



## Postgraduate Certificate

High-Quality Information Retrieval Specialized in Health Sciences

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Accreditation: 4 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/nursing/postgraduate-certificate/high-quality-information-retrieval-specialized-health-sciences

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## tech 06 | Introduction

The rapid advancement of knowledge in health and the incorporation of new diagnostic and therapeutic procedures demand nursing professionals with the ability to analyze the best available evidence and to transfer that knowledge into their clinical practice, with the ultimate goal of delivering quality care.

Research helps us understand the organization of our healthcare system, the effectiveness of medical procedures, and patient behavior. This highlights the need to develop competencies in the search for high-quality scientific information, in order to address the questions that arise in professional practice and to cultivate critical reading skills.

This Postgraduate Certificate in High-Quality Information Retrieval Specialized in Health Sciences aims to provide students with the necessary knowledge of the various sources of information for the design of search strategies, the application of methodological filters, and the creation of bibliographic alerts.

This Postgraduate Certificate in High-Quality Information Retrieval Specialized in Health Sciences contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of prractical cases presented by experts. Its graphic, schematic, and highly practical content provides the necessary knowledge to enhance digital competencies in teaching
- Video lessons on the different resources and their practical application
- Interactive learning system designed to explore in depth the main search tools
- Includes theoretical lectures, questions to the expert, discussion forums on controversial issues and individual reflection papers
- Content that is accessible from any fixed or portable device with an internet connection



## Introduction | 07 tech



This Postgraduate Certificate may be the best investment you can make when choosing a professional development program for two main reasons: in addition to updating your information retrieval skills, you will receive a diploma for the Postgraduate Certificate issued by TECH Global University"

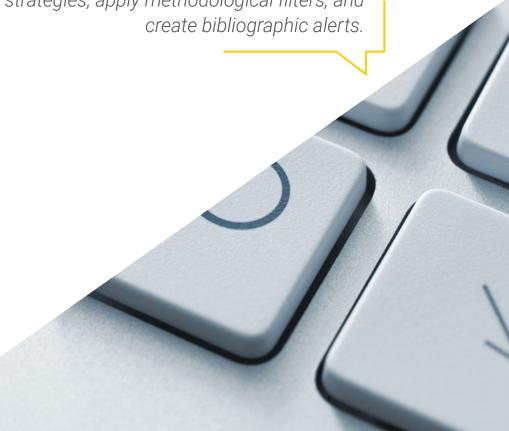
Its faculty is composed of leading professionals who contribute to this training program the valuable experience gained through their professional practice.

Thanks to its multimedia content, developed with the latest educational technology, professionals will benefit from situated and contextual learning—simulated environments designed to provide immersive learning experiences that prepare them for real-life situations.

This will be done with the help of an innovative interactive video system developed by renowned experts and with extensive teaching experience.

This Postgraduate Certificate facilitates the updating of skills in managing the best web resources for conducting professional bibliographic searches.

Do not miss the opportunity to update your knowledge and learn how to design search strategies, apply methodological filters, and create bibliographic alerts.







## tech 10 | Objectives



## **General Objective**

• Update nursing professionals in the use of various information sources for the design of search strategies, the application of methodological filters, and the creation of bibliographic alerts



## **Specific Objectives**

- Define the different sources of information and the management of general search engines, databases, and clearinghouses for clinical practice guidelines
- Establish the practical foundations for information retrieval from databases specialized in health, enabling the performance of appropriate bibliographic reviews
- Describe search strategies using subject headings, free-text terms, and Boolean operator algebra
- Explain the methodology for creating bibliographic alerts





Take this opportunity and take the step to update yourself on the latest developments in High-Quality Information Retrieval Specialized in Health Sciences.



