



# Professional Master's Degree

# Educational Technology and Digital Competencies

» Modality: online

» Duration: 12 months

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Acceso web: www.techtitute.com/in/education/professional-master-degree/master-educational-technology-digital-competencies

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# tech 06 | Introduction

This Professional Master's Degree offers a practical and complete vision of the application of technology in education, from the most basic tools to the development of digital teaching skills. A step forward from the mainly theoretical programs, which do not address the use of technology in the educational environment. The approach provides a far deeper understanding of how technology works at the different educational levels, so that the professional, depending on his or her interests, can have various options for its application in the workplace.

This Professional Master's Degree addresses the training required to specialize in educational technology and the digital skills needed to enter the world of teaching, all offered from a very practical perspective

In this way, the student will learn, based on professional experience, an approach centered on pedagogy based on evidence. This way of working makes the student's training more efficient and accurate. The student gets the opportunity to expand his knowledge and teaching skills from a professional point of view, being able to apply what he has learned from the very first moment.

In the programming of this Professional Master's Degree, we rely on the most efficient learning systems, offering you highly effective systems. An intensive assignment that is, however, perfectly compatible with other work or personal occupations. To this end, we have developed a contextual and collaborative learning approach that focuses on the teacher's competence, allowing them to efficiently apply what they have learned to their own reality. All this at a distance, adapting the learning process to the student's rhythm and their own needs in terms of time and evolution.

The different modules are taught in independent sessions, following an eminently practical approach, with the necessary theoretical support for each. All TECH Master teachers have extensive experience working with people of all educational levels and from diverse socio-familial and educational contexts.

This content will become, for the professional, an extraordinary training that will make his or her resume much more competitive, with a view to his or her professional growth and increased value in the current labor market.

This Professional Master's Degree in Educational Technology and Digital Competences contains the most complete and up-to-date scientific program on the market. The most important features of the specialization are:

- The development of more than 75 case studies presented by experts in educational technology and digital competencies
- The graphic, schematic and eminently practical contents with which they are presented, provide scientific and practical information on those areas that are essential for professional practice
- Up-to-date scientific and practical information
- New developments on the detection and intervention in students with guidance needs
- Practical self-assessment exercises to improve learning
- Algorithm-based interactive learning system for decision-making in the situations that are presented to the student
- Evidence-based methodologies
- Theoretical sessions, questions to the expert, discussion forums and individual reflection works
- Content available from any fixed or portable device with Internet connection



A Professional Master's Degree created to be versatile and flexible, allowing you to combine your personal or professional life with the best online training" With a didactic approach based on the resolution of real situations, you will be trained quickly and efficiently, being able to apply each piece of learning in your work immediately.

It includes in its teaching staff professionals belonging to the field of Educational Technology and Digital Competences, who bring to this training the experience gained from their work, as well as recognized specialists from prestigious reference societies and 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 training programmed to train in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the teacher must try to solve the different professional practice situations that arise throughout the academic program. For this purpose, the teacher will be assisted by an innovative interactive video system developed by recognized experts in the field of Educational Technology and Digital Competencies, with extensive teaching experience.







# tech 10 | Objectives



# **General Objectives**

- Introduce students to the world of teaching, from a global perspective in order to prepare them for their future employment
- · Know the new tools and technologies applied to teaching.
- Explore digital competencies in depth
- Show the different options and ways the teacher can work in his or her post
- Promote the acquisition of communication and knowledge transmission skills and abilities
- Encourage continuous training of students and an interest in teaching innovation



## **Specific Objectives**

#### Module 1. The Definition of Learning

- Differentiate between formal and informal learning
- Distinguish between implicit learning and non-formal learning
- Define the new perspectives in teaching, training and labor within the digital framework

#### Module 2. The Psychological Processes Involved in Learning

- Describe the processes of memory and attention in learning
- Discover Nomophobia
- Discover the cyberbully profile
- Learn about the consequences of cyberbullying

## Module 3. Types of Learning

- Define the principles of the Flipped Classroom
- Describe the importance of the new role of the teacher in the classroom.
- Explain the role of students and families within the Flipped Classroommodel
- Discover the benefits of the Flipped Classroom with the diversities of the classroom
- Identify the differences between traditional teaching and the *Flipped Classroom*.
- Test the link between the *flipped classroom* model and Bloom's taxonomy

