Postgraduate Certificate

Physico-Chemical Processes for the Production and Control of Pharmaceutical Products

tech technological university

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Postgraduate Certificate

Physico-Chemical Processes for the Production and Control of Pharmaceuticals Products

Course Modality: **Online**
Duration: **6 weeks**
Certificate: **TECH - Technological University**
4 ECTS Credits
Teaching Hours: **100 hours.**
Website: **www.techtitute.com/us/pharmacy/postgraduate-certificate/physico-chemical-processes-production-control-pharmaceutical-products**

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01

Introduction

The development of industry and the discovery of new synthetic medicines has transformed the concept of medicine. We have gone from an individualized medicine for a specific patient and specific needs, to a global medicine. I.e., for a specific disease, but for a large number of patients.

Update your knowledge through the Postgraduate Certificate in Physico-Chemical Processes for the Production and Control of Pharmaceutical Products, in a practical way and adapted to your needs"

Industrialized medicine has been a breakthrough in current therapeutics, since many patients have found a remedy for their illnesses.

However, this industrialized drug does not cover all therapeutic needs. For various reasons, there are therapeutic gaps that only individualized medication can fill.

The magistral formulation or, nowadays, "individualized medicine" is the essence of the pharmaceutical profession. It has been the starting point of human medicine therapeutics, when patient care was individualized.

The master formula, understood as the medicine intended for an individualized patient, prepared by or under the direction of a pharmacist, to expressly comply with a detailed medical prescription of the medicinal substances it includes, requires that the professional activity be adjusted to strict and faithfully reproducible procedural guidelines. In this sense, pharmacists need to be updated and promote continuous training in the knowledge and compliance with the standards for the correct preparation and quality control of master formulas in order to achieve the required level of quality.

The objective of this program is to train pharmacists in a discipline unique and exclusive to their profession, training professionals who can respond to therapeutic gaps with the formulation of an individualized drug with the quality and efficacy of an industrialized drug.

This **Postgraduate Certificate in Physico-Chemical Operations for the Production and Control of Pharmaceuticals Products** contains the most complete and up-to-date scientific program on the market. The most important features of the Postgraduate Certificate are:

- Development of clinical cases presented by experts in pharmacology. The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice.
- New developments on performance in the development of physicochemical operations for the production and control of pharmaceutical products
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course.
- With a special emphasis on evidence-based medicine and research methodologies in physicochemical operations for the development and control of pharmaceutical products
- All this will be complemented with theoretical lessons, questions to the expert, forums for the discussion of controversial topics and individual reflection papers.
- Availability of the contents from any fixed or portable device with an internet connection

Update your knowledge through the Postgraduate Certificate in Physico-Chemical Processes for the Elaboration and Control of Pharmaceutical Products, in a practical way and adapted to your needs"

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 knowledge in Physico-Chemical Processes for the Elaboration and Control of Pharmaceutical Products, you will obtain a degree from the largest Digital University in the world, TECH"

It includes in its teaching staff health professionals from the field of master formulas, who bring to this training the experience of their work, as well as recognized specialists belonging to leading scientifica societies

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 an immersive training program to train in real situations.

The design of this program is based on Problem-Based Learning, by means of which the pharmacist must try to solve the different professional practice situations that arise throughout the Postgraduate Certificate. This will be done with the help of an innovative interactive video system developed by renowned experts in the field of pharmacology with extensive teaching experience.

The Postgraduate Certificate includes real case studies and exercises to bring the development of the Postgraduate Certificate closer to the pharmacist's professional practice

Take the opportunity to update your knowledge in Physico-Chemical Processes for the Elaboration and Control of Pharmaceutical Products and improve your patient care

02

Objectives

The main objective of the program is the development of theoretical and practical learning, so that the professional can master in a practical and rigorous way the Physico-Chemical Processes for the Elaboration and Control of Pharmaceutical Products.

This refresher program will generate a sense of security in the performance of the professional's praxis, which will help you grow personally and professionally"

General Objective

- Guarantee the correct preparation, by the pharmacist, of magistral formulas and office preparations according to the regulations in force by means of complementary theoretical/practical training to that acquired in their basic training, updating knowledge, training skills and developing attitudes.

