

# Postgraduate Diploma Health Research





## Postgraduate Diploma Health Research

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

Website: [www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-health-research](http://www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-health-research)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Methodology

---

*p. 20*

06

Certificate

---

*p. 28*

# 01

# Introduction

The effectiveness and efficiency of public and private healthcare systems have improved dramatically since the early days of healthcare research. Recent studies in medicine have been refined to the point where knowledge has been disseminated, leading to collaborative clinical trials and greater lucidity about advances on the patients themselves. In addition, scientific studies have helped to prevent diseases and, therefore, improve the health of individuals and their quality of life. For this reason, this research sector has a great demand for highly qualified professionals who know the protocols to carry out research projects. For this reason, TECH Universidad Tecnológica offers a rigorous program that explores the methods of studies and the transfer of results. All this, through a 100% online format that facilitates the monitoring of the subject and provides flexibility to students.





“

*With this Postgraduate Diploma you will know perfectly the new bibliometric techniques so that you can share your medical discoveries with other professionals”*

The benefits of medical research are reflected in the commercial sector through drug testing and marketing. However, the mere clinical development through medical devices and equipment of the centers has also been possible after showing empirical evidence of their performance. In turn, medical patents are the result of the study and are very useful as sources of information.

James Jurin, Joseph Lister and Barry Marshall are some of the recognized names that correspond to figures who revolutionized public health through research. Today, the emergence of new epidemiological diseases makes it more necessary than ever to invest in clinical trials to address the symptoms of the virus and its composition. To understand the keys to the scientific activity of the present and foresee the future strategies that could be incorporated to obtain greater findings, professionals who are dedicated to this area must master the bibliographic tools and the generation of efficient projects.

For this reason, TECH Universidad Tecnológica offers a Postgraduate Diploma in Health Research that delves into the treatment of documentary sources; the generation of reference bases for multiple use; the control of the achievement of activities and the generation of the budget, among many other aspects involved in scientific research. In addition, this program has been developed in a 100% online format to facilitate the tracking of the students. TECH Universidad Tecnológica seeks, in turn, to enhance the performance of professionals in the program, through advanced teaching materials and a flexibility innate to the digital mode of the institution.

This **Postgraduate Diploma in Health Research** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Case studies presented by experts in Health Sciences Research
- ♦ The graphic, schematic, and practical contents with which they are created, provide medical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where the self-assessment process can be carried out 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



*Update your knowledge in the presentation of the background and preliminary data of Research Projects to generate them under the best teaching guidelines”*



“

*Thematic networks are essential to opt for new research spaces in Health Sciences. Create them thanks to TECH Technological University with all the flexibility you need in your current job”*

*Renew your knowledge about the generation of the scientific budget and discover how public organizations contribute to its development.*

*Don't wait any longer, gain now extensive knowledge on the pros and cons of Medicine patents.*

The program includes, in its teaching staff, professionals from the sector who bring to this program the experience of their work, in addition to recognized specialists from prestigious reference societies and universities.

Its 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 education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.



# 02 Objectives

Investment in R&D&I has a low rate, despite the intrinsic need for its development in financing. Only advances in clinical trials are able to motivate the support of public and private institutions in this area, so it is necessary that professionals opt for their qualification in research projects. In this sense, TECH Universidad Tecnológica offers a complete and rigorous program that explores clinical, basic and translational research and its results. All this, through downloadable audiovisual content that allows study flexibility. In addition, the institution has a professional team that guarantees the contents and appropriate teaching.