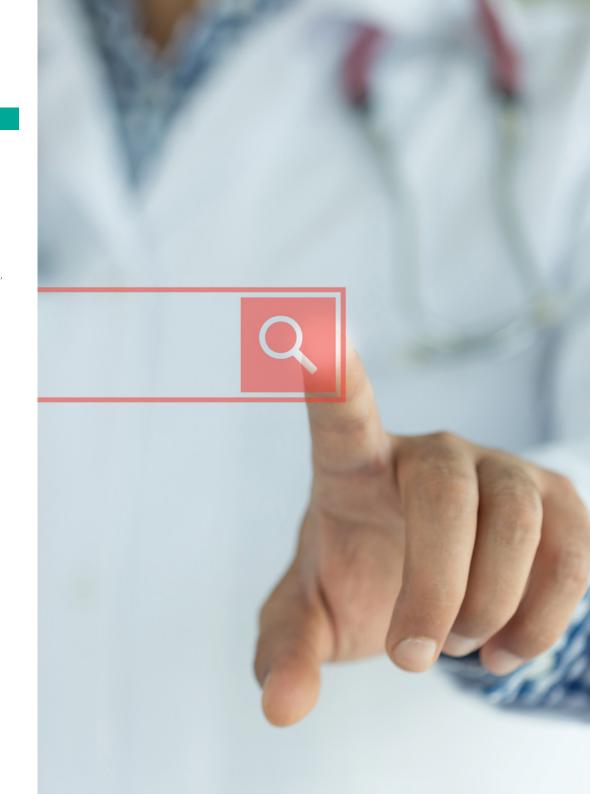




## tech 14 | Structure and Content

#### Module 1. High-Quality Information Retrieval Specialized in Health Sciences

- 1.1. Introduction. Development of a Bibliographic Search
  - 1.1.1. Justification: Scientific Literature and Bibliographic Review: What and Why
  - 1.1.2. Phases of the Bibliographic Review: Development of a Bibliographic Search
  - 1.1.3. Search for Scientific Information on the Internet
    - 1.1.3.1. Formulating Clinical Questions: Research Elements and Approach
    - 1.1.3.2. Steps to Conduct an Optimal Bibliographic Search: The COSI Protocol
  - 1.1.4. Basic Toolkit for Simple Searches
- Knowledge of the Different Sources of Information: General Search Engines (UpToDate), Databases (PubMed, CINAHL) and Clearinghouses for Clinical Practice Guidelines
  - 1.2.1. Pyramid of Bibliographic Sources
    - 1.2.1.1. Systems: Computerized Decision Support Systems
    - 1.2.1.2. Summaries: "Books" That Compile Evidence
    - 1.2.1.3. Synopsis of Syntheses: Evidence-Based Databases and Journals
    - 1.2.1.4. Syntheses: Systematic Reviews (SRs)
    - 1.2.1.5. Synopsis of Studies: Evidence-Based Journals
    - 1.2.1.6. Studies: Original Journal Articles
  - 1.2.2. General Search Engines
    - 1.2.2.1. Google Scholar
    - 1.2.2.2. Scopus
  - 1.2.3. Databases
    - 1.2.3.1. Medline
    - 1.2.3.2. Embase
    - 1.2.3.3. Web of Science
    - 1.2.3.4. CINAHL
    - 1.2.3.5. BIREME
    - 1.2.3.6. Spanish Medical Index
    - 1.2.3.7. CUIDEN
  - 1.2.4. Clearinghouses for Clinical Practice Guidelines and Health Technology Assessment Reports
    - 1.2.4.1. National Guidelines Clearinghouse
    - 1.2.4.2. Guía Salud
    - 1.2.4.3. Health Technology Assessment Reports



- 1.3. Design of Search Strategies. PICO Questions
  - 1.3.1. How to Query a Database
    - 1.3.1.1. Keyword Search
    - 1.3.1.2. Search by Indexes or Alphabetical Lists
    - 1.3.1.3. Concept-Based Search: The Precision of Thesauri
    - 1.3.1.4. Combining Search Terms Using Boolean Operators (AND/OR/NOT)
    - 1.3.1.5. Truncation of Terms
  - 1.3.2. Structured Question and Medical Literature Search. Example of Search in PubMed
  - 1.3.3. Advanced Search in PubMed
    - 1.3.3.1. How to Start a Search in PubMed
    - 1.3.3.2. Combining Boolean Operators and Their Priority
    - 1.3.3.3. Avoiding Repetitions with a Common Root: Truncation
    - 1.3.3.4. Selecting Fields to Search: Field Qualifiers
    - 1.3.3.5. Applying Filters with a Single Click
    - 1.3.3.6. Viewing Results: Reference Format
    - 1.3.3.7. Saving Search Results
    - 1.3.3.8. Proximity Search: Related PubMed Articles Link
    - 1.3.3.9. Using the Clipboard
    - 1.3.3.10. Viewing the Search History
    - 1.3.3.11. Full Texts of Articles
    - 1.3.3.12. Maximum Search Precision: Using the MeSH Thesaurus
    - 1.3.3.13. Consulting Journals Indexed in PubMed: Journals in NCBI Database
    - 1.3.3.14. Locating a Specific Reference via Single Citation Matcher
    - 1.3.3.15. Your Cloud in PubMed: How to Use My NCBI