Take the opportunity and take the step to get up to date on the latest developments in physicochemical operations for the processing and control of products

Specific Objectives

- Carry out the operations of elaboration and/or control according to the established rules of correct elaboration and quality control of magistral formulas and office preparations
- Make the corresponding records
- Explain what is the emulsion sign?
- Explain what the organoleptic characteristics test consists of,
- Final weight/volume

03

Structure and Content

The structure of the contents has been designed by a team of professionals knowledgeable about the implications of training in daily pharmaceutical practice. in Physico-Chemical Processes for the Elaboration and Control of Pharmaceutical Products, aware of the relevance of the current training to be able to elaborate magistral formulas with guarantee, by means of new educational technologies.

This Postgraduate Certificate in Physico-Chemical Processes for the Elaboration and Control of Pharmaceutical Products contains the most complete and up to date scientific program on the market"

Module 1. Basic Physicochemical Processes for the Production and Control of Products

1.1. Volume Measurement. Units, Volumetric Material, Calibration, Cleaning and Recommendations for Use
1.2. Determination of Mass: Units of Mass, Scales and Weighing Methods. Verification and Calibration
1.3. Concentration: Concept and Expression. Units
1.4. Dilution Techniques. Realization and Calculations
1.5. Density: Concept, Determination and Applications
1.6. Temperature Measurement
1.7. Viscosity: Concept, Determination and Applications
1.8. Melting Point: Concept and Determination
1.9. Solidification Point: Concept and Determination
1.10. Ph Determination. Fundamental Concepts

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

04

Methodology

This training provides you with a different way of learning. Our methodology is developed through a cyclical learning mode: ***Re-learning***.

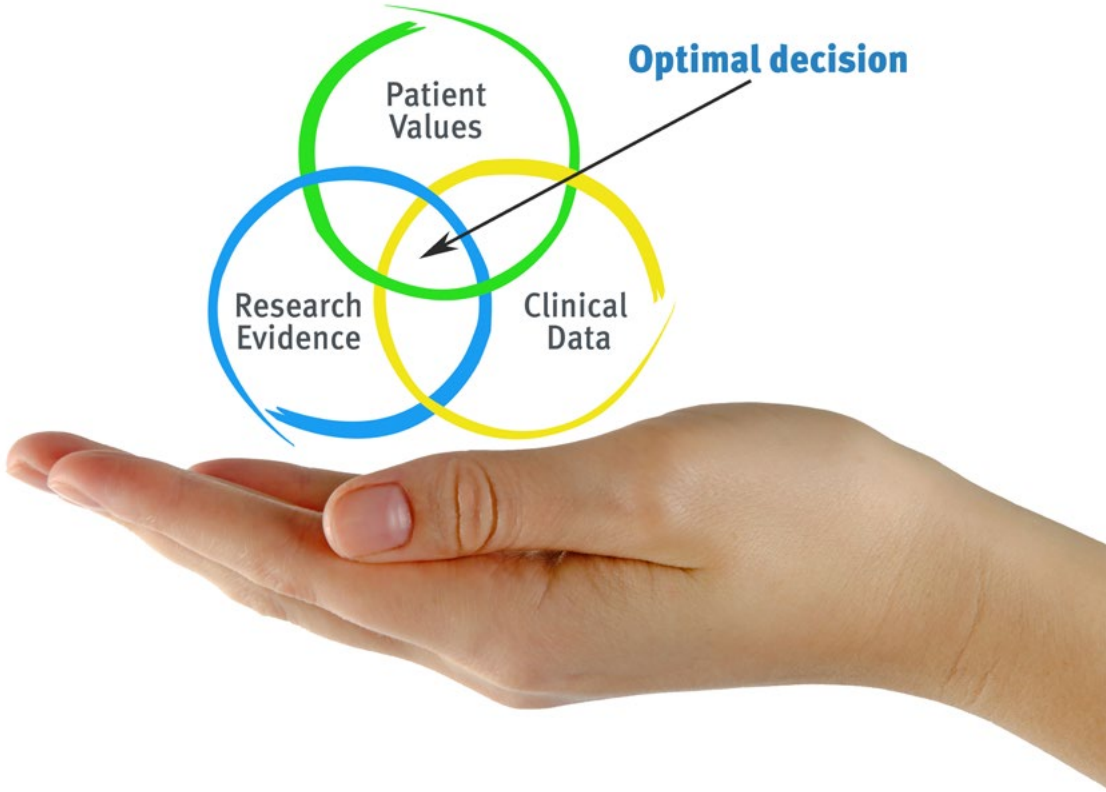
This system of teaching is used in the most prestigious medical schools in the world and has been and has been considered one of the most effective by leading publications such as the ***New England Journal of Medicine.***