“

*Become a multidisciplinary specialist relying not only on theoretical knowledge in the generation of clinical trials, but also on the guidelines of professionals with years of experience in the sector”*



## General Objectives

---

- Understand the appropriate approach to a question or problem to be solved
- Assess the state of the art of the problem through literature search
- Assess the feasibility of the potential project
- Study the drafting of a project in accordance with the different calls for proposals
- Examine the search for funding
- Master the necessary data analysis tools
- Write scientific articles (*papers*) according to the daily magazines
- Generate posters relevant to the topics addressed
- Know the tools for dissemination to the non-specialized public
- Delve into data protection
- Understand the transfer of knowledge generated to industry or the clinic
- Examine the current use of artificial intelligence and massive data analysis
- Study examples of successful projects



*Would you like to bring yourself up to date and understand the importance of sampling in research projects? Achieve it with TECH in just 6 months”*







## Specific Objectives

---

### **Module 1. The Scientific Method Applied to Health Research. Bibliographic positioning of the research**

- ◆ Become familiar with the scientific method to carry out health research
- ◆ Learn the correct way to ask a question and the methodology to follow to achieve the best possible answer
- ◆ Delve into learning how to search for bibliographic methods
- ◆ Master all the concepts of scientific activity

### **Module 2. Generation of Working Groups: Collaborative Research**

- ◆ Learn how to create working groups
- ◆ Create new biomedical research spaces
- ◆ Master the new spaces for health research

### **Module 3. Generation of Research Projects**

- ◆ Learn how to assess the feasibility of the potential project
- ◆ Know in depth the essential milestones for writing a research project
- ◆ Delve into the criteria for exclusion/inclusion in projects
- ◆ Learn how to set up the specific team for each project

### **Module 4. Protection and Transfer of Results**

- ◆ Introduction to the world of results protection
- ◆ Know in depth about patents and similar
- ◆ You will learn in depth about the possibilities of creating companies

# 03

# Course Management

TECH Universidad Tecnológica has called on experts in the area of Health Sciences to develop, together with the institution, the syllabus and teach all the contents of the program. In this way, students will not only have theoretical knowledge, but will also have at their disposal the real experience of specialists in Medicine who have developed over the years in scientific research. Thanks to their extensive professional background, the professionals will see the practical keys reflected in their future collaborative projects. In addition, the specialists will have a direct communication channel through which they will be able to solve all their questions on the subject.



“

*A professional training that features simulations of real cases with which you will obtain more accurate results for patients in clinical centers”*



## Management



### Dr. López-Collazo, Eduardo

- Scientific Deputy Director in the Institute for Health Research the Health Research Institute of La Paz University Hospital
- Head of the Department of Immune Response and Infectious Diseases at IdiPAZ
- Head of the Department of Immune Response, Tumors and Immunology at IdiPAZ
- President of the IdiPAZ Research Commission
- Sponsor of the External Scientific Committee of the Murcian Institute of Health Research
- Member of the Scientific Commission of FIDE
- Editor of the international scientific journal Mediators of Inflammation
- Editor of the international scientific journal "Frontiers of Immunology"
- Coordinator of IdiPAZ Platforms
- Coordinator of Health Research Funds in the areas of Cancer, Infectious Diseases and HIV
- PhD in Nuclear Physics, University of La Habana
- Doctorate in Pharmacy from the Complutense University of Madrid

## Professors

### Dr. Gómez Campelo, Paloma

- ♦ Researcher at the Instituto de Investigación Sanitaria, Hospital Universitario La Paz
- ♦ Deputy Technical Director of the Health Research Institute of La Paz University Hospital
- ♦ Director of the Biobank of the Health Research Institute of the University Hospital La Paz
- ♦ Collaborating Teacher of the Polytechnic University of Catalonia
- ♦ Doctorate in Psychology the Complutense University of Madrid
- ♦ Degree in Psychology from the Complutense University Madrid

### Dr. Pascual Iglesias, Alejandro

- ♦ Bioinformatics Platform Coordinator, La Paz Hospital
- ♦ Advisor to the COVID-19 Expert Committee of Extremadura
- ♦ Researcher in Eduardo López-Collazo's innate immune response research group, Instituto de Investigación Sanitarias University Hospital La Paz
- ♦ Researcher in the coronavirus research group of Luis Enjuanes, National Center of Biotechnology CNB-CSIC
- ♦ Coordinator of Continuing Education in Bioinformatics, Health Research Institute of the University Hospital La Paz
- ♦ Cum Laude, Doctor in Molecular Biosciences from the Autonomous University of Madrid
- ♦ Degree in Biology Molecular from the University of Salamanca
- ♦ Professional Master's Degree in Cellular and Molecular Physiopathology and Pharmacology from the Universidad of Salamanca of Salamanca

