

# Postgraduate Certificate Quantitative Research





## Postgraduate Certificate Quantitative Research

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

Website: [www.techtute.com/us/nursing/postgraduate-certificate/quantitative-research](http://www.techtute.com/us/nursing/postgraduate-certificate/quantitative-research)

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# 01

# Introduction

Quantitative research offers the health branch the contrasted data of evidence-based medicine. Information that bases nursing intervention on solid and real research-based care, avoiding traditional uses or personal preferences in exchange for work supported by the most appropriate results.





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Quantitative Research, developed in a Postgraduate Certificate of the highest quality”

The nursing discipline initially advanced in knowledge thanks to Quantitative Research, using the universal language of numbers, which facilitates the understanding of results, as well as statistical programs.

Quantitative research seeks the cause of the fact, together with the validity of the results obtained for a larger universe. This module introduces this type of research and provides sufficient knowledge to understand the Quantitative Research process.

It is a formal, objective, rigorous and systematic process for generating information about the world, which is used to describe new situations, events or concepts in it, as well as the relation between concepts and ideas.

Quantitative research tries to determine the strength of association or correlation between variables, the generalization and objectification of results through a sample in order to make inferences about the population the samples come from. After studying the association or correlation, it aims, in turn, to make causal inferences to explain why things do or do not happen in a certain way.



*A very specific training, created for professionals in the field of Quantitative Research”*

This **Postgraduate Certificate in Quantitative Research** offers the characteristics of a high-level scientific, teaching, and technological program. These are some of its most notable features:

- ◆ The latest technology in online teaching software
- ◆ A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- ◆ Practical cases presented by practicing experts
- ◆ State-of-the-art interactive video systems
- ◆ Teaching supported by telepractice
- ◆ Continuous updating and recycling systems
- ◆ Autonomous learning: full compatibility with other occupations
- ◆ Practical exercises for self-evaluation and learning verification
- ◆ Support groups and educational synergies: questions to the expert, debate and knowledge forums
- ◆ Communication with the teacher and individual reflection work
- ◆ Availability of content from any device, fixed or portable, with an Internet connection
- ◆ Complementary documentation banks permanently available, even after the course

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*A unique opportunity to gain access to the most interesting databases and the most powerful educational community in the online teaching market”*

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

*Add to your CV the ability to participate in the area of research and position yourself as a competitive and interesting professional for any company.*

The teaching staff includes professionals from the field of nursing, who bring their experience to this training program, as well as renowned specialists from leading communities 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 an immersive training experience designed to train for real-life situations.

This program is designed around Problem-Based Learning, where the nurse must try to solve the different professional practice situations that arise during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts in Clinical Nutrition Pediatrics with extensive experience.



# 02 Objectives

This comprehensive training allows professionals to develop skills and apply theoretical knowledge in real research projects in nursing practice, from the research question/hypothesis to the publication of their results.







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*This Postgraduate Certificate offers you essential support to reach your academic objectives, with a teaching system created to facilitate and increase your learning”*