#### Module 4. Context in Learning

- Determine the differences between active and passive learning
- Understand the role of the traditional school in learning
- Explain the characteristics of the 4.0 School



#### Module 5. Teachers' Technological Skills

- Explain the use of technology in recreation among students.
- Identify the use of educational technology by students
- Distinguish between Digital Immigrant vs Digital Native
- Identify technological difficulties in adults
- Distinguish between mobile and wifi networks
- Classify mobile devices: tablets and smartphones
- Discover the spread of the use of tablets in the classroom
- Learn about the electronic whiteboard
- Understand the management of the computerized student body
- Explain online classes and tutoring

#### Module 6. Students' Technological Skills

- Establish the defining characteristics of educational technology
- Describe the advantages and disadvantages of educational technology.
- Identify F.O.M.O
- Understand technology dependence
- Set Sleep Texting

#### Module 7. Traditional Teaching with Educational Technology

- Classify the defining characteristics of e-learning
- Explain the advantages and disadvantages of e-learning over traditional teaching
- Differentiate between digital immigrant and digital native
- Describe the new trends in digital communication

#### Module 8. Distance Learning

- Discern the defining characteristics of distance learning
- Discover the advantages and disadvantages of distance learning over traditional education
- Learn about the new illnesses associated with technologies
- Introduction to technology assessment tools of technological implementation
- Identify the costs and benefits of technological implementation

