Professional Master's Degree Educational Technology and Digital Competencies





## **Professional Master's Degree** Educational Technology and Digital Competencies

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

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

## Index



## 01 Introduction

Technology is making more and more inroads into our lives and education is no stranger to this advance. Teaching is a field that must always move with the times in order to provide students with all the necessary tools for today's social communication. Therefore, it is imperative for the teacher to be trained in the latest educational technology and all aspects of digital learning.



A highly qualified Professional Master's Degree that will allow you to learn how to use and implement the new tools that the digital world brings to quality teaching"

## 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

### Introduction | 07 tech

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.

# 02 **Objectives**

The Professional Master's Degree in Educational Technology and Digital Competences will allow you to acquire the essential knowledge in this field to be able to apply this valuable activity in your classroom. An intensive and efficient training that will take you one step closer to excellence.

This Professional Master's Degree will open up new avenues for your professional and personal development, and will enable your students to benefit from new teaching techniques and approaches"

## 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 Classroom* model
- 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

## Objectives | 11 tech

#### 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

## 03 **Skills**

After passing the evaluations of the Professional Master's Degree in Educational Technology and Digital Competences, you will have the ability to take the acquired knowledge to your classroom or educational center, giving a new and advanced dimension to your teaching.

Skills | 13 tech

GG Ta in

Take the step to get up to date on the latest developments in the handling of Educational Technology and Digital Competencies and stay at the forefront of your profession"

## 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



## Skills | 15 tech

### 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

## 04 Course Management

The program's teaching staff includes leading experts who bring the experience gained from their work to this specialization. Furthermore, other professionals of recognized prestige participate in its design and elaboration, completing the program in an interdisciplinary way.

GG Learn i metho

CESC

Learn from leading professionals about the new work methods that bring the benefits of new technologies in education to the classroom"

### tech 18 | Course Management

### **International Guest Director**

Considered as a pioneer in the implementation of **Competency-Based Learning Models**, Dr. John Cano is a prestigious **engineer** specialized in **Educational Technology**. In this sense, he has devoted most of his professional career to implement innovative digital tools to improve both the quality of teaching and the classroom experience.

In this way, he has contributed to the adoption by numerous academic institutions of advanced technological tools such as **online learning systems**, **automated assessment** equipment or **digital collaboration** devices. Thanks to this, teachers have been able to offer immersive experiences that have improved the assimilation of complex terms in areas such as Mathematical Sciences, Physics or Chemistry. At the same time, it has provided numerous **open educational resources** and digital libraries to boost academic research.

Another of his main achievements is to have led the "School Kids Investigating Language in Life and Society" program. Through this initiative, she has been able to engage students in the analysis of language within their communities. This has enabled students to become more aware of the impact of communication on civic life, while acquiring cross-cutting skills such as critical thinking.

He has also balanced this work with his role as a researcher. In fact, he has published a variety of articles on subjects such as **virtual learning activities**, **intercultural dialogue** or children's **gaming experience** with Nintendo Labo. As such, he has developed several cutting-edge **pedagogical approaches** that have optimized access to a variety of free teaching resources. In the same vein, it has created different **hybrid environments** that have significantly improved interaction between teachers and students. Committed to educational excellence, he has participated in multiple conferences to facilitate the implementation of **Information and Communication Technologies**.



## Dr. Cano, John

- Director of University-Community Liaisons at the University of California, Berkeley, United States
- Coordinator of Instructional Technology at Gervirtz Gaduate School of Education, Santa Barbara
- Instructional Content Developer at Instructional Design Intern, Santa Barbara
- Instructional Designer at UCSB Collaborate Student Support Center, California
- Instructional Designer at the American University Corporation, Colombia.
- Doctor of Philosophy with a major in Education, University of California, Santa Barbara
- Master of Arts in Education, University of California, Santa Barbara
- Master's Degree in Technology Education from the University of the North
- B.S. in Engineering with a major in Computer Science from the University of the North

Thanks to TECH, you will be able to learn with the best professionals in the world"

## tech 20 | Course Management

### 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 | 21 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

## 05 Structure and Content

The structure of the contents has been designed by the best professionals in the field of Educational Technology and Digital Competencies, with an extensive background and recognized prestige in the profession, backed by the volume of cases reviewed, studied and diagnosed, and with a broad command of new technologies applied to teaching.

GG

This Professional Master's Degree in Educational Technology and Digital Competences contains the most complete and up-to-date teaching program on the market"

### tech 24 | 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



### Structure and Content | 25 tech

### 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"

## 06 **Methodology**

This training program offers a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.** 

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

## Methodology | 27 tech

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

## tech 28 | Methodology

### At TECH Global University 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. 66

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:

- 1. 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.
- 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 30 | 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 | 31 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 32 | 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.

20%

15%

3%

15%

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.

### Methodology | 33 tech



### **Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

20%

7%

3%

17%



### **Testing & Retesting**

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.

## 07 **Certificate**

The Professional Master's Degree in Educational Technology and Digital Competences guarantees, in addition to the most rigorous and up-to-date training, access to a Professional Master's Degree certificate issued by TECH Global University.

Certificate | 35 tech

Successfully complete this training program and receive your diploma without travel or laborious paperwork"

## tech 36 | Certificate

This program will allow you to obtain your **Professional Master's Degree diploma in Educational Technology and Digital Competencies** 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** title 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: Professional Master's Degree in Educational Technology and Digital Competencies Modality: online Duration: 12 months Accreditation: 60 ECTS

ECTS Type

6

6 CO

6

6 CO

6 CO

CO

CO

CO

CO

6 CO

CO

6 CO

global



\*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.

tech global university **Professional Master's** Degree Educational Technology and Digital Competencies » Modality: online » Duration: 12 months » Certificate: TECH Global University » Credits: 60 ECTS » Schedule: at your own pace » Exams: online

Professional Master's Degree Educational Technology and Digital Competencies