### Dr. Avendaño Ortiz, José

- ♦ Sara Borrell Researcher Foundation for Biomedical Research of the Ramón y Cajal University Hospital (FIBioHRC/IRyCIS)
- ♦ Researcher Foundation for Biomedical Research of La Paz University Hospital (FIBHULP/ IdiPAZ)
- ♦ Researcher HM Hospitals Foundation (FIHM)
- ♦ Graduate in Biomedical Sciences from the University of Lleida
- ♦ Master's Degree in pharmacological research from the Autonomous University of Madrid
- ♦ PhD in Pharmacology and Physiology from the Autonomous University of Madrid

### Dr. del Fresno, Carlos

- ♦ "Michael Servetus" Researcher. Group Leader, Research Institute of the Hospital la Paz (IdiPAZ)
- ♦ Researcher Spanish Association Against Cancer (AECC), National Center for Cardiovascular Research (CNIC - ISCIII)
- ♦ Researcher, National Center for Cardiovascular Research (CNIC - ISCIII)
- ♦ "Sara Borrel Researcher, National Biotechnology Center (CNIC - ISCIII)
- ♦ PhD in Biochemistry, Molecular Biology and Biomedicine, Autonomous University of Madrid
- ♦ Degree in Biology from the Complutense University of Madrid

# 04

## Structure and Content

The syllabus of this Postgraduate Diploma in health research has been designed in detail by experts in health sciences. Thanks to their collaboration, TECH offers a program that, in just 6 months, will boost the career of Pharmacy specialists and other professionals interested in the clinical studies. It is a complete and rigorous teaching with a 100% online modality, which allows students to adapt their studies to their work and personal availability. In addition, TECH applies the *Relearning* methodology to exempt students from long hours of memorization, assimilating the contents the theoretical and practical materials.