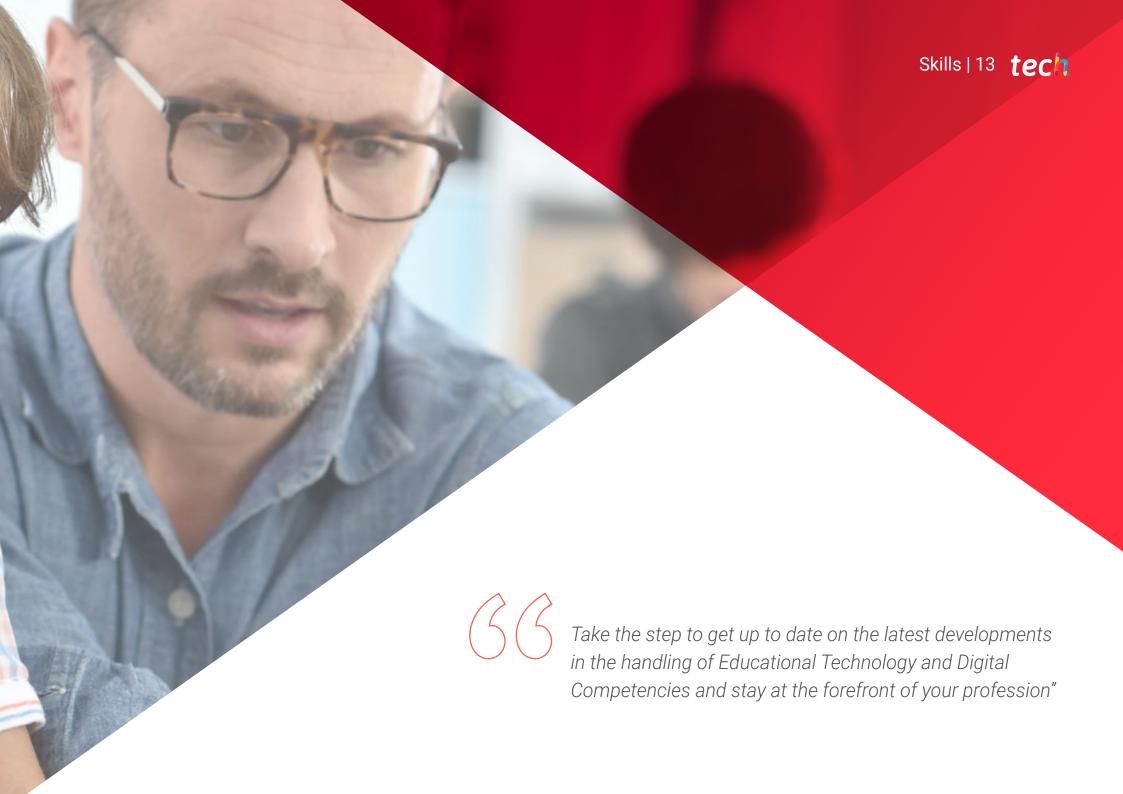
#### Module 9. Blended Learning

- Explain the defining characteristics of Blended Learning
- Define the advantages and disadvantages of Blended Learning over traditional teaching
- Explain the importance of digital competencies in teachers
- Value the importance of virtual learning environments as channels of instruction inside and outside the classroom

#### Module 10. E-learning

- Define the uses that Social Networks provide to teachers. Explain how to manage a communication crisis in Social Networks
- Explain the evolution of Facebook, how to create and manage a profile, how to use Facebook as a search engine and its use as a teaching tool
- Recognize all critical factors specific to the Apple environment in the development of our implementation model
- Identify and estimate the pedagogical possibilities of Apple's proprietary Apps for the management, creation of content and evaluation
- Know the main Apps to develop a flipped classroom and gamification strategies, as well as to value these emerging methodologies as learning motivators
- Explain the evolution of Twitter, how to create and manage a profile, how to use Twitter as a search engine and its use as a teaching tool
- Explain the evolution of LinkedIn, how to create and manage a profile, how to use LinkedIn as a search engine and its use as a teaching tool
- Explain the evolution of YouTube, how to create and manage a profile, how to use YouTube as a search engine and its use as a teaching tool
- Explain the evolution of Instagram, how to create and manage a profile, how to use Instagram as a search engine and its use as a teaching tool
- List the different digital formats for the creation of content in the different social networks
- Describe the different tricks that will help students to be more effective in social networks





# tech 14 | Skills



## **General Skills**

- Gain knowledge of educational technology and digital skills that will provide an opportunity for entry to or professional development in this field
- Apply the knowledge acquired in a practical way, with a sound theoretical foundation, in order to solve any problem that may arise in the work environment, and adapt to new challenges related to their area of study
- Integrate the knowledge gained in the Professional Master's Degree with previous knowledge, as well as reflecting upon the implications for professional practice, applying to them personal values, thereby improving the quality of the service provided
- Transmit the theoretical and practical knowledge acquired, as well as develop the capacity for criticism and reasoning, before a specialized and non-specialized public, in a clear and unambiguous manner
- Develop self-learning skills that will allow them to continue training for the best professional performance







# Specific Skills

- Classify the characteristics of direct versus indirect learning
- Apply the different tools for content creation, social media management and social media analytics
- Explain how social networks emerged and what changes they have brought about in the teaching field
- Explain meta-cognition and meta-intelligence in learning
- Explain the difference between a professional teaching network and a personal one, as well as the different elements to follow in each of them
- Use Apple's programming language and appreciate the growing importance of this kind of digital literacy
- Apply basic techniques for analyzing the data provided by social networks to make decisions about the content to be disseminated
- Practice digital conversation and the elements that define it
- Explain the basic rules in Social Networks for an adequate and effective use of profiles
- Apply the techno-pedagogical criteria for the choice of different devices as management, teaching and learning tools
- Identify the key elements and tools in the analysis prior to the implementation of technology in the classroom.
- Know how to apply the broad lines that should guide the design of the implementation model





# Management



# Dr. Gris Ramos, Alejandro

- Technical Engineer in Computer Management
- Master's Degree in e-Commerce
- Specialist in the latest technologies applied to teaching, digital marketing, web application development and Internet business



# Course Management | 19 tech

## **Professors**

## Dr Albiol Martín, Antonio

- Master's Degree in Education and Information and Communication Technologies from the UOC
- Master's Degree in Literary Studies
- Graduate in Philosophy and Literature
- Head of CuriosiTIC: JABY School's ICT Integration Program in the classroom

## Dr. Azorín López, Miguel Ángel

- Teacher specialized in Physical Education
- Expert in the Flipped Classroom (level I Flipped Learning and level I Trainer Flipped Learning, TOP-100 Flipped Learning Worldwide Teachers)