- 1.4. Refinement of Search Results: Methodological Filters
  - 1.4.1. Justification for Evidence-Based Medicine
  - 1.4.2. Methodological Filters
    - 1.4.2.1. Clinical Queries
    - 1.4.2.2. Examples of Application of Methodological Filters
  - 1.4.3. Information Resources for Evidence-Based Medicine
    - 1.4.3.1. TRIP Database: Turning Research Into Practice
    - 1.4.3.2. Cochrane Library Plus
    - 1.4.3.3. The Joanna Briggs Institute: Spain
    - 1.4.3.4. Simple Search
    - 1.4.3.5. Advanced Search
- 1.5. Creation of Bibliographic Alerts
  - 1.5.1. Google Alerts
  - 1.5.2. Scopus
  - 1.5.3. PubMed
  - 154 Web of Science
  - 1.5.5. TRIP Database



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





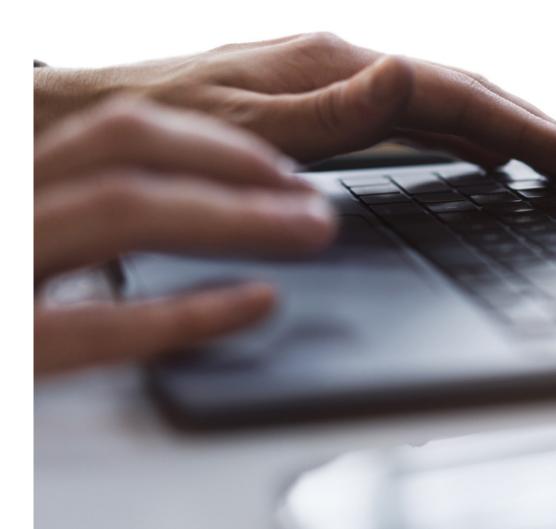
## The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.









#### The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.



TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want"

## tech 20 | Study Methodology

#### Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



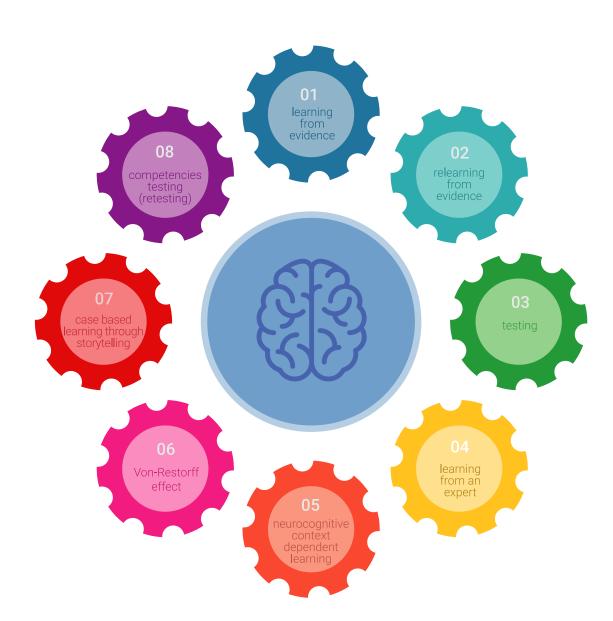
## Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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.



## tech 22 | Study Methodology

#### A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

#### 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 assess 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.

## Study Methodology | 23 tech

## The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.

## tech 24 | Study Methodology

As such, the best educational materials, thoroughly prepared, will be available in this program:



#### **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.

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.



#### **Practicing Skills and Abilities**

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



#### **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 exclusive educational system for presenting multimedia content 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 education.

## Study Methodology | 25 tech



Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.



#### **Testing & Retesting**

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.



#### **Classes**

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

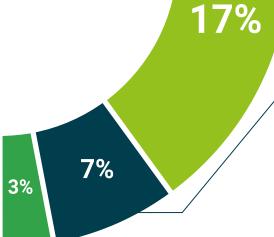




#### **Quick Action Guides**

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 28 | Certificate

This private qualification will allow you to obtain a diploma for the **Postgraduate** Certificate in High-Quality Information Retrieval Specialized in Health Sciences 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 High-Quality Information Retrieval Specialized in Health Sciences

Modality: online

Duration: 6 weeks

Accreditation: 4 ECTS



Mr./Ms. \_\_\_\_\_\_ with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

#### Postgraduate Certificate in High-Quality Information Retrieval Specialized in Health Sciences

This is a private qualification of 120 hours of duration equivalent to 4 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



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