Postgraduate Certificate
Programming for Learning Through Play

tech. technological university

Postgraduate Certificate
Programming for Learning Through Play

- » Modality: **online**
- » Duration: **6 weeks**
- » Certificate: **TECH Technological University**
- » Dedication: **16h/week**
- » Schedule: **at your own pace**
- » Exams: **online**

Website: **www.techtitute.com/pk/education/postgraduate-certificate/programming-learning-through-play**

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Introduction

Nowadays, the planet is clearly immersed in a world of new technologies, which are advancing in giant steps, and we not only live with them to communicate with each other, but we also work with them. Within the education world, children coexist with new technologies, we use digital boards, blogs, projectors, etc., and we are in the age of information, where technology is immersed in our daily and school life.

" *This Postgraduate Certificate in Programming for Learning Through Play will generate a sense of security in the performance of your profession, which will help you grow personally and professionally"*

Therefore, teachers have a great role to play in this sector, since we are preparing children to face tomorrow's society and the jobs they will have in the future.

For this reason, we consider programming as an innovative and ideal tool to promote the development of skills or competencies through the resolution of small challenges, using it as a medium.

With this Postgraduate Certificate in Programming for Learning through Play what we want to achieve is that apart from having knowledge about the world of programming, we want to take advantage of the multidisciplinary accessibility that compose it, to activate cognitive processes in students and above all to develop a more meaningful learning, being themselves the protagonists of this process.

That is why this Postgraduate Certificate in Programming for Learning through Play has been designed with the aim of establishing learning guidelines, new technological and pedagogical knowledge for the program to enable teachers, educators or teaching professionals, so that they can generate a change in the education of our children, who will undoubtedly be the society of tomorrow.

The Postgraduate Certificate in Programming for Learning through Play aims to be a means to provide the teacher with various tools to help the motivation and learning of students, to be a generator of a new teacher profile of the XXI century.

This is a fully practical specialization of teaching, presenting the student with challenges that he/she can then apply in the classroom.

This **Postgraduate Certificate in Programming for Learning Through Play** contains the most complete and up-to-date educational program on the market. The most important features include:

- Development of a large number of case studies presented by experts in Programming and Educational Video Games

- 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

- News on Educational Programming and Video Games

- It contains practical exercises where the self-assessment process can be carried out to improve learning

- With special emphasis on innovative methodologies in Programming and Educational Video Games

- 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

Update your knowledge through the Postgraduate Certificate program in Programming for Learning through Play"

"This Postgraduate Certificate may be the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your Programming for Learning Through Play, you will obtain a Postgraduate Certificate from TECH Technological University"

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

Take the opportunity to learn about the latest advances in Programming for Learning Through Play and in this way improve the attention of your students.
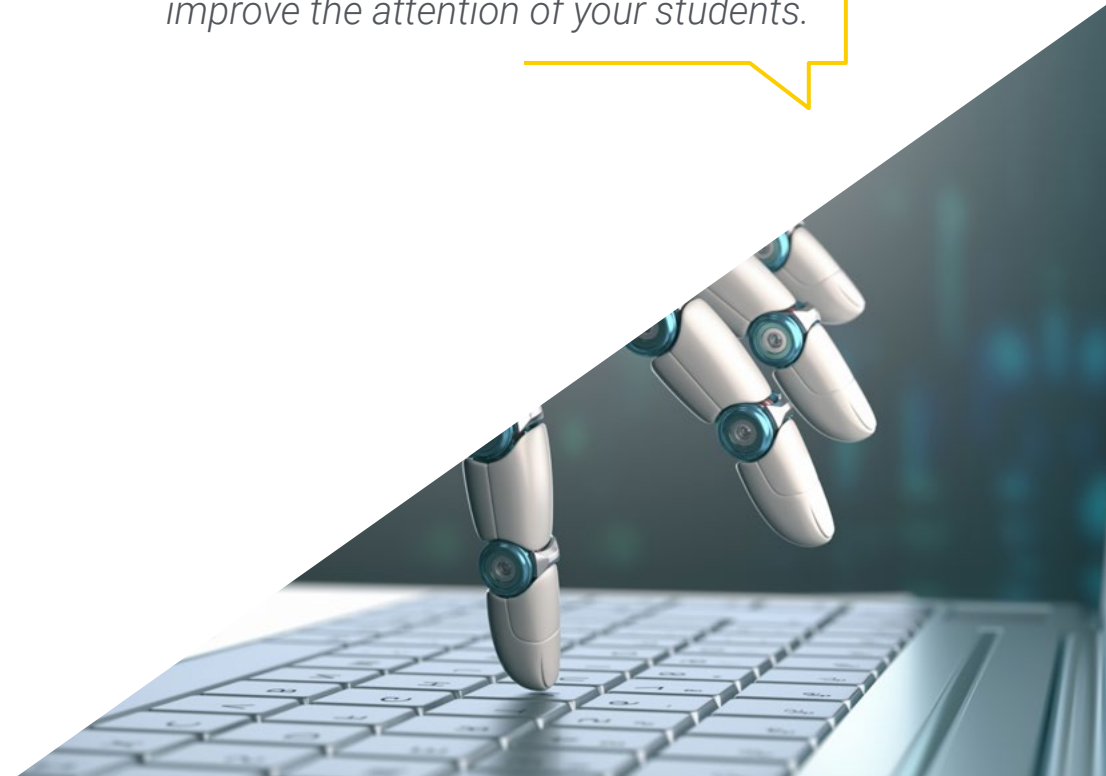
It includes in its teaching staff professionals belonging to the field of Programming for Learning through Play, who will enable in this program the experience of their work, in addition to recognized specialists belonging to reference societies and prestigious universities.