### Dr Cabezuelo Doblaré, Álvaro

- Psychologist expert in Digital Identity and Master's Degree in Communication, Digital Marketing and Social Networks
- Teacher of Digital Identity, Social Media Manager in a Communication Agency and a Teacher in Aula Salud

## Dr De la Serna, Juan Moisés

- PhD in Psychology and Professional Master's Degree in Neurosciences and Behavioral Biology
- Author of the Cátedra Abierta de Psicología y Neurociencias and scientific disseminator





# tech 22 | Structure and Content

## Module 1. The Definition of Learning

- 1.1. Formal Vs. Informal Learning
  - 1.1.1. The Characteristics of Formal Learning
  - 1.1.2. The Characteristics of Informal Learning
- 1.2. Implicit Learning vs. Non-formal
  - 1.2.1. The Characteristics of Implicit Learning
  - 1.2.2. The Characteristics of Non-Formal Learning

## Module 2. The Psychological Processes Involved in Learning

- 2.1. Memory Vs. Attention
  - 2.1.1. Memory in Learning
  - 2.1.2. Attention in Learning
- 2.2. Meta-cognition Vs. Intelligence
  - 2.2.1. Meta-cognition in Learning
  - 2.2.2. Intelligence and Learning

## Module 3. Types of Learning

- 3.1. Direct Vs. Indirect Learning
  - 3.1.1. The Characteristics of Direct Learning
  - 3.1.2. The Characteristics of Indirect Learning
- 3.2. Active Vs. Passive Learning
  - 3.2.1. The Characteristics of Active Learning
  - 3.2.2. The Characteristics of Passive Learning

## Module 4. Context in Learning

- 4.1. The Traditional School
  - 4.1.1. Family and Education
  - 4.1.2. School and Education
- 4.2. The 4.0 School
  - 4.2.1. Characteristics of 2.0 Schools
  - 4.2.2. Characteristics of 4.0 Schools



## Module 5. Teachers' Technological Skills

- 5.1. Digital Migrant vs. Digital Native
  - 5.1.1. Characteristics of the Digital Immigrant
  - 5.1.2. Characteristics of the Digital Native
- 5.2. Digital Competencies in Teachers
  - 5.2.1. Office Software in Education
  - 5.2.2. Management of Digital Elements

#### Module 6. Students' Technological Skills

- 6.1. Recreational Technology
  - 6.1.1. Educational Games
  - 6.1.2. Gamification
- 6.2. Educational Technology
  - 6.2.1. The Internet in Schools
  - 6.2.2. Other Technological Devices in the Classroom

## Module 7. Traditional Teaching with Educational Technology

- 7.1. Defining Characteristics of Educational Technology
  - 7.1.1. Technological Advances in the Classroom
  - 7.1.2. Technological Provision in the Classroom
- 7.2. Advantages and Disadvantages of Educational Technology
  - 7.2.1. Advantages of Educational Technology
  - 7.2.2. Disadvantages of Educational Technology

## Module 8. Distance Learning

- 8.1. Defining Characteristics
  - 8.1.1. The Challenge of Distance Learning
  - 8.1.2. Characteristics of Distance Learners
- 8.2. Advantages and Disadvantages over Traditional Teaching
  - 8.2.1. Advantages of Distance Learning
  - 8.2.2. Disadvantages of Distance Learning

## Module 9. Blended Learning

- 9.1. Defining Characteristics
  - 9.1.1. Educational Technological Inclusion
  - 9.1.2. Characteristics of the Users of Blended Learning
- 9.2. Advantages and Disadvantages over Traditional Teaching
  - 9.2.1. Advantages of Blended Learning
  - 9.2.2. Disadvantages of Blended Learning

## Module 10. E-learning

- 10.1. Defining Characteristics
  - 10.1.1. New Challenges in the Virtualization of Education
  - 10.1.2. New e-learning Institutions
- 10.2. Advantages and Disadvantages over Traditional Teaching
  - 10.2.1. Advantages of e-learning
  - 10.2.2. Disadvantages of E-learning



Join us for a unique training experience that will give you the professional and personal growth you need to move towards a better future"





# tech 26 | Methodology

#### At TECH Education School we use the Case Method

In a given situation, what should a professional do? Throughout the program students will be presented with multiple simulated cases based on real situations, where they will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method.