Discover Re-learning, 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 we use the Case Method

In a given clinical situation, what would you do? Throughout the program, you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Pharmacists learn better, more quickly and more sustainably over time.

With TECH you can experience a way of learning that is shaking the foundations of traditional universities around the world



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching potential or because of its uniqueness or rarity. It is essential that the case is based on current professional life, attempting to recreate the actual conditions in a pharmacist's professional practice.

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:

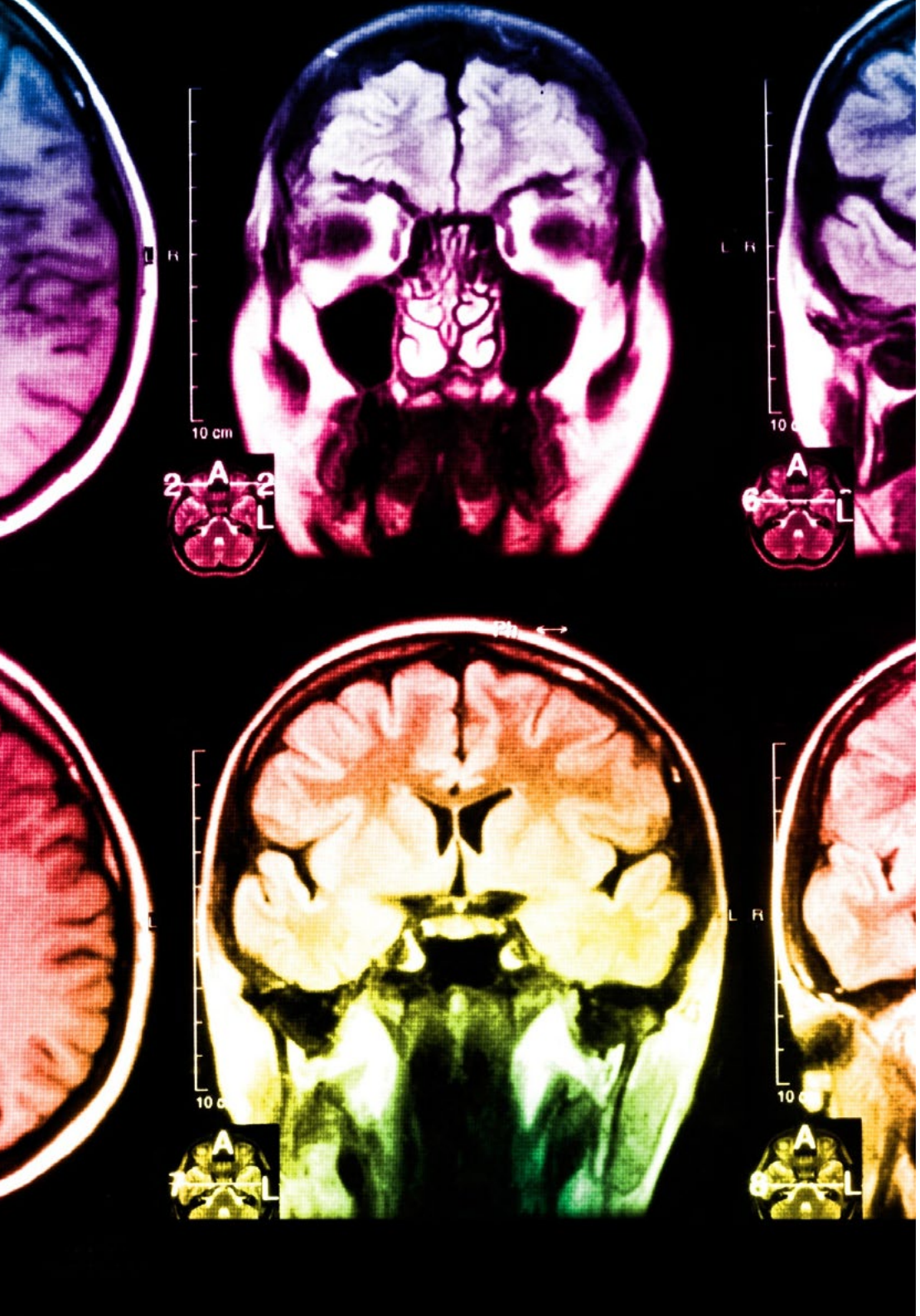
1. Pharmacists who follow this method not only achieve the assimilation of concepts, but also develop their mental capacity through exercises to evaluate real situations and apply their knowledge.
2. The learning process has a clear focus on practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
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.