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 program 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 developed by recognized experts in the field of cooperative learning in mathematics and with extensive teaching experience.

Objectives

The Postgraduate Certificate in Programming for Learning through Play is oriented to facilitate the implementation of Programming and Educational Video Games in the regular development of the classroom.

"

This Postgraduate Certificate is designed for you to update your knowledge in Programming for Learning through Play, using the latest educational technology, to contribute with quality and security to the decision making and monitoring of these students"

General Objective

• Learning how to plan in a transversal and curricular way in all educational stages, where education professionals can incorporate new technologies and methodologies in the classroom

" *Take the opportunity and take the step to get up-to-date on the latest developments in Programming for Learning Through Play"*

Specific Objectives

- Introduce learning theories related to Educational Robotics
- To substantiate the application of robotics pedagogy in the classroom
- Know the legal and ethical aspects of robotics and 3D printing
- Teaching STEAM competencies as a learning model
- Transfer the teacher to new physical environments that improve the educational practice
- Knowledge of computational thinking skills
- Turn classrooms into workspaces for their own learning
- To provide teachers with knowledge related to the brain's functioning
- Train the teacher to transform the traditional methodology into a playful methodology
- Understand what a robot is, types and elements that make it up
- Understanding the laws of robotics
- Raise teachers' awareness of the importance of a transformation in education, motivated by the new generations
- Learn about new learning models and the application of educational robotics to motivate students towards technological careers
- Facilitating skills and capabilities for the relationships of the new classrooms of the future

03

Course Management

The program includes in its teaching staff reference experts in Programming for Learning through Play, who will enable the experience of their work in this program. Additionally, other recognized specialists participate in its design and preparation, which means that the program is developed in an interdisciplinary manner.

Learn from leading professionals, the latest advances in procedures in the field of Programming for Learning through Play"

Management

Ms. Muñoz Gambín, Marina

- Degree in Early Childhood Education Teaching from CEU Cardenal Herrera University
- Educational Coach certified by the Alicante Chamber of Commerce
- Expert in Neurolinguistic Programming certified by Richard Bandler
- Responsible for the area of Educational Robotics and Programming for Kindergarten and Primary School at Robotuxc Academy Certified in Lego Education© methodology
- Emotional Intelligence in the Classroom Trainer
- Neuroscience Teacher Training
- Certified trainer of trainers
- Certified in Music Education as therapy

Management

Mr. Coccaro Quereda, Alejandro

- Expert in Educational Robotics, Design and 3D Printing
- Certified in Lego Education© methodology
- Head of Educational Robotics, Design and 3D Printing for Primary and Secondary Education at Robotuxc Academy
- Robotuxc Academy Robotics National Competition Challenges Specialist
- Certified trainer of trainers

