



# Postgraduate Certificate Artificial Intelligence and Real-Time Translation

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Schedule: at your own pace

» Exams: online

 $We bsite: {\color{blue}www.techtitute.com/us/artificial-intelligence/postgraduate-certificate/artificial-intelligence-real-time-translation}$ 

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01 Introduction

Artificial Intelligence is radically transforming the field of real-time translation, facilitating communication between people speaking different languages. Recently, applications such as AIPhone. All have gained attention by enabling instant translations during phone calls, supporting more than 100 languages and offering live transcriptions. This tool has become essential for immigrants and travelers, helping them overcome language barriers in everyday and critical situations. Although it is important to note that machine translation still faces challenges in terms of accuracy and context understanding. In this scenario, TECH has developed a comprehensive online program that optimally adjusts to graduates' work and personal schedules, always employing the innovative methodology known as Relearning.

# tech 06 | Introduction

Artificial Intelligence is transforming the field of translation, especially with the advancement of real-time translation. In fact, there are technologies such as Meta's NLLB-200, which are capable of instantly translating between 200 languages, including under-represented languages from Africa and Asia.

This is how this Postgraduate Certificate was created, in which students will be able to use various platforms and applications to perform real-time translations, improving efficiency and accuracy in multilingual communication. This practical approach will not only provide an in-depth knowledge of current technologies, but will also allow students to experience how these tools can optimize the work of translators in multicultural contexts.

Furthermore, through the application of specific metrics and indicators, professionals will be able to identify the key aspects that determine the effectiveness of a machine translation. This will include analyzing the consistency, fluency and fidelity of the translated content, which will enable them to make adjustments and improvements to the systems used, essential to ensure that translations are not only accurate, but also culturally appropriate.

Finally, the challenges and implications of relying on automated technologies in multilingual communication will be addressed, as well as the need for a critical approach to decisions involving translation. In this sense, with comprehensive training that combines theory and practice, experts will be prepared to face the challenges of the sector and contribute effectively to the evolution of translation in the digital era.

In this way, TECH has created a comprehensive, fully online program, which only requires an electronic device with an Internet connection to access all educational resources. This avoids inconveniences such as going to a physical center and the need to follow a strict schedule. Additionally, it will be will be based on the revolutionary Relearning methodology, which focuses on the repetition of key concepts for an optimal and organic comprehension of the contents.

This **Postgraduate Certificate in Artificial Intelligence and Real-Time Translation** contains the most complete and up-to-date program on the market. The most important features include:

- The development of case studies presented by experts in Artificial Intelligence applied to Translation and Interpreting
- The graphic, schematic, and practical contents with which they are created, provide practical information on the disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning.
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection



You will be able to evaluate the quality of translations through specific metrics, guaranteeing a high standard in your work, hand in hand with the best online university in the world, according to Forbes: TFCH"

# Introduction | 07 tech



You will have the opportunity to work in diverse scenarios, from international conferences to instant messaging platforms, applying the knowledge acquired in real contexts. Enroll now!"

The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned experts in the field of educational coaching with extensive experience.

You will master the platforms for real-time translation, improving efficiency and accuracy in multilingual communication through the best teaching materials, at the forefront of technology and education.

You will apply specific metrics and indicators that will allow you to measure the accuracy, coherence and adequacy of translations in real time, thanks to an extensive library of innovative multimedia resources.





**Objectives** The main objective of a Postgraduate Certificate in Artificial Intelligence and Real-Time Translation is to train students to become competent professionals in the use of artificial intelligence-based translation tools, thus optimizing multilingual communication. Throughout the course, participants are expected to acquire practical skills to handle these technologies effectively, while developing a critical approach to evaluate the quality of the translations generated. In addition, it aims to foster an understanding of the fundamental principles of artificial intelligence and its application in the field of translation, equipping students with the necessary knowledge to adapt to technological advances and industry challenges.

