



Postgraduate Certificate Use of ICT and its Practical Education Application

» Modality: online

» Duration: 12 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

 $We b site: {\color{blue}www.techtitute.com/us/education/postgraduate-certificate/technological-innovation-education} \\$

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06 Certificate





tech 06 | Introduction

Knowledge of what ICT is, its objectives and its use in the educational environment will provide the teacher with a solid base to continue learning more ways to apply this valuable knowledge in favor of teaching adapted to the digital era.

Nowadays, educators face a great challenge because they have to be ahead of their students, those who have been born in the digital era, and that is why it is essential to acquire new knowledge about *e-learning* and the technological advances that are changing the teaching system completely.

The versatility offered by the technological advances offered by *e-learning* allows the educator to carry out a very entertaining job with a wide interaction with students, although everything is achieved with adequate specialization and practice in order to know the available tools well.

Educators need to acquire basic knowledge in a wide range of areas related to programming, gamification and robotics. All this will help to make the classes more interesting and attract the student's attention.

Update your knowledge through the Postgraduate Certificate in the Use of ICT and its Practical Application in Education"

This Postgraduate Certificate in the Use of ICT and its Practical Education Application contains the most complete and up-to-date program on the market. The most important features include:

- Development of more than 75 case studies presented by experts in Technological Innovation in 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
- The latest developments in detection and intervention through Technological Innovation in teaching
- It contains practical exercises where the self-assessment process can be carried out to improve learning
- Algorithm-based interactive learning system for decision-making in the situations that are presented to the student
- With special emphasis on evidence-based methodologies in technological innovation in education
- All of this will be complemented by 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



This Postgraduate Certificate may be the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge of ICT and their practical application in Education, you will obtain a Postgraduate Certificate from TECH Technological University"

It includes in its teaching staff professionals belonging to the field the area of Neuroeducation and their practical application in Education will who pour into this specialization the experience of their work, in addition to recognized specialists belonging to reference societies and prestigious universities.

Thanks to its multimedia content developed with the latest educational technology, they will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to prepare in real situations.

The design of this Postgraduate Certificate is based on problem-based learning, by means of which the professional must try to solve the different professional practice situations that arise throughout the course. To do so, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts in the field Use of Infographics.

Increase your decision-making confidence by updating your knowledge through this Postgraduate Certificate.

Seize the opportunity to learn the latest advances in ICT and their practical application in Education will and improve the attention you provide your students.









tech 10 | Objectives



General Objectives

- Acquire fundamental knowledge and skills to be able to practice your profession by learning everything you need to know about ICTs
- To understand the major differences between traditional teaching and teaching using digital technologies
- To learn about the new technological methodologies available for the educational sector and acquire basic knowledge to face the challenge of robotics and teaching through gamification



Make the most of this opportunity and take the step to get up to date on the latest developments in Use of ICT and their practical application in Physical Education"





Objectives | 11 tech



Specific Objectives

- Describe new technologies in education
- Know how to implement ICT in the classroom and its different applications
- Understand social media and its applications in teaching
- Know the new methodologies in the classroom
- Distinguish between mobile and WiFi networks
- Classify mobile devices: tablets and smartphones
- Discover the increase 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





tech 14 | Course Management

Management



Dr. Cabezuelo Doblaré, Álvaro

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



Course Management | 15 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. 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

D. Gris Ramos, Alejandro

- Technical Engineer in Computer Management
- Master's Degree in Electronic Commerce and Specialist in latest technologies applied to teaching, Digital Marketing, development of web applications, and Internet business





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Module 1. ICT and its Practical and Interactive Application

- 1.1. New Technologies in Education
 - 1.1.1. The Educational Context 2.0
 - 1.1.2. Why use ICT?
 - 1.1.3. The Digital Competencies of Teachers and Students
 - 1.1.4. Summary
- 1.2. ICT in the Classroom and its Application
 - 1.2.1. Digital Book
 - 1.2.2. Digital Whiteboard
 - 1.2.3. Digital Backpack
 - 1.2.4. Mobile Devices
 - 1.2.5. Summary
- 1.3. ICT on the Web and its Application
 - 1.3.1. Browse, Search and Filter Information
 - 1.3.2. Educational Software
 - 1.3.3. Guided Activities on the Internet
 - 1.3.4. Educational Blogs and Web Pages
 - 1.3.5. Language and Literature Teacher's Wikis
 - 1.3.6. Learning Platforms: Moodle and Schoology
 - 1.3.7. Google Classroom
 - 1.3.8. Google Docs
 - 1.3.9. MOOCs
 - 1.3.10. Summary
- 1.4. Social Networks and their Applications in Teaching
 - 1.4.1. Introduction to Social Networks
 - 1.4.2. Facebook.
 - 1.4.3. Twitter
 - 1.4.4. Instagram
 - 1.4.5. LinkedIn
 - 1.4.6. Summary