“

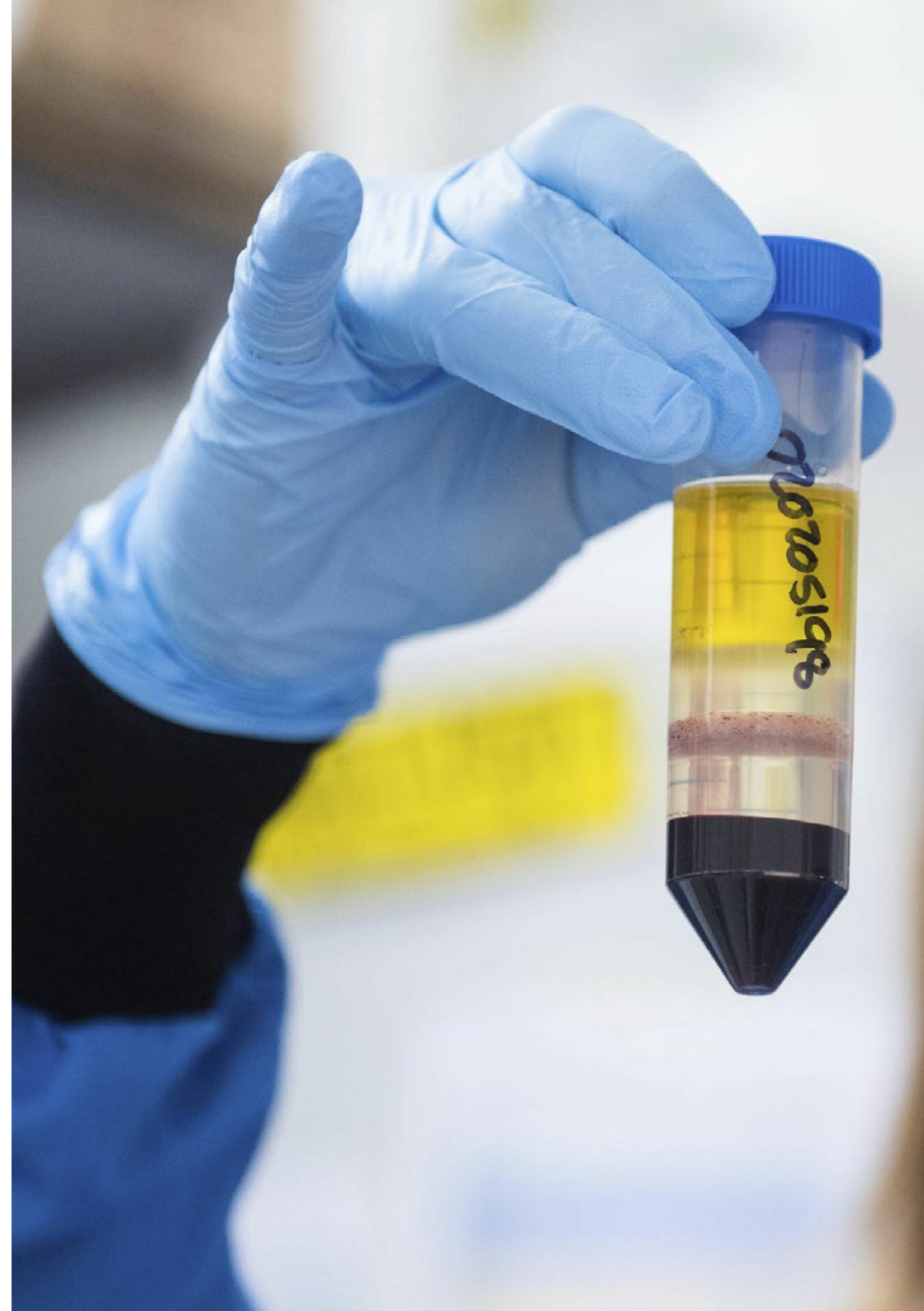
*Now, it has a degree that integrates a downloadable reference guide so you can have the knowledge on your electronic device, even after completing the study”*

## Module 1. The Scientific Method Applied to Health Research. Bibliographic positioning of the research

- 1.1. Definition of the Question or Problem to be Solved
- 1.2. Bibliographic Positioning of the Question or Problem to be Solved
  - 1.2.1. Information Search
    - Strategies and Keywords Pubmed and Other Repositories of Scientific Articles
  - 1.2.2. Pubmed and Other Repositories of Scientific Articles
- 1.3. Treatment of Bibliographic Sources
- 1.4. Treatment of Documentary Sources
- 1.5. Advanced Bibliography Search
- 1.6. Generation of Reference Bases for Multiple Use
- 1.7. Bibliography Managers
- 1.8. Extraction of Metadata in Bibliographic Searches
- 1.9. Definition of the Scientific Methodology to be Followed
  - 1.9.1. Selection of the Necessary Tools
  - 1.9.2. Design of Positive and Negative Controls in an Investigation
- 1.10. Translational Projects and Clinical Trials: Similarities and Differences

## Module 2. Generation of Working Groups: Collaborative Research

- 2.1. Definition of Working Groups
- 2.2. Formation of Multidisciplinary Teams
- 2.3. Optimal Distribution of Responsibilities
- 2.4. Leadership
- 2.5. Control of Activities Achievement
- 2.6. Hospital Research Teams
  - 2.6.1. Clinical Research
  - 2.6.2. Basic Research
  - 2.6.3. Translational Research
- 2.7. Creation of Collaborative Networks for Health Research
- 2.8. New Spaces for Health Research
  - 2.8.1. Thematic Networks
- 2.9. Networked Biomedical Research Centers
- 2.10. Biobanks of Samples: International Collaborative Research







