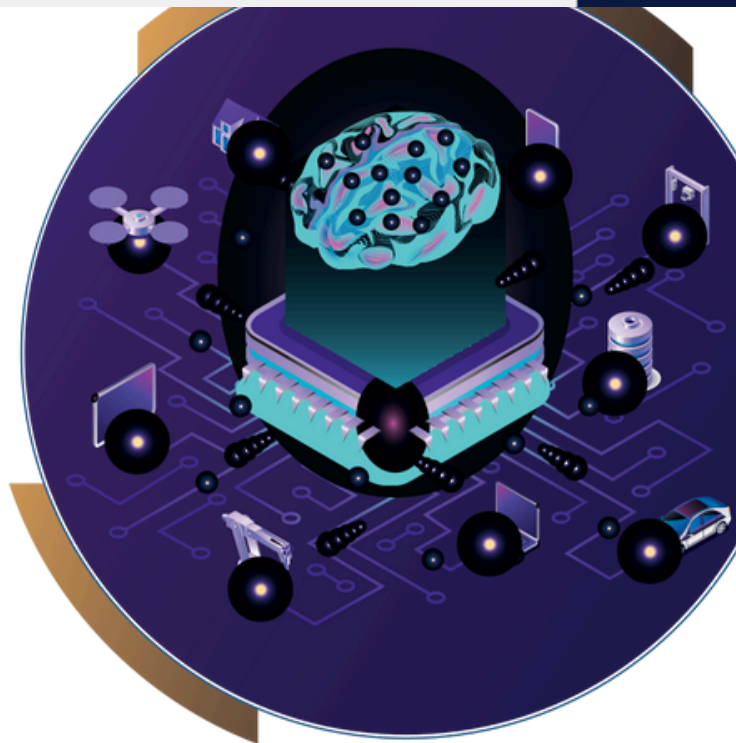


**TIC**

# ENGLISH CODE ARTIFICIAL INTELLIGENCE

**INTEGRATOR- Module 1**

**Unit 3**



# CONTEXTUALIZATION OF MY LEARNING

In this Integrator module, students will delve into Natural Language Processing (NLP), and its applications to enrich AI-related reading, and writing skills. The focus includes understanding challenges like ambiguity and bias in NLP, and building a robust vocabulary with terms such as tokenization and part-of-speech tagging. Exploring deep learning in NLP, students will grasp concepts like word embeddings and recurrent neural networks. By the end of the course, they'll adeptly navigate the lexicon associated with neural network architectures, and layers in language processing, ensuring a comprehensive understanding of NLP within the AI context.



# General objective

## UNIT 3

- Develop a profound comprehension of Natural Language Processing (NLP) concepts, including challenges like ambiguity and bias, and key terms such as tokenization, stemming, and part-of-speech tagging.
- Attain linguistic proficiency in the vocabulary associated with neural networks, architecture, and layers within the context of language processing, ensuring the ability to navigate and comprehend readings on these topics in the field of AI.

## SKILLS TO DEVELOP

- Linguistic competence.
- Pragmatic competence.
- Sociolinguistic competence.
- Topical Competence.

**Linguistic Competence:** Acquire a robust command of linguistic skills in the field of AI, focusing on the vocabulary and technical terminology associated with Natural Language Processing (NLP) and neural network architectures.

**Pragmatic Competence:** Develop pragmatic competence by applying language skills in practical contexts, such as understanding and addressing challenges like ambiguity and bias in NLP, and effectively utilizing NLP applications.

**Sociolinguistic Competence:** Cultivate sociolinguistic competence through an understanding of how language functions within the context of AI, recognizing the societal implications and ethical considerations associated with NLP applications and neural network technologies.

**Topical Competence:** Achieve topical competence by gaining a comprehensive understanding of key topics in NLP, including tokenization, stemming, part-of-speech tagging, and neural network architectures, enabling effective communication and engagement within the AI domain.

## UNIT 3: STEMMING AND PART OF SPEECH TAGGING

**Execution time: 4 hours.**

APPROACH OF THE SESSION	MATERIALS
<ol style="list-style-type: none"><li>1) Socialize the technology idiom of the day.</li><li>2) Topic explanation: Prefixes and Suffixes.</li><li>3) Socialize key words about: Stemming</li><li>4) Reading comprehension activity #4: "What is Stemming?"</li><li>5) Fill in the blank activity.</li><li>6) Topic explanation: Parts of speech</li><li>7) Socialize key words about: "Understanding Part-of-Speech Tagging in NLP: Techniques and Applications"</li><li>8) Reading comprehension activity: "Understanding Part-of-Speech Tagging in NLP: Techniques and Applications"</li><li>9) Quizizz game reading comprehension.</li><li>10) Explain what the skimming strategy is.</li><li>11) Socialization of the vocabulary: "What are neural networks?"</li><li>12) Reading comprehension activity: "What are neural networks?"</li></ol>	<ul style="list-style-type: none"><li>• Reading: "What is stemming?" <a href="https://www.seobility.net/es/wiki/">https://www.seobility.net/es/wiki/</a></li><li>• Stemming Quizizz: <a href="https://quizizz.com/join">https://quizizz.com/join</a></li><li>• Reading: "What are neural networks:" <a href="https://www.ibm.com/topics/neural-networks">https://www.ibm.com/topics/neural-networks</a></li></ul>

# UNIT 3: STEMMING AND PART OF SPEECH TAGGING

Execution time: 4 hours

APPROACH OF THE SESSION	MATERIALS
<p>13) Multiple choice questionnaire.</p> <p>14) Reading comprehension activity: "Natural Language Processing (NLP): Foundations of Linguistics. Layers of Language"</p> <p>15) Matching heading activity</p>	<ul style="list-style-type: none"><li>• Reading Natural Language Processing (NLP): Foundations of Linguistics. Layers of Language. <a href="https://medium.com/@ehfirst/natural-language-processing-nlp-foundations-of-linguistics-layers-of-language-2d691e3c905e">https://medium.com/@ehfirst/natural-language-processing-nlp-foundations-of-linguistics-layers-of-language-2d691e3c905e</a></li></ul>