- .5. New Methodologies in the Classroom
 - 1.5.1. Outlines, Concept, and Mind Maps
 - 1.5.2. Infographics
 - 1.5.3. Presentations and Moving Texts
 - 1.5.4. Creation of Videos and Tutorials
 - 1.5.5. Gamification
 - 1.5.6. Flipped Classroom
 - 1.5.7. Summary
- 1.6. Design of Collaborative Activities
 - 1.6.1. Creation of Collaborative Activities
 - 1.6.2. Reading and Writing with ICT
 - 1.6.3. Expanding Dialogue and Reasoning Skills with ICTs.
 - 1.6.4. Attention to Group Diversity
 - 1.6.5. Scheduling and Monitoring of Activities
 - 1.6.6. Summary
- 1.7. Evaluation with ICT
 - 1.7.1. Assessment Systems with ICT
 - 1.7.2. The E-Portfolio
 - 1.7.3. Self-assessment, Peer Assessment, and Feedback
 - 1.7.4. Summary
- 1.8. Possible Risks of the Web
 - 1.8.1. Filtering Information and Infoxication
 - 1.8.2. Online Distractors
 - 1.8.3. Activity Tracking
 - 1.8.4. Summary
- 1.9. My ICT Resources
 - 1.9.1. Storage and Retrieval of Resources, Materials, and Tools
 - 1.9.2. Updating Resources, Materials, and Tools
 - 1.9.3. Summary

Module 2. Technological Innovation in Education

- 2.1. Advantages and Disadvantages of the Use of Technology in Education
 - 2.1.1. Technology as a Means of Education
 - 2.1.2. Advantages of Use
 - 2.1.3. Inconveniences and Addictions
 - 2.1.4. Summary
- 2.2. Educational Neurotechnology
 - 2.2.1. Neuroscience
 - 2.2.2. Neurotechnology
 - 2.2.3. Summary
- 2.3. Programming in Education
 - 2.3.1. Benefits of Programming in Education
 - 2.3.2. Scratch Platform
 - 2.3.3. Confection of the First Hello World
 - 2.3.4. Commands, Parameters and Events
 - 2.3.5. Export of Projects
 - 2.3.6. Summary
- 2.4. Introduction to the Flipped Classroom
 - 2.4.1 What it is Based On?
 - 2.4.2. Examples of Use
 - 2.4.3. Video Recording
 - 2.4.4. YouTube
 - 2.4.5. Summary
- 2.5. Introduction to Gamification
 - 2.5.1. What is Gamification?
 - 2.5.2. Gamification Tools
 - 2.5.3. Success Stories
 - 2.5.4. Summary
- 2.6. Introduction to Robotics
 - 2.6.1. The Importance of Robotics in Education
 - 2.6.2. Arduino (*Hardware*)
 - 2.6.3. Arduino (Programming Language)
 - 2.6.4. Summary

- 2.7. Introduction to Augmented Reality
 - 2.7.1. What is AR?
 - 2.7.2. What are the Benefits in Education?
 - 2.7.3. Summary
- 2.8. How to Develop your own AR Applications?
 - 2.8.1. Professional Augmented Reality
 - 2.8.2. Unity/Vuforia
 - 2.8.3. Examples of Use
 - 2.8.4. Summary
- 2.9. Samsung Virtual School Suitcase
 - 2.9.1. Immersive Learning
 - 2.9.2. The Backpack of the Future
 - 2.9.3. Summary
- 2.10. Tips and Examples of Use in the Classroom
 - 2.10.1. Combining Innovation Tools in the Classroom
 - 2.10.2. Real Examples
 - 2.10.3. Summary



A unique specialization experience, key and decisive to boost your professional development"



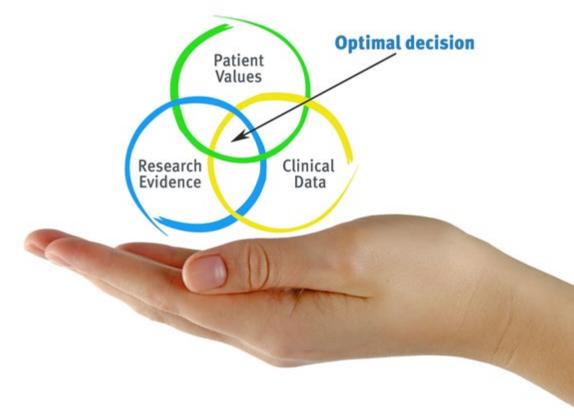


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At TECH Education School we use the Case Method

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 24 | 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 | 25 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 26 | 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.



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:



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.





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 30 | Diploma

This **Postgraduate Certificate in Use of ICT and its Practical Education Application** contains the most complete and up-to-date program on the market.

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

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

Title: Postgraduate Certificate in Use of ICT and its Practical Education Application N.° Teaching Hours: 300 h.



POSTGRADUATE CERTIFICATE

in

Use of ICT and its Practical Education Application

This is a qualification awarded by this University, equivalent to 300 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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

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Jnique TECH Code: AFW0

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

technological university

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