# tech 10 | Objectives



# **General Objectives**

- Acquire skills to use and optimize AI tools in real-time translation, ensuring accuracy and fluency in multilingual contexts
- Become skilled in the use of the main Al-assisted translation platforms and tools, integrating them effectively into the professional workflow
- Develop criteria and methods for assessing the quality of translations and interpretations performed with AI tools
- Train in identifying and resolving ethical and social challenges related to the use of Artificial Intelligence in translation and interpreting
- Explore and implement innovations in the field of Al-assisted translation and interpretation, anticipating emerging trends
- Equip yourself with the necessary skills to lead projects and teams in the implementation of AI solutions in the field of translation and interpreting







# **Specific Objectives**

- Learn to handle Al-based real-time translation tools, improving efficiency and accuracy in multilingual communication
- Develop skills to evaluate the quality of real-time translations, using specific metrics and indicators



Not only will you enrich your professional profile, but you will also open up new opportunities in a job market that increasingly demands experts in translation and technology. With all the TECH quality guarantees!"







# tech 14 | Course Management

# Management



### Dr. Peralta Martín-Palomino, Arturo

- CEO and CTO at Prometeus Global Solutions
- CTO at Korporate Technologies
- CTO at Al Shepherds GmbH
- Consultant and Strategic Business Advisor at Alliance Medical
- Director of Design and Development at DocPath
- PhD in Psychology from the University of Castilla La Mancha
- PhD in Economics, Business and Finance from the Camilo José Cela University
- PhD in Psychology from University of Castilla La Mancha
- Master's Degree in Executive MBA from the Isabel I University
- Master's Degree in Sales and Marketing Management, Isabel I University
- Expert Master's Degree in Big Data by Hadoop Training
- Master's Degree in Advanced Information Technologies from the University of Castilla La Mancha
- Member of: SMILE Research Group



# Course Management | 15 tech

#### **Professors**

#### Ms. Martínez Cerrato, Yésica

- Responsible for Technical Training at Securitas Seguridad España
- Education, Business and Marketing Specialist
- Product Manager in Electronic Security at Securitas Seguridad España
- Business Intelligence Analyst at Ricopia Technologies
- Computer Technician and Responsible for OTEC computer classrooms at the University of Alcalá de Henares
- Collaborator in the ASALUMA Association
- Degree in Electronic Communications Engineering at the Polytechnic School, University of Alcalá de Henares

#### Ms. Del Rey Sánchez, Cristina

- Talent Management Administrative Officer at Securitas Seguridad España, S.L.
- Extracurricular Activities Center Coordinator
- Support classes and pedagogical interventions with Primary and Secondary Education students
- Postgraduate in Development, Delivery and Tutoring of e-Learning Training Actions.
- Postgraduate in Early Childhood Care
- Degree in Pedagogy from the Complutense University of Madrid

