

# Postgraduate Certificate Artificial Intelligence and Real-Time Translation



## Postgraduate Certificate Artificial Intelligence and Real-Time Translation

- » Modality: **online**
- » Duration: **6 weeks**
- » Certificate: **TECH Global University**
- » Accreditation: **6 ECTS**
- » Schedule: **at your own pace**
- » Exams: **online**

Website: [www.techtute.com/us/humanities/postgraduate-certificate/artificial-intelligence-real-time-translation](http://www.techtute.com/us/humanities/postgraduate-certificate/artificial-intelligence-real-time-translation)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Study Methodology

---

*p. 20*

06

Certificate

---

*p. 30*

# 01

# Introduction

Artificial Intelligence has revolutionized real-time translation, enabling instant communication between speakers of different languages. Advances in deep neural networks and machine learning algorithms have dramatically improved the quality and speed of translations, facilitating interaction in global environments. From text and audio translation to multimodal processing in videoconferencing, these technologies eliminate language barriers and promote fluency. Furthermore, their integration into virtual assistants and portable devices offers solutions for various industries, allowing professionals to interact without linguistic limitations. In this context, TECH has created a 100% online program that adapts perfectly to the work and personal commitments of professionals, using its innovative methodology called Relearning.



“

*It delves into the main features around real-time translations, and the implications of Artificial Intelligence to automate and streamline the process thanks to this 100% online program”*

Artificial Intelligence has transformed the field of real-time translation, offering Humanities professionals advanced tools to overcome language barriers. Through the use of deep neural networks and machine learning algorithms, AI significantly improves the quality and accuracy of translations in both text and audio. These technologies enable a more accurate understanding of cultural and linguistic context.

This TECH Postgraduate Certificate provides a detailed introduction to AI-driven real-time translation, covering from basic concepts to its relevance in different professional contexts. The most prominent tools on the market, such as Fluently and Voice Tra, will be analyzed, as well as the challenges and opportunities these technologies present for Humanities experts.

Subsequently, the basics of Artificial Intelligence applied to translation will be discussed, including the most relevant models and algorithms for this task. Also, the most advanced AI-based tools will be studied, with a comparison of their functionalities and features, along with practical examples of their use in various scenarios.

The program also devotes a section to neural machine translation (NMT) models and their advantages over traditional approaches. The development and evolution of these models will be addressed, as well as their integration with other modalities, such as text, voice and images, in the field of multilingual and multimodal translation. Finally, the ethical and social challenges that arise with the use of these tools, such as translation bias and the impact on linguistic diversity, will be analyzed.

Furthermore, this academic pathway offers the advantage of being 100% online, which allows Humanities professionals to access the most comprehensive content available from anywhere they prefer, as long as they have a device with an Internet connection. This flexibility allows them to easily combine the program with their daily responsibilities.

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:

- ♦ Development of practical cases presented by experts in Humanities in Artificial Intelligence
- ♦ The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable 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



*Enroll in this program and learn the basics of traditional translation, along with the different tools provided by Artificial Intelligence to modernize its use"*

“

*Discover some Neural Machine Translation (NMT) models and learn about the advantages offered by this AI-based medium, thanks to an extensive library of innovative multimedia resources”*