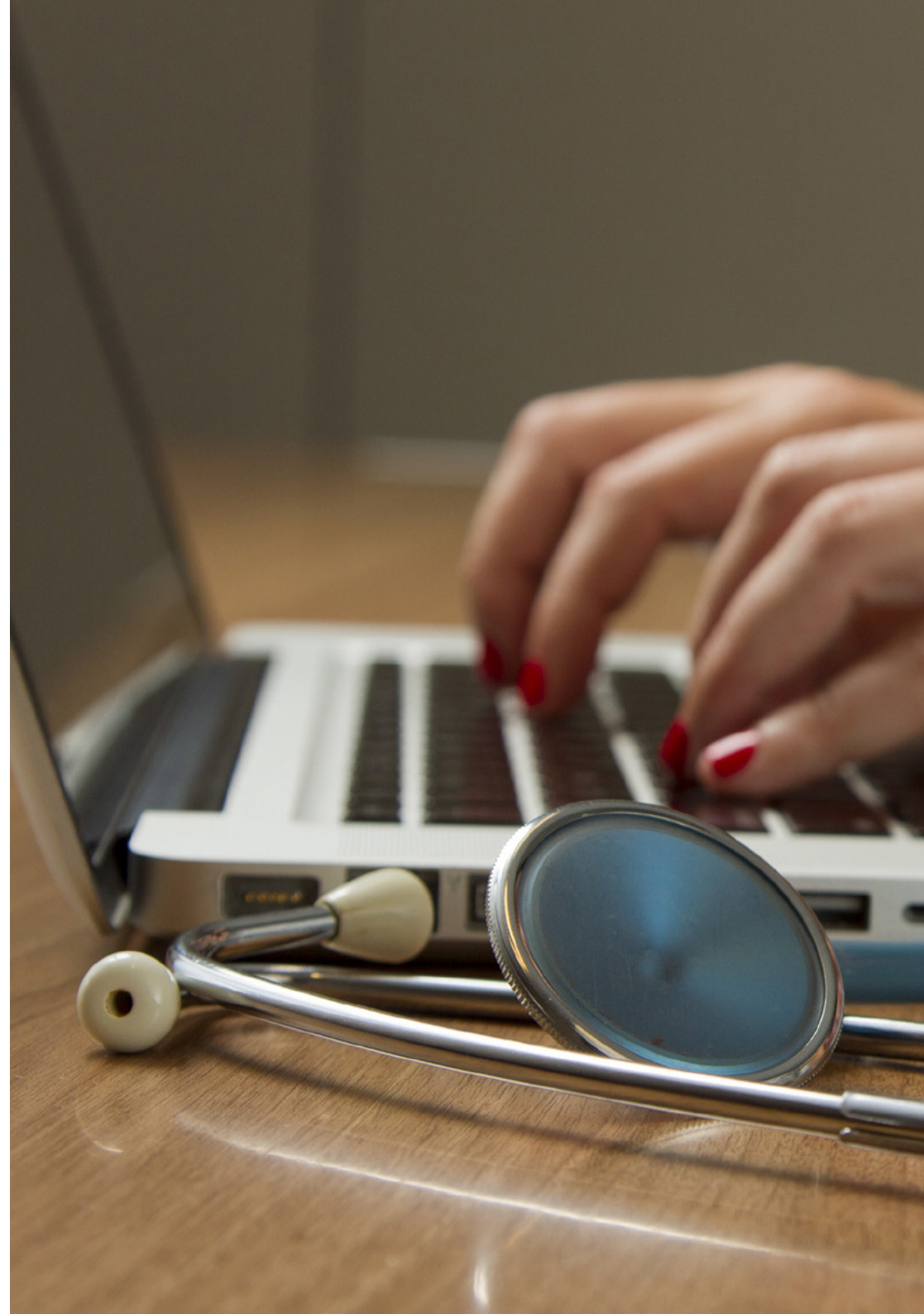
## General Objectives

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- Obtain the necessary tools to execute the research idea
- Learn how to manage the scientific method that will enable you to become researchers and knowledge producers
- Use different research models depending on the object of study
- Perform bibliographic searches, accessing the latest research results with critical and analytical skills



*Realistic objectives, but with a high educational impact, in a Postgraduate Certificate of the highest level"*





## Specific Objectives

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- ♦ Define quantitative research, theoretical bases, general characteristics and basic concepts of quantitative research
- ♦ Define terms related to the quantitative research process
- ♦ Compare and contrast use and control in quantitative research
- ♦ Describe the phases in the process of quantitative research
- ♦ Examine the different types of quantitative research studies: descriptive, correlational, quasi-experimental and experimental
- ♦ Value its importance in generating knowledge for nursing practice

03

# Course Management

A specialized teaching staff made up of nursing professionals who bring their work experience to this training. Additionally, other specialists of recognized prestige have participated in the creation of the contents, complementing the program in an interdisciplinary manner.





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*Learning from the best is the best way to move toward excellence. That is why our professor have been chosen from among the best professionals in the field”*

## Management



### **Dr. Rodríguez Nogueiras, Amelia**

- ♦ Graduate in Nursing.
- ♦ Postgraduate Diploma in Research
- ♦ Master's Degree in Research
- ♦ PhD in Nursing



### **Mr. Redondo Montserrat, Francisco**

- ♦ Diploma in Nursing
- ♦ Postgraduate Diploma in Innovation
- ♦ Nutritionist
- ♦ Innovation Nurse



## Professors

### Ms. Álvarez García, Graciela

- ◆ Master's Degree in Research in Nursing and PhD student in Nursing
- ◆ Advanced nursing practice

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*Update your knowledge through  
this Postgraduate Certificate in  
Quantitative Research”*

# 04

# Structure and Content

The contents of this program have been developed by the different experts on the course, with a clear purpose: to ensure that our students acquire each and every one of the necessary skills to become true experts in this field.

A complete and well-structured program that will take you to the highest standards of quality and success.





