Marron
Spring 2025

Course Title: **Terminología Especializada en Documentos de Tecnología e Ingeniería**
Program and Track: **Interpretación y Traduccíon: 6° Cuatrimestre**
Course ID: **IT0627**
Cohort ID: **6A2**

Description

This course, which is the complement to Course IT0629 (Taller de Traducción Ingeniería y Adelantos Tecnológicos), will focus on the specialized terminologies, acronyms, and jargon used in selected engineering sciences and in the broader field of advanced technologies. The professional translational mapping tools developed in this course will be specific to Spanish and English translations.

Major elements of the course will include: i) the structure and function of language in selected engineering disciplines and advanced and emerging technologies; ii) the structure and function of texts and documents in selected engineering disciplines and advanced and emerging technologies; iii) the elements of style and the use of standard conventions in selected engineering disciplines and advanced and emerging technologies; iv) Version Control Systems (VCSs) and elements of quality assurance and quality control (QAQC) as applied to documents;; v) the professional use of Large Language Models (LLMs) in translation; and vi) the direct translation of specialized terminologies, acronyms, and jargon in selected engineering disciplines and advanced and emerging technologies using student-developed dictionaries.

Scope

1. Structure and Function of Language in the Engineering Sciences
    - 1.1 History, Structure and Function of Language
    - 1.2 The Rise of Discipline-Specific Jargon
    - 1.3 Language Structures and Functions in the Engineering Sciences

2. Structure and Function of Documents in the Engineering Sciences
    - 2.1 Document Structures
    - 2.2 Document Functions
    - 2.3 Document Types and Formats
        - 2.3.1 Academic Texts and Papers
        - 2.3.2 Manuals and Standard Operating Procedures (SOPs)
        - 2.3.3 Request for Proposals (RFPs) and Proposals
        - 2.3.4 Analytical Evaluations, White Papers, and Lab Reports

3. The Elements of Style in the Engineering Sciences
    - 3.1 The Use of Voice in Style
    - 3.2 Stylistic Conventions

4. Document QAQC and Version Control Systems
    - 4.1 Git Commands
    - 4.2 Github Commands
    - 4.3 Best Practices
    - 4.4 Github Explorations

5. Professional Use of LLMs and Specialized Dictionaries in Translation
    5.1 LLMs and AutoML Models
    5.2 API-Based Translation
        5.2.1 Python
        5.2.2 Cloud Translation API (Google LLM)
        5.2.3 Specialized Models and AutoML

6. Translation of Specialized Terminology
    6.1 Personal Dictionaries
    6.2 Application of Personal Dictionaries to Translation

7. Document Translation
    7.1 Academic Texts and Papers
    7.2 Manuals and Standard Operating Procedures (SOPs)
    7.3 Request for Proposals (RFPs) and Proposals
    7.4 Analytical Evaluations, White Papers, and Lab Reports
    7.5 Science Reporting Articles

Expectations

Students will be expected to:

- Attend all classes on time
- Be prepared to take notes and access materials on-line
- Participate in all class activities, including discussions and presentations
- Complete all assignments, quizzes, and the final exam

Exit Criteria

Upon the successful completion of the course the student will be able to:

- Analyze the structure and function of language in the engineering sciences
- Analyze the structure and function of documents in the engineering sciences
- Analyze the elements of style in documents in the engineering sciences
- Apply the principles of QAQC to document production by using a VCS
- Apply the principles of modern translation by using an API to access a LLM for English-Spanish translation
- Design, develop, and implement personal dictionaries for the translation of specialized terminology in the engineering sciences

Interim Evaluations	
Daily Work and Participation	10%
Homework	60 %
Interim Exam	30%

Final Grade	
Av. Daily Work and Participation	10%
Av. Homework	30 %
Av. Interim Exams	30%
Final Exam	30 %