Postgraduate Certificate
Technology and Computer Science Teaching

tech global university

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Technology and Computer Science Teaching

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

Website: **www.techtitute.com/us/education/postgraduate-certificate/technology-computer-science-teaching**

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01

Introduction

The incorporation of ICT in education systems is currently of great importance. This in turn is a boost for teachers who teach Technology and Computer Science, as they introduce the latest trends in 3D printing, Virtual Reality or programming into their daily work. In this context, TECH offers a program that provides the professional with the most recent and advanced teaching methods for the teaching of this subject. All this, in a 100% online educational format and with a syllabus that goes into facilitating the most innovative methodology, new learning activities and attractive pedagogical resources. A program, moreover, developed by an excellent team of professionals with a long history in the education sector.

This Postgraduate Certificate will enable you to successfully teach Technology and Computer Science at all levels of High School Education"

The development of the virtual world, learning through video games or the use of emerging technologies open a range of possibilities in the teaching-learning process of the students in the subject of Technology and Computer Science.

Innovative teaching resources that the teaching professionals should not fail to use if they want to create attractive and dynamic classes that provide useful knowledge to their students. Along these lines, TECH has created this Postgraduate Certificate in Technology and Computer Science Teaching, which provides the most recent and advanced information on existing resources, techniques and innovative methodologies.

A program that presents a theoretical approach, but at the same time provides a practical vision with case studies that facilitate the incorporation of truly effective methods and processes in these disciplines. To this end, the students have at their disposal multimedia resources (video summaries, detailed videos) and essential readings that can be accessed comfortably from any electronic device with an Internet connection at any time of the day.

The professional will also have access to a syllabus prepared by an excellent team of teachers, who are true experts in the teaching sector. This knowledge is the result of their experience and continuous updating in the field of teaching.

In this way, TECH provides students with a unique opportunity to advance as a teacher through a first level and flexible university program. The fact is that, with no attendance or classes with fixed schedules, the graduates can distribute their study time and make this education compatible with their regular responsibilities.

This **Postgraduate Certificate in Technology and Computer Science Teaching** contains the most complete and up-to-date educational program on the market. The most important features include:

- The development of case studies presented by experts in teaching in High School Education
- The graphic, schematic, and practical contents with which they are created, provide scientific and 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

Incorporate the latest scientific-technological learning techniques and strategies into your daily life thanks to this educational option"

With this university program you will not need to invest many hours of study, TECH's Relearning system provides you with a solid learning in less time"

Delve whenever you wish into the main scientific theories that delve into learning disabilities.

You will enhance your skills as a teacher to create a great learning climate in your classroom. Enroll now"

The program's teaching staff includes professionals from the sector 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 educational year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

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Objectives

Upon completion of this Postgraduate Certificate, the teaching professional will have acquired advanced knowledge on the design and preparation of teaching units in High School Education. A goal that will be more easily achieved thanks to the teaching resources provided by TECH and the support of the excellent teachers that make up this program.

In only 6 weeks you will be able to improve the teaching of your classes, using the latest educational tools and resources"

General Objectives

- Introduce students to the world of teaching, from a broad perspective that provides them with the necessary skills for the performance of their work
- Know the new tools and technologies applied to teaching
- Show the different options and ways the teacher can work in their post
- Promote the acquisition of communication and knowledge transmission skills and abilities
- Encourage continuing Education for students

Specific Objectives

- Get to know the relationship between learning and development, education and culture
- Understand the importance of schooling in development
- Study the concept of brain plasticity and plasticity windows
- Gain knowledge about the essential social factors in learning: imitation, shared attention and empathic understanding
- Identify the stages of development
- Understand the concept of personality

Introduce new ways of methodological assessment in your sessions thanks to the learning you will acquire with this 100% online program"
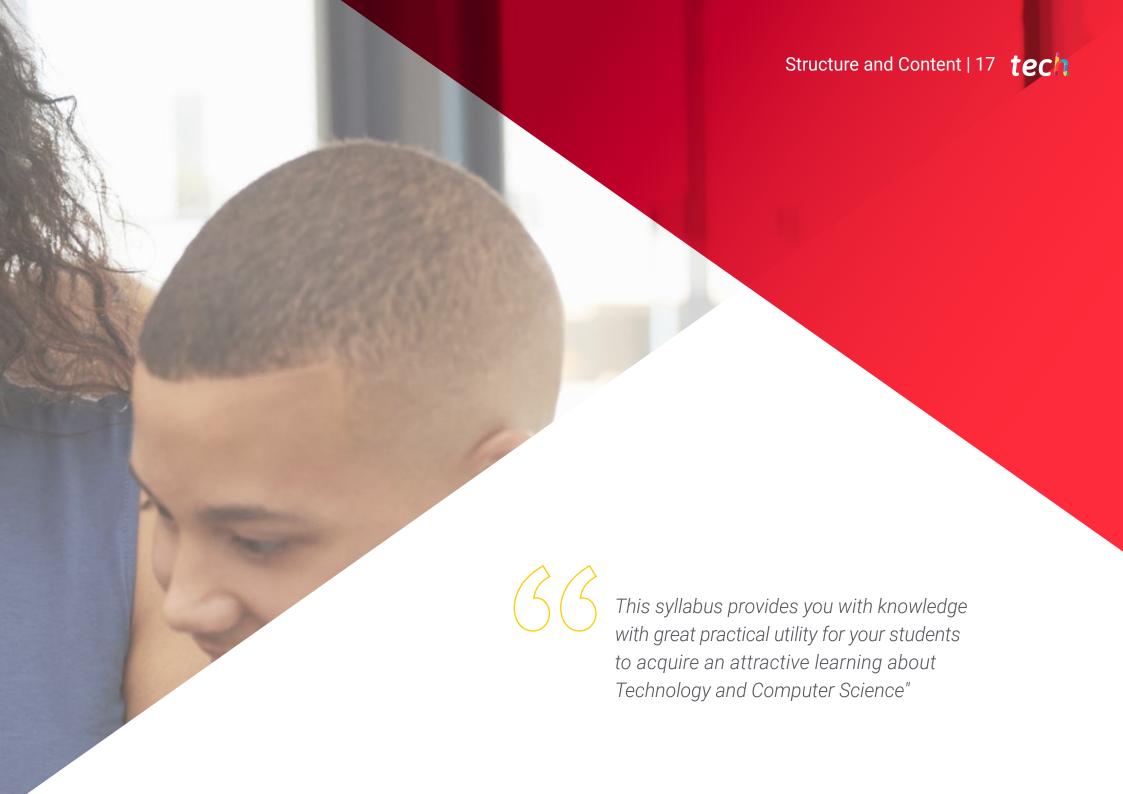
03