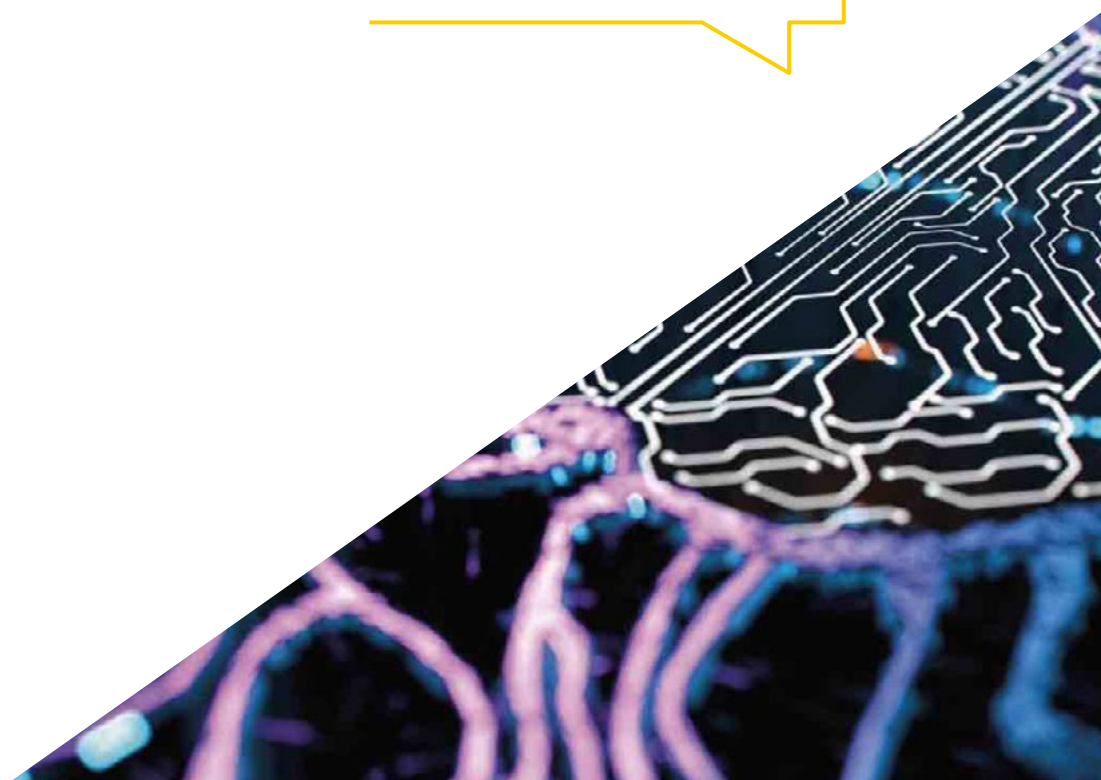
The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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.

*Master key tools such as Fluently or Voice Tra for a successful real-time translation, through this program offered in a 100% online mode.*

*Evaluate the conditions that reflect the improvement of translation quality in real time with AI, through TECH's Relearning methodology.*



# 02 Objectives

The central purpose of the Postgraduate Certificate in Artificial Intelligence and Real-Time Translation is to prepare Humanities professionals for the use of AI-based translation technologies, improving efficiency in multilingual communication. Throughout the curriculum, experts are expected to develop skills to use these technological resources efficiently, while acquiring a critical perspective to evaluate the quality of machine translations. In addition, it focuses on their understanding of the fundamental principles of AI, preparing them to face the advances and challenges of the sector.





```
mirror_mod.use_x = False
mirror_mod.use_y = True
mirror_mod.use_z = False
elif _operation == "MIRRO
mirror_mod.use_x
mirror_mod.use
mirror_mod

#sele
mirror
mod
```

“

*Combine diverse knowledge in core NLP concepts relevant to translation and optimize the efficiency of multilingual communication throughout this 6-week program”*



## 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 AI-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 AI-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 AI-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



*Improve your professional profile, boosting it with the effective management of programs such as iTranslate Voice, ideal for developing certain strategies to improve the quality of translation in real time"*

# 03

# Course Management

The teaching team of this Postgraduate Certificate is one of the fundamental pillars that allow it to stand out in the academic panorama. TECH has made a firm commitment to bring together renowned professionals, experts in the integration of real-time translation tools within professional environments. These specialists, with outstanding track records in the industry, ensure that the content is of the highest quality and relevance. In addition, all their experience and knowledge will be poured into innovative materials, specifically designed for the digital environment, which will be available on the Virtual Campus, allowing accessible and flexible training to meet the needs of today's world.



“

*Professionals with extensive experience in AI-assisted translation will provide you with all the essential knowledge throughout this Postgraduate Certificate”*

## Management



### Dr. Peralta Martín-Palomino, Arturo

- ♦ CEO and CTO at Prometheus Global Solutions
- ♦ CTO at Korporate Technologies
- ♦ CTO at AI 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 the research group SMILE.