### Ms. Gambín Pallarés, María del Carmen

- Systemic Family Therapist
- Social Worker
- Founder and Director of "EducaDiferente" Positive Discipline in Costa
- Family and teacher educator in Positive Discipline
- Lego Serious Play methodology facilitator
- Coaching training for professionals
- Member of the Positive Discipline Association Spain

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Structure and Content

The structure of the contents has been designed by a team of professionals from the best educational centers and universities in the national territory, aware of the relevance of updating in order to be able to intervene in the program and accompany students with high capacity, and committed to quality teaching through new educational technologies.
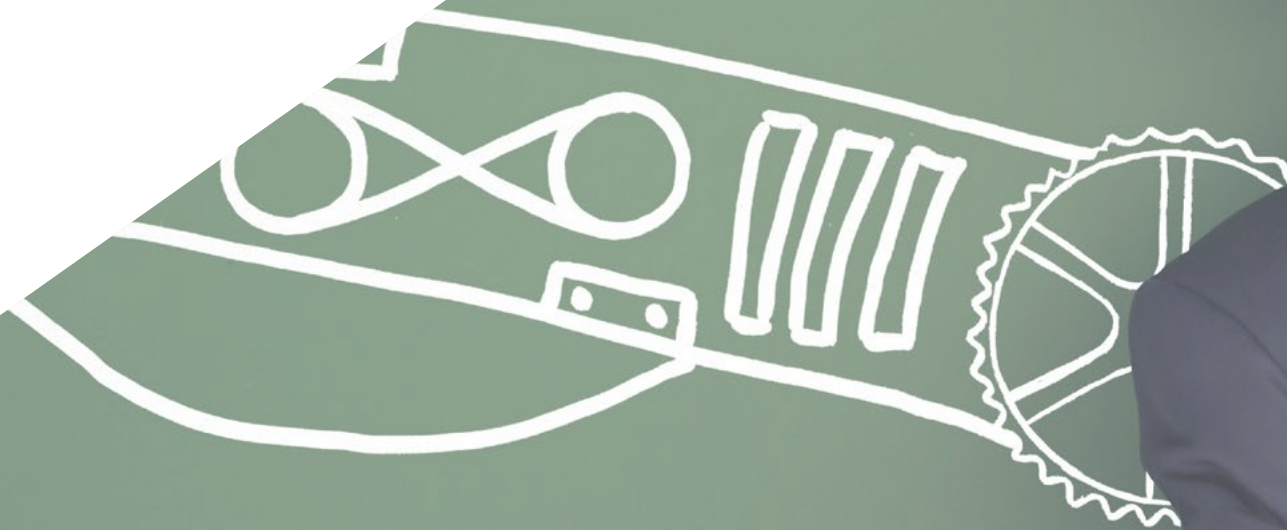
This Postgraduate Certificate in Programming for Learning Through Play contains the most complete and up-to-date scientific program on the market"

Module 1. Programming for learning by playing

1.1.   The Future of Education Lies in Teaching How to Code
    1.1.1.   The Origins of Programming for Children
        1.1.1.1. LOGO Language
    1.1.2.   Impact of Learning Programming in the Classroom
    1.1.3.   Small Creators Without Fear of Error
1.2.   Teaching Tools for Introducing Programming in the Classroom
    1.2.1.   From where do we start teaching programming?
    1.2.2.   How Can I Introduce It in the Classroom?
1.3.   What Programming Tools Can We Find?
    1.3.1.   Platform for Learning to Program from Early Childhood
        1.3.1.1. Code org
    1.3.2.   Video Game Programming in 3D
        1.3.2.1. Kodu Game Lab
    1.3.3.   Learn to Program in High School
        1.3.3.1. JavaScript
        1.3.3.2. C+
        1.3.3.3. Phyton
        1.3.3.4. Code Combat
1.3.4. Other Alternatives for Programming at School