With TECH, educators can experience a learning methodology that is shaking the foundations of traditional universities around the world.



It is a technique that develops critical skills and prepares educators to make decisions, defend their arguments, and contrast opinions.



Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

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

- Educators who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
- 2. The learning process is solidly focused on practical skills that allow educators to better integrate the knowledge into daily practice.
- **3.** Ideas and concepts are understood more efficiently, given that the example situations are based on real-life teaching.
- **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.



# tech 28 | Methodology

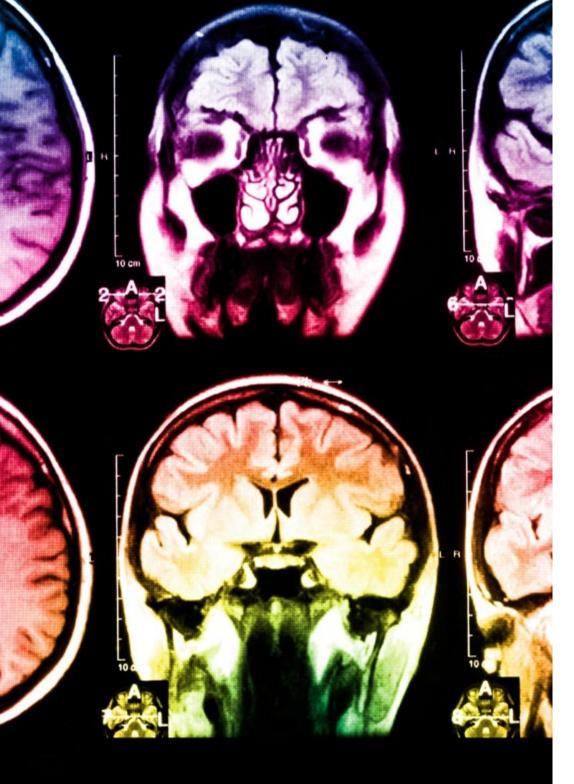
## Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

Our University is the first in the world to combine case studies with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analyzing cases.

Educators will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.





# Methodology | 29 tech

At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology we have trained more than 85,000 educators with unprecedented success in all specialties. 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 specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

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.

The overall score obtained by our learning system is 8.01, according to the highest international standards.

# tech 30 | Methodology

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



#### **Study Material**

All teaching material is produced by the specialist educators who teach the course, specifically for the course, so that the teaching content is really 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.



#### **Educational Techniques and Procedures on Video**

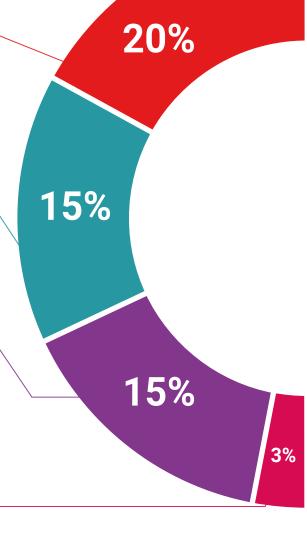
TECH introduces students to the latest techniques, with the latest educational advances, and to the forefront of Education. All this, first-hand, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **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 multimedia content presentation training Exclusive system was awarded by Microsoft as a "European Success Story".





#### **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.





Testing & Retesting

a clear and direct way to achieve the highest degree of understanding.

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 your goals.



#### Classes

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

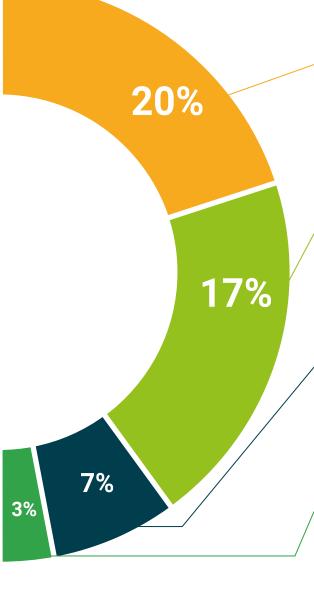
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