## 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 Direct
- ◆ 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

# 04

## Structure and Content

The syllabus has been prepared in accordance with the most up-to-date topics on real-time machine translation and Artificial Intelligence, following the guidelines of the teaching team of this Postgraduate Certificate. Therefore, it covers the ethical and social challenges related to real-time translation, focusing on aspects such as privacy and security of user data. In addition, emerging trends and technological advances in the sector are integrated. Throughout this academic module, Humanities professionals will expand their knowledge, acquiring the indispensable skills in this field.





“

*You will have a comprehensive curriculum that will allow you to reinforce the most relevant models and algorithms for real-time translation”*

## Module 1. Artificial Intelligence and Real-Time Translation

- 1.1. Introduction to Real-Time Translation with AI
  - 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. AI-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 TTranslate
  - 1.5.1. Basic NLP Concepts Relevant to Translation
  - 1.5.2. Pre-Processing 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
- 1.7. Quality Assessment in Real-Time Translation with AI
  - 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 AI
  - 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 AI-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

“*Become a professional capable of assessing translation quality metrics and the future implications of this type of AI-assisted communication*”



# 05

# Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



“

*TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”*

### The student: the priority of all TECH programs

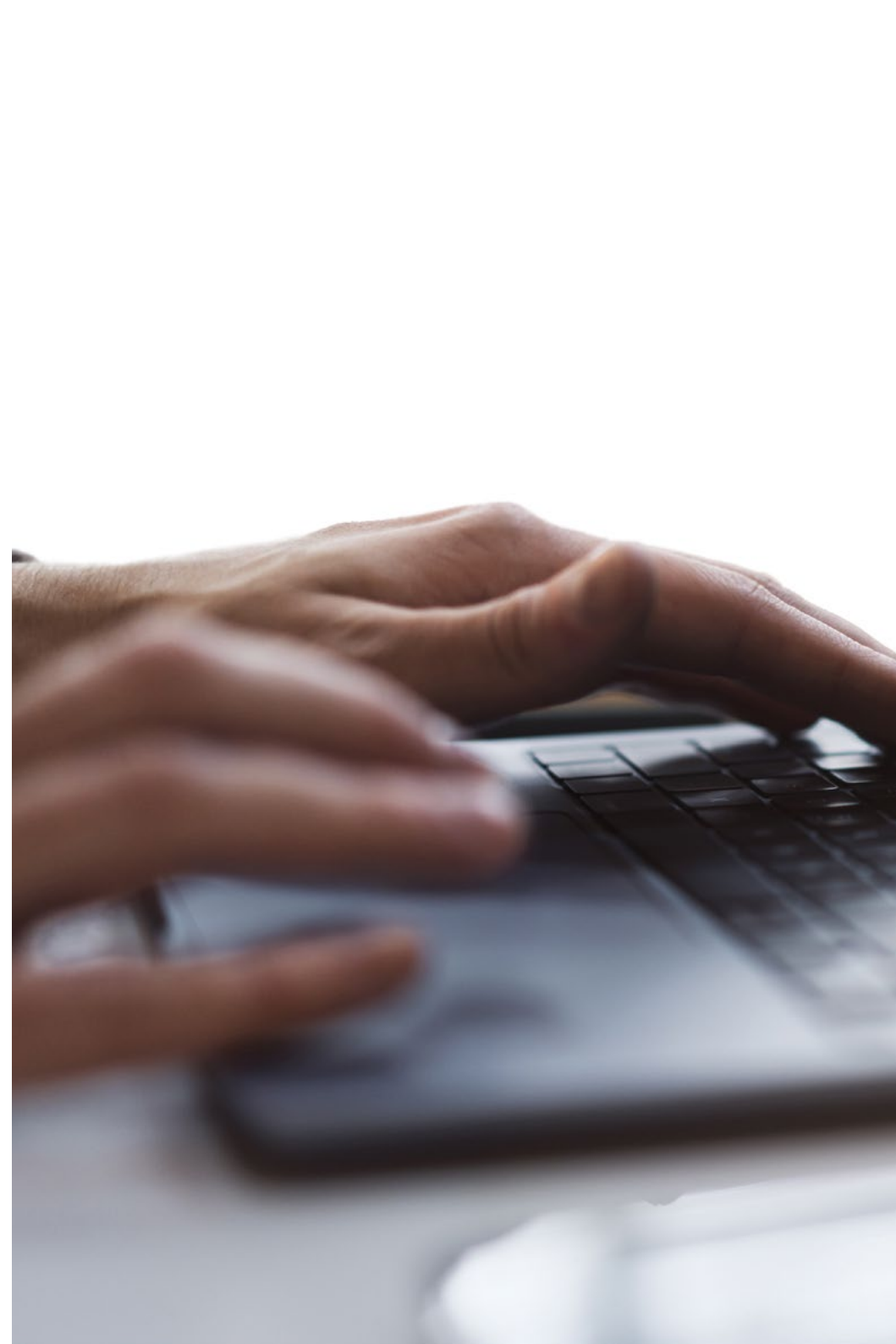
In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