### Module 3. Generation of Research Projects

- 3.1. General Structure of a Project
- 3.2. Presentation of Background and Preliminary Data
- 3.3. Definition of the Hypothesis
- 3.4. Definition of General and Specific Objectives
- 3.5. Definition of the Type of Sample, Number and Variables to be Measured
- 3.6. Establishment of the Scientific Methodology
- 3.7. Exclusion/Inclusion Criteria in Projects with Human Samples
- 3.8. Establishment of the Specific Team: Balance and Expertise
- 3.9. Ethical aspects and Expectations: an Important Element that we Forget
- 3.10. Budget Generation: a fine Tuning between the Needs and the Reality of the Call

### Module 4. Protection and Transfer of Results

- 4.1. Protection of Results: General Aspects
- 4.2. Valorization of the Results of a Research Project
- 4.3. Patents: Pros and Cons
- 4.4. Other Forms of Protection of Results
- 4.5. Transfer of Results to Clinical Practice
- 4.6. Transfer of Results to Industry
- 4.7. The Technology Transfer Contract
- 4.8. Trade Secrets
- 4.9. Spin- Off Company Generation Based on Research Projects
- 4.10. Investment Opportunity Search in Spin- Off Companies

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.



“

*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 we use the Case Method

What should a professional do in a given situation? 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. Specialists learn better, faster, and more sustainably over time.

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



According to Dr. Gervas, 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, trying to recreate the real conditions in the physician'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. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into 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.





## 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 the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

*Professionals will learn through real cases and by resolving 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, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. 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 highly 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.



#### Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and 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 the videos as many times as you like.



#### 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.

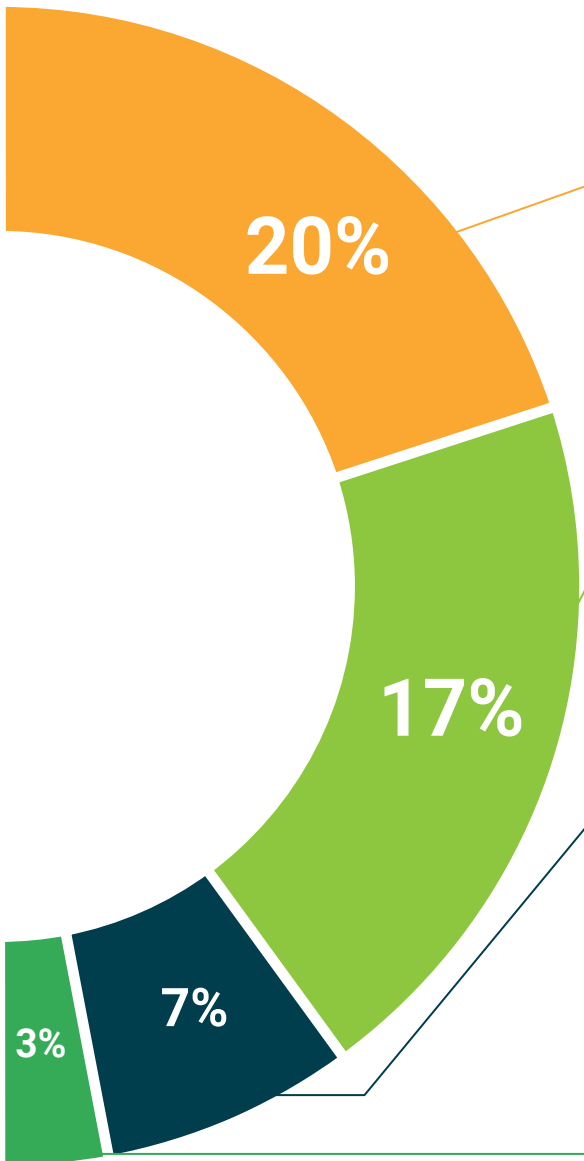
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### 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 on the usefulness of learning by observing experts. The system known as 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 Diploma in Health Research guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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 Diploma in Health Research** contains the most complete and up-to-date scientific on the market.

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

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

Program: **Postgraduate Diploma in Health Research**

Official No. of Hours: **600 h.**



\*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.

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



## Postgraduate Diploma Health Research

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

# Postgraduate Diploma Health Research