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*A spectacular syllabus that will take you through the most exciting educational process, boosting your professional and personal growth in the most stimulating way”*

## Module 1. Quantitative Research

- 1.1. Introduction to Quantitative Research: Theoretical Framework, Definition in Different Areas
- 1.2. Quantitative Research Tools: Research Question, Applying Research Models
- 1.3. Quantitative Research Analysis: Answering the Question, Studying the Results, Relationship between Results and Conclusions, Critical Reading
- 1.4. Relationship between Quantitative Variables: T-test, Nonparametric Tests, Mann-Whitney Test, Data Interpretation
- 1.5. Analysis with More Than Two Samples: Anova, Kruskal-Wallis Test, Variance Analysis, Friedman Test
- 1.6. Regression: Scatterplot and Correlation Diagrams
- 1.7. Incidence and Prevalence. Proportion, Ratio and Rate
- 1.8. Diagnostic Test Analysis: Sensitivity and Specificity
- 1.9. Roc Curves
- 1.10. Meta-analysis and Literature Revision: Elaboration Critical Reading





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

05

# Methodology

This academic program offers students 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.





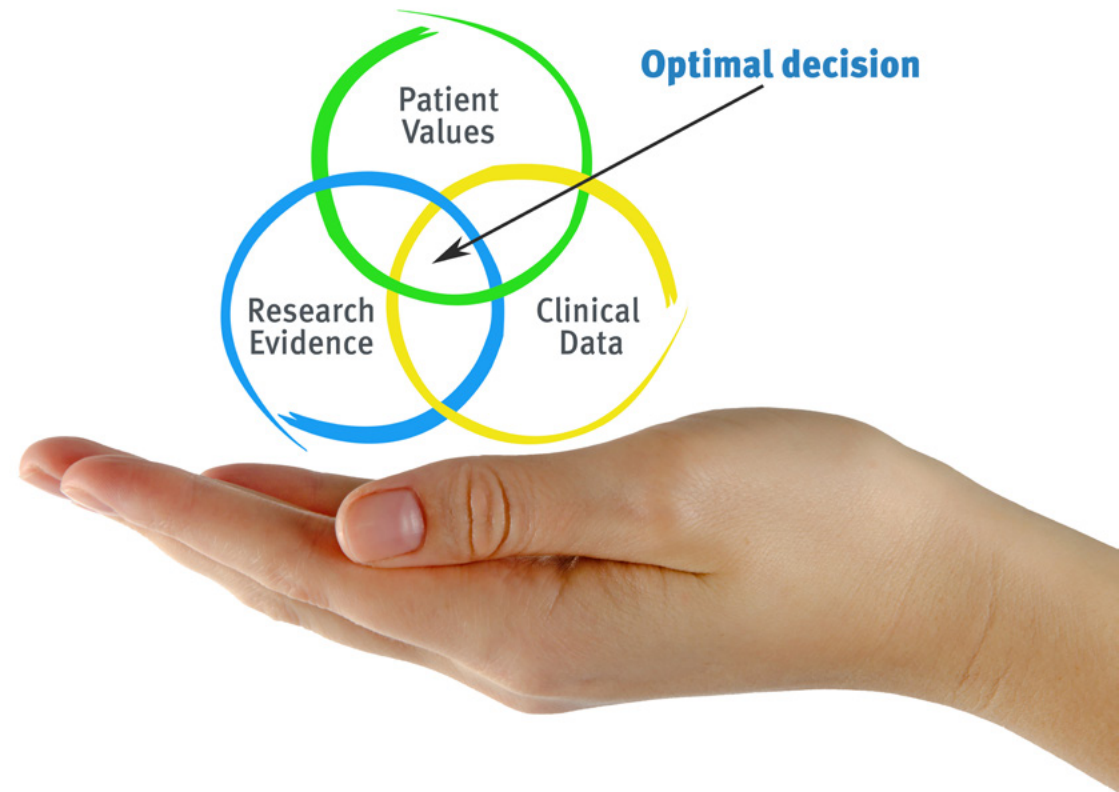
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*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## At TECH Nursing School we use the Case Method

In a given situation, what should a professional do? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Nurses learn better, faster, and more sustainably over time.

*With TECH, nurses can experience a learning methodology 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 power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the real conditions in professional nursing practice.

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*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. Nurses 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 has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
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.



## Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This 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 is a real revolution compared to the simple study and analysis of cases.



*The nurse 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 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 175,000 nurses with unprecedented success in all specialities regardless of practical workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

*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 TECH's 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 specialists 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.



### Nursing Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their 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 educational system for presenting multimedia content 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.





#### 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 their 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.



# 06 Certificate

The Postgraduate Certificate in Quantitative Research guarantees, in addition to the most rigorous and up-to-date training, access to a qualification issued by TECH Global University.



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

This private qualification will allow you to obtain a **Postgraduate Certificate in Quantitative Research** 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** private qualification 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 Quantitative Research**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



\*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.

health future  
confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present quality  
development language  
classroom



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