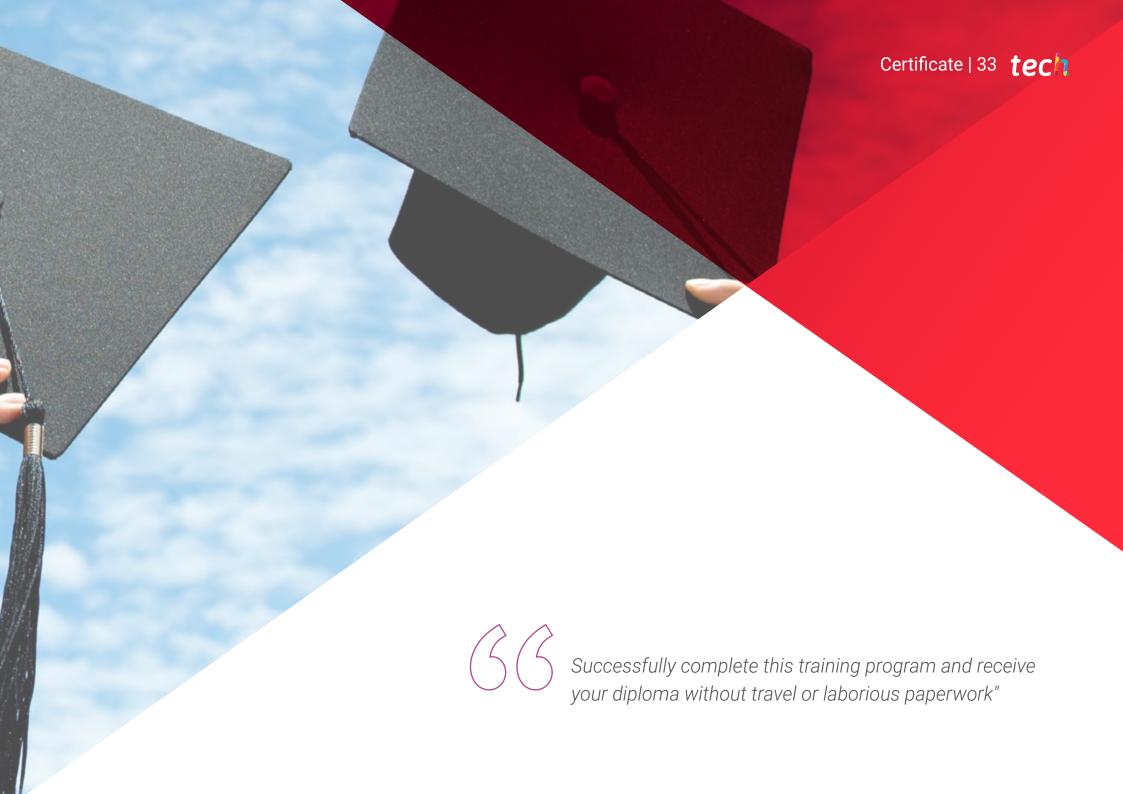
#### **Quick Action Guides**

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.









# tech 34 | Certificate

This **Professional Master's Degree in Educational Technology and Digital Competencies** contains the most complete and up-to-date program on the market.

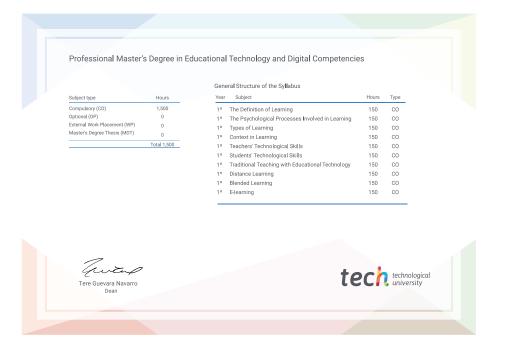
After the student has passed the assessments, they will receive their corresponding **Professional Master's Degree** diploma issued by **TECH Technological University** via tracked delivery\*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in professional master's degree, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: Professional Master's Degree in Educational Technology and Digital Competencies

Official N° of Hours: 1,500 h.





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

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# Professional Master's Degree

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