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

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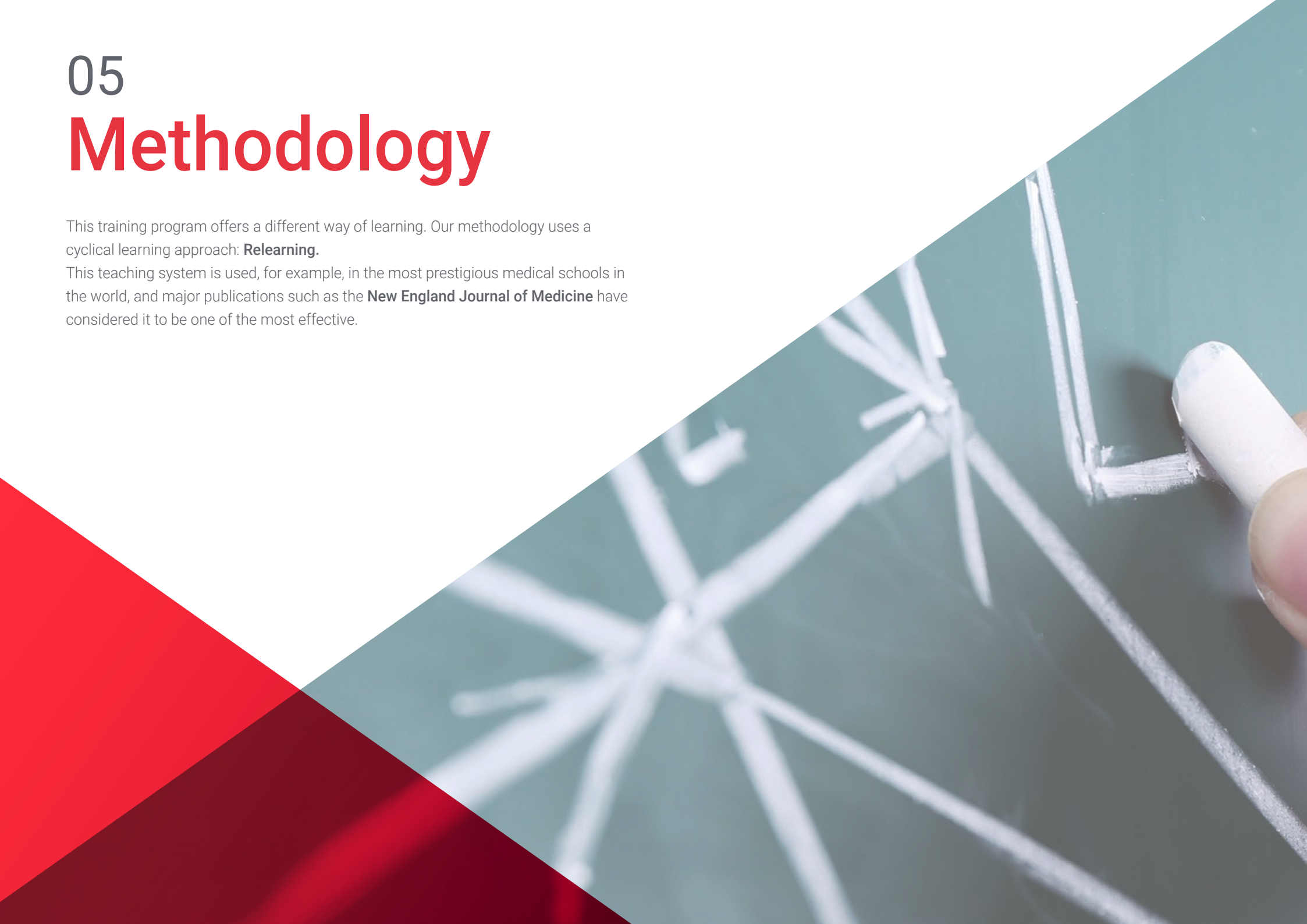
Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

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.

Scientific Evidence

European Guidelines

Educational Community

Optimal Decision

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.

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.

20%

15%

15%

3%

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 Programming for Learning Through Play guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

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

This **Postgraduate Certificate in Programming for Learning Through Play** 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 certificate 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 Programming for Learning Through Play**

Official Nº of Hours: **150 h.**

tech technological university

Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.
For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Programming for Learning Through Play

This is a qualification awarded by this University, equivalent to 150 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.

June 17, 2020

Tere Guevara Navarro
Dean

Unique TECH Code: AFWORD23S   techtitute.com/certificates

*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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