Course Management

The students who take this course will receive the most exhaustive, rigorous and recent information on Technology and Computer Science Teaching from a team of professionals with extensive experience in the Teaching sector. In this way, the teachers have the guarantee of access to a first class program, which will allow them to incorporate all the methodological elements and educational resources to offer quality learning.

You have at your disposal a magnificent team of teachers specialized in the Education sector that will give you all the tools you need to understand the way teenage high school students learn"

Management

Dr. Barboyón Combey, Laura

- Teacher of Primary Education and Postgraduate Studies
- Teacher in Postgraduate University Studies of High School Teacher Formation
- Teacher of Primary Education in several schools
- Doctor in Education from the University of Valencia
- Master's Degree in Psychopedagogy from the University of Valencia
- Degree in Primary School Education with a major in English Teaching from the Catholic University of Valencia San Vicente Mártir

04

Structure and Content

The syllabus of this Postgraduate Certificate has been created to offer the teaching professional the most necessary information to be able to carry out an effective teaching. In this way, the teachers will be immersed in a syllabus with a theoretical-practical approach that will take them from the most general to the particular, providing the techniques, learning strategies and tools necessary to design a successful lesson in Technology and Computer Science. All this, in addition, with innovative multimedia material to which you will have access 24 hours a day, 7 days a week.

"
This syllabus provides you with knowledge with great practical utility for your students to acquire an attractive learning about Technology and Computer Science"

Module 1. Teaching of Technology and Computer Science

1.1.   General Didactics and Learning Theories
 1.1.1.   Concept
 1.1.2.   Learning Theories
 1.1.3.   Learning Theories for the Digital Age
 1.1.4.   Social Learning Theories

1.2.   Techniques and Strategies of Scientific-Technological Learning
 1.2.1.   Inquiring Learning and ICT
 1.2.2.   Techniques and Strategies of Scientific-Technological Learning

1.3.   Learning Techniques and Strategies Activate Applied to the Specialty
 1.3.1.   Collaborative-Learning Cooperative Learning
 1.3.2.   Learning by Doing
 1.3.3.   Learning by Participating

1.4.   Teacher Methodologies for Teaching Technology and Innovative Methodologies
 1.4.1.   Academic-Expository Model
 1.4.2.   Problem-Solving Models
 1.4.3.   Project-Solving Models
 1.4.4.   Discovery Learning Model
 1.4.5.   Incidentally Learning Model
 1.4.6.   Interdisciplinary Model
 1.4.7.   Model with Specific Teaching Materials
 1.4.8.   Research or Inquiry Model
 1.4.9.   Product Analysis Model
 1.4.10.   Game-Based Learning (GBL)
 1.4.11.   Online Applications: Clash of Clans
 1.4.12.   Flipped Classroom

1.5.   Mainly Theoretical Focus of Learning Difficulties
 1.5.1.   Neurobiological or Organic Theories
 1.5.2.   Theories of Cognitive Deficit Processes
 1.5.3.   Psycholinguistic Theories
 1.5.4.   Psychogenic Theories
 1.5.5.   Environmentalist Theories

05
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.

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"
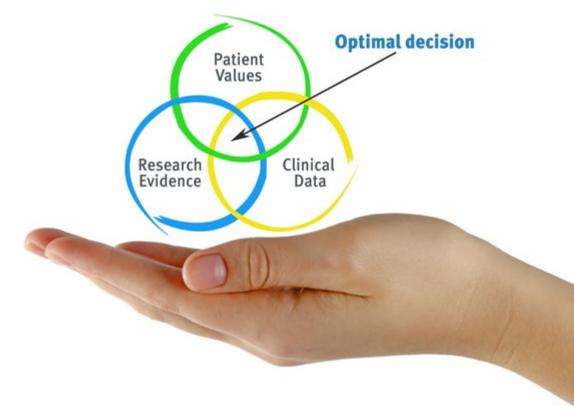
At TECH Education School we use the Case Method

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:

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.

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.

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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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.

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.

20%

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.

15%

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".

15%

3%

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.

20%

17%

7%

3%

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.

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.

Certificate

The Postgraduate Certificate in Technology and Technology and Computer Science Teaching 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 program will allow you to obtain your **Postgraduate Certificate in Technology and Computer Science Teaching** 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: **Postgraduate Certificate in Technology and Computer Science Teaching**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**

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Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Postgraduate Certificate in Technology and Computer Science Teaching

This is a program of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

Unique TECH Code: AFWORD235   techtitute.com/certificates

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*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.

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