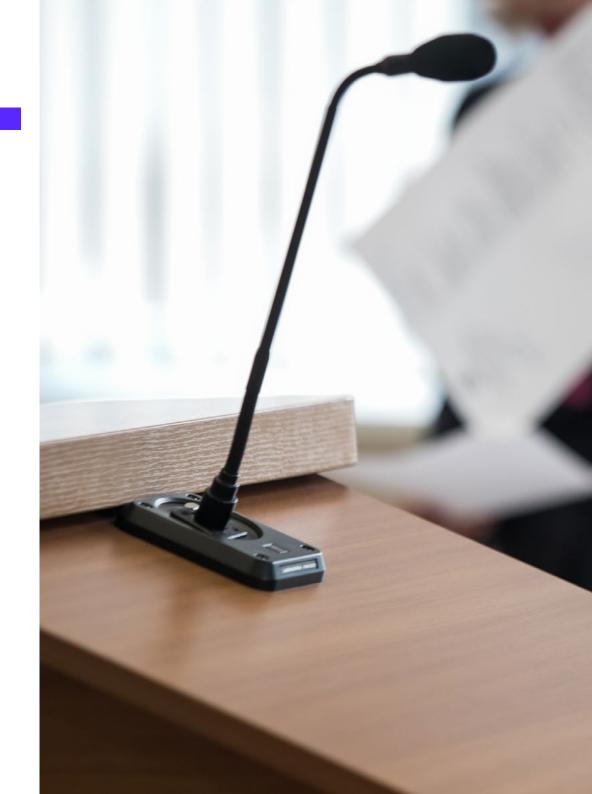




# tech 18 | Structure and Content

#### Module 1. Al and Real-Time Translation

- 1.1. Introduction to Real-Time Translation with Al
  - 1.1.1. Definition and Basic Concepts
  - 1.1.2. Importance and Applications in Different Contexts
  - 1.1.3. Challenges and Opportunities
  - 1.1.4. Tools such as Fluently or Voice Tra
- 1.2. Artificial Intelligence Fundamentals in Translation
  - 1.2.1. Brief Introduction to Artificial Intelligence
  - 1.2.2. Specific Applications in Translation
  - 1.2.3. Relevant Models and Algorithms
- 1.3. Al-Based Real-Time Translation Tools
  - 1.3.1. Description of the Main Tools Available
  - 1.3.2. Comparison of Functionalities and Features
  - 1.3.3. Use Cases and Practical Examples
- 1.4. Neural Machine Translation (NMT) Models. SDL Language Cloud
  - 1.4.1. Principles and Operation of NMT Models
  - 1.4.2. Advantages over Traditional Approaches
  - 1.4.3. Development and Evolution of NMT Models
- 1.5. Natural Language Processing (NLP) in Real-Time Translation. SayHi TRanslate
  - 1.5.1. Basic NLP Concepts Relevant to Translation
  - 1.5.2. Preprocessing and Post-Processing Techniques
  - 1.5.3. Improving the Coherence and Cohesion of the Translated Text
- 1.6. Multilingual and Multimodal Translation Models
  - 1.6.1. Translation Models that Support Multiple Languages
  - 1.6.2. Integration of Modalities such as Text, Speech and Images
  - 1.6.3. Challenges and Considerations in Multilingual and Multimodal Translation





# Structure and Content | 19 tech

- 1.7. Quality Assessment in Real-Time Translation with Al
  - 1.7.1. Translation Quality Assessment Metrics
  - 1.7.2. Automatic and Human Evaluation Methods. iTranslate Voice
  - 1.7.3. Strategies to Improve Translation Quality
- 1.8. Integration of Real-Time Translation Tools in Professional Environments
  - 1.8.1. Use of Translation Tools in Daily Work
  - 1.8.2. Integration with Content Management and Localization Systems
  - 1.8.3. Adaptation of Tools to Specific User Needs
- 1.9. Ethical and Social Challenges in Real-Time Translation with Al
  - 1.9.1. Biases and Discrimination in Machine Translation
  - 1.9.2. Privacy and Security of User Data
  - 1.9.3. Impact on Linguistic and Cultural Diversity
- 1.10. Future of Al-Based Real-Time Translation. Applingua
  - 1.10.1. Emerging Trends and Technological Advances
  - 1.10.2. Future Prospects and Potential Innovative Applications
  - 1.10.3. Implications for Global Communication and Language Accessibility



The contents will prepare you to face the challenges of the translation field in real time in an increasingly interconnected world, supported by the revolutionary Relearning methodology"





# tech 22 | Methodology

# Case Study to contextualize all content

Our program offers a revolutionary approach to developing skills and knowledge. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.



At TECH, you will experience a learning methodology that is shaking the foundations of traditional universities around the world"



You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.



The student will learn to solve complex situations in real business environments through collaborative activities and real cases.

## A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and professional reality is taken into account.



Our program prepares you to face new challenges in uncertain environments and achieve success in your career"

The case method has been the most widely used learning system among the world's leading Information Technology schools for as long as they have existed. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question that you are presented with in the case method, an action-oriented learning method. Throughout the course, students will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.



# Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

In 2019, we obtained the best learning results of all online universities in the world.

At TECH you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our university is the only one in the world authorized to employ this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



# Methodology | 25 tech

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

This methodology has trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, and financial markets and instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.

This program offers the best educational material, prepared with professionals in mind:



#### **Study Material**

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



#### **Classes**

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **Practising Skills and Abilities**

They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



#### **Additional Reading**

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best specialists in the world.



#### **Interactive Summaries**

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.



This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

#### **Testing & Retesting**

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We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.







# tech 30 | Certificate

This Postgraduate Certificate in Artificial Intelligence and Real-Time Translation contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding Postgraduate Certificate issued by TECH Technological University via tracked delivery\*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: Postgraduate Certificate in Artificial Intelligence and Real-Time Translation

Modality: online

Duration: 6 weeks



#### POSTGRADUATE CERTIFICATE

in

#### Artificial Intelligence and Real-Time Translation

This is a qualification awarded by this University, equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

<sup>\*</sup>Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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