“

*At TECH you will NOT have live classes  
(which you might not be able to attend)”*



### The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

“*TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want*”

## Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.





## Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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



## A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



*The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule”*

### The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

### The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the quality of teaching, quality of materials, course structure and objectives is excellent. Not surprisingly, the institution became the best rated university by its students on the Trustpilot review platform, obtaining a 4.9 out of 5.

*Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.*

*You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.*



As such, the best educational materials, thoroughly prepared, will be available in this program:



#### 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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



#### Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



#### Interactive Summaries

We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

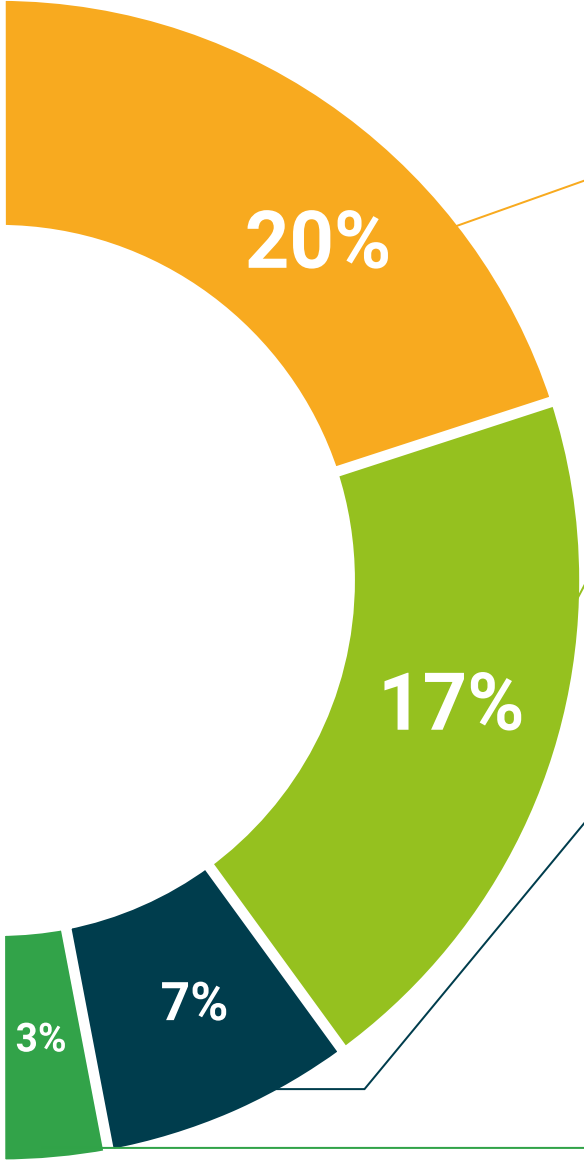
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





**Case Studies**

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.



**Testing & Retesting**

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.



**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 for future difficult decisions.



**Quick Action Guides**

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.



06

# Certificate

The Postgraduate Certificate in Artificial Intelligence and Real-Time Translation guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



“

*Successfully complete this program  
and receive your university qualification  
without having to travel or fill out  
laborious paperwork”*

This private qualification will allow you to obtain a **Postgraduate Certificate in Artificial Intelligence and Real-Time Translation** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University**, is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** private qualification, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

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

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



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





## Postgraduate Certificate Artificial Intelligence and Real-Time Translation

- » Modality: **online**
- » Duration: **6 weeks**
- » Certificate: **TECH Global University**
- » Accreditation: **6 ECTS**
- » Schedule: **at your own pace**
- » Exams: **online**

# Postgraduate Certificate Artificial Intelligence and Real-Time Translation