Re-learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our University is the first in the world to combine the study of clinical cases 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.

Pharmacists 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



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

With this methodology we have trained more than 115,000 pharmacists with unprecedented success, in all clinical specialties. Our pedagogical methodology is developed in a highly demanding environment, with a university student body with a high socioeconomic profile and an average age of 43.5 years old.

Re-learning 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 (we 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.

In this program you will have access to the best educational material, prepared with you in mind:

Study Material

All teaching material is created specifically for the course by specialist pharmacists who will be teaching the course, so that the didactic development is highly specific and accurate.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.

Video Techniques and Procedures

We bring you closer to the latest techniques, to the newest educational advances, to the forefront of current pharmaceutical care procedures. All this, in first person, 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.

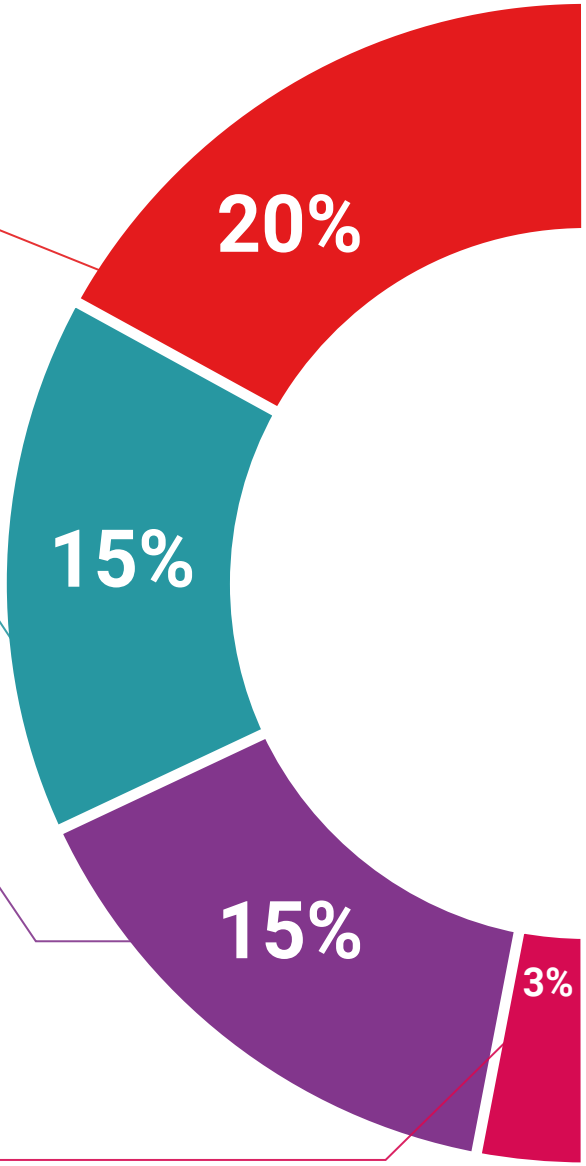
Interactive Summaries

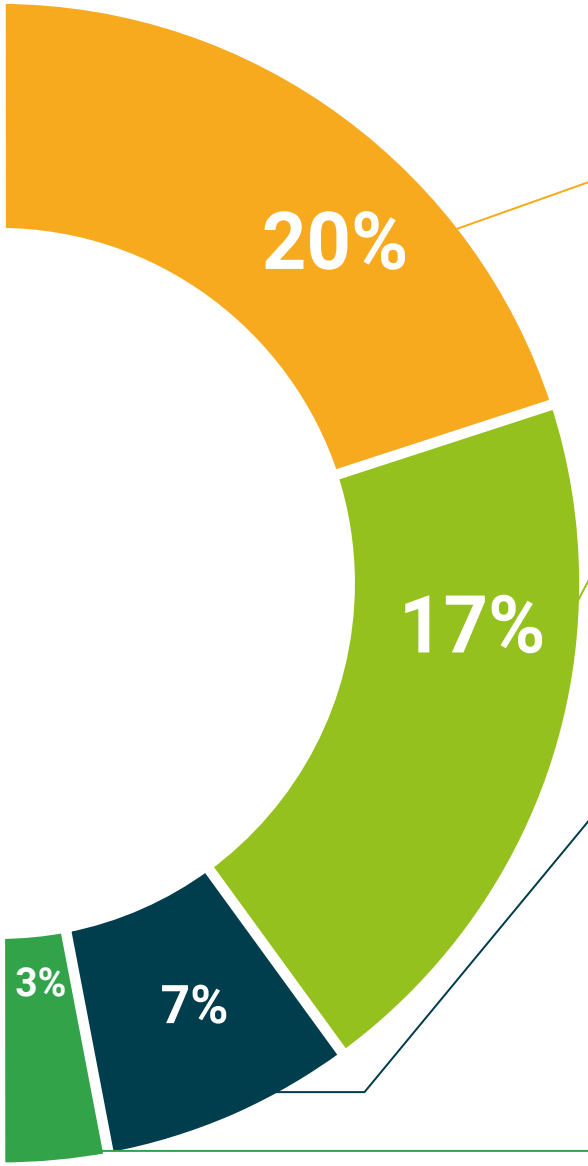
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story"

Additional Reading

Recent articles, consensus documents, international guides. in our virtual library you will have access to everything you need to complete your training.





Expert-led case studies and case analysis

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through the development of attention and the resolution of different situations: a clear and direct way to achieve the highest degree of understanding.

Testing & Retesting

We periodically evaluate and re-evaluate your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.

Classes

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

Learning from an expert reinforces knowledge and memory, and builds confidence in our difficult future decisions.

Quick Action Guides

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.

05

Certificate

The **Postgraduate Certificate in Physico-Chemical Processes for the Production and Control of pharmaceutical products** guarantees you, in addition to the most rigorous and up to date training, the access to a Postgraduate Certificate issued **by TECH - Technological University.**

Successfully complete this training and receive your Postgraduate Certificate without travel or laborious paperwork"

This **Postgraduate Certificate in Physico-Chemical Processes for the Production and Control of pharmaceutical products** contains the most complete and up to date scientific program on the market.

Once the student has passed the evaluations, they will receive their corresponding **Postgraduate Certificate** issued by **TECH - Technological University**

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

Title: **Postgraduate Certificate in Physico-Chemical Processes for the Production and Control of Pharmaceutical Products**

ECTS: **4**

Official Number of Hours: **100 hours.**


tech technological university

Awards the following

DIPLOMA

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Physico-Chemical Processes for the Production and Control of Pharmaceutical Products

This is a qualification awarded by this University, with 4 ECTS credits and equivalent to 100 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

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. 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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