Postgraduate Certificate

Critical Reading of Scientific Articles

tech global university

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Postgraduate Certificate

Critical Reading of Scientific Articles

- Modality: **online**
- Duration: **6 weeks**
- Certificate: **TECH Global University**
- Accreditation: **8 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/us/nursing/postgraduate-certificate/critical-reading-scientific-articles**

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01

Introduction

The research function in nursing professionals is not yet as integrated into the profession as the care function, so it is necessary to stimulate learning and update research methods for professionals. This program presents, in a practical manner, the main guidelines for conducting a critical reading of scientific articles and thus improving the research capabilities of nursing professionals.

New research procedures through ICT invite us to be in a constant learning process. The new tools of information and communication technologies enable us to increase our research capabilities and improve as professionals"

In order to provide quality nursing care, it is essential that, given the rapid evolution of health knowledge and the inclusion of new diagnostic and therapeutic procedures, nursing professionals possess skills that enable them to analyze the best available evidence and transfer that knowledge into their clinical practice.

Although the volume of scientific literature grows enormously, the scientific quality of research articles is highly varied, justifying the need to develop skills and competencies to search for quality scientific information and to conduct critical reading.

This Postgraduate Certificate in Critical Reading of Scientific Articles aims to serve as a guide to read, understand, and critique scientific articles, with the goal of improving the understanding of scientific literature and providing the necessary skills to quickly exclude low-quality scientific articles and accept those with sufficient scientific quality to aid in decision-making for patient care.

This **Postgraduate Certificate in Critical Reading of Scientific Articles** 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 stages of critical reading of scientific articles
- Interactive learning system to deepen the scientific method and the writing of research results
- 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

Stay up to date on the procedures for critical reading of scientific articles to enhance your research capabilities”

This Postgraduate Certificate may be the best investment you can make when selecting a refresher program, for two key reasons: in addition to updating your knowledge in Critical Reading of Scientific Articles, you will obtain a diploma from TECH Global University"

This Postgraduate Certificate facilitates the updating of knowledge in the critical reading of scientific articles.

Don't miss the opportunity to refresh your knowledge and learn to read and write research results accurately.

It includes a faculty of leading professionals who share the experience of their work in this training.

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.

02

Objectives

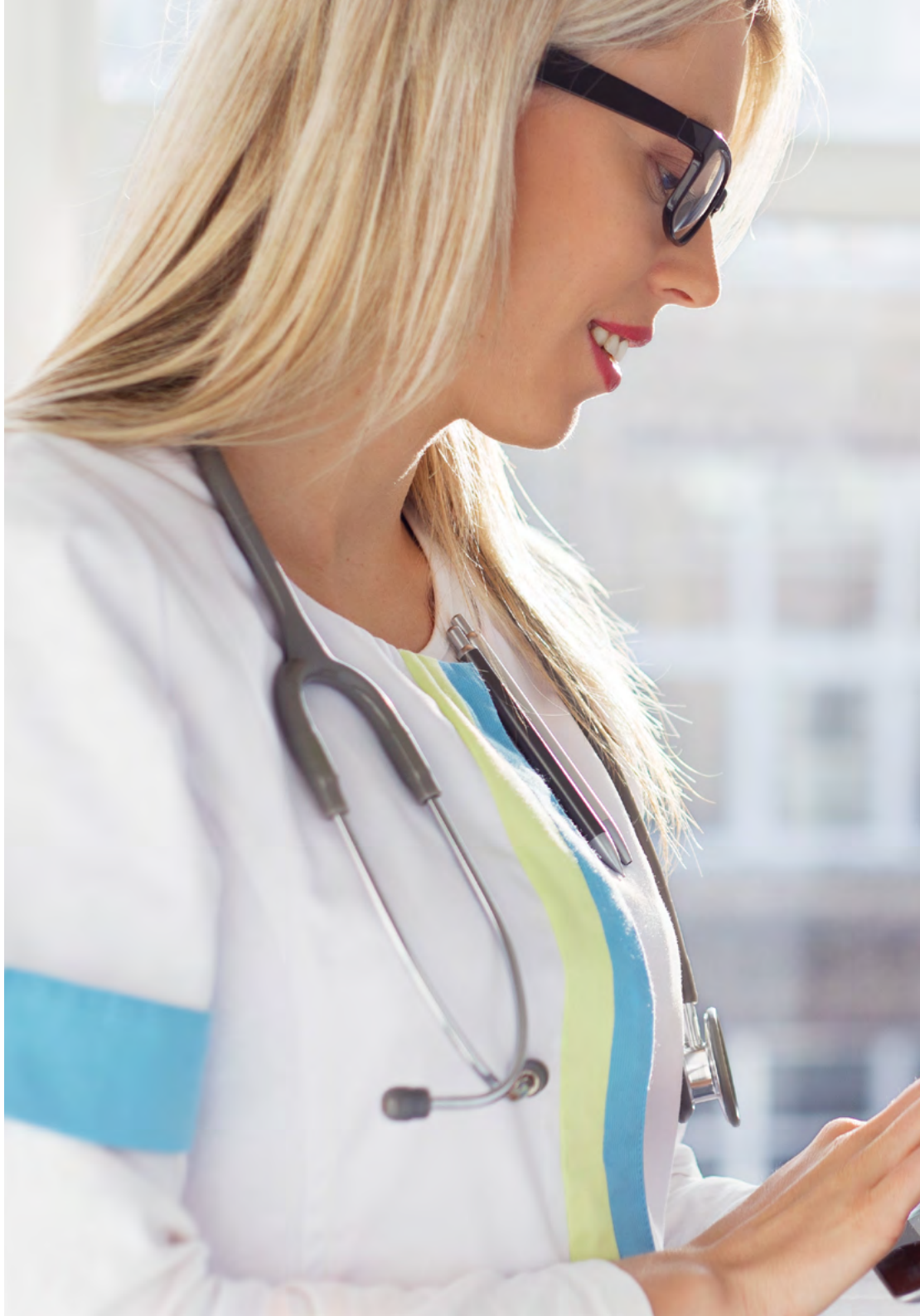
The program is designed to enable the learning of the main resources available to ensure a critical reading of scientific texts, and, thanks to the possibilities offered by technology, it provides an opportunity to enhance the effectiveness of research for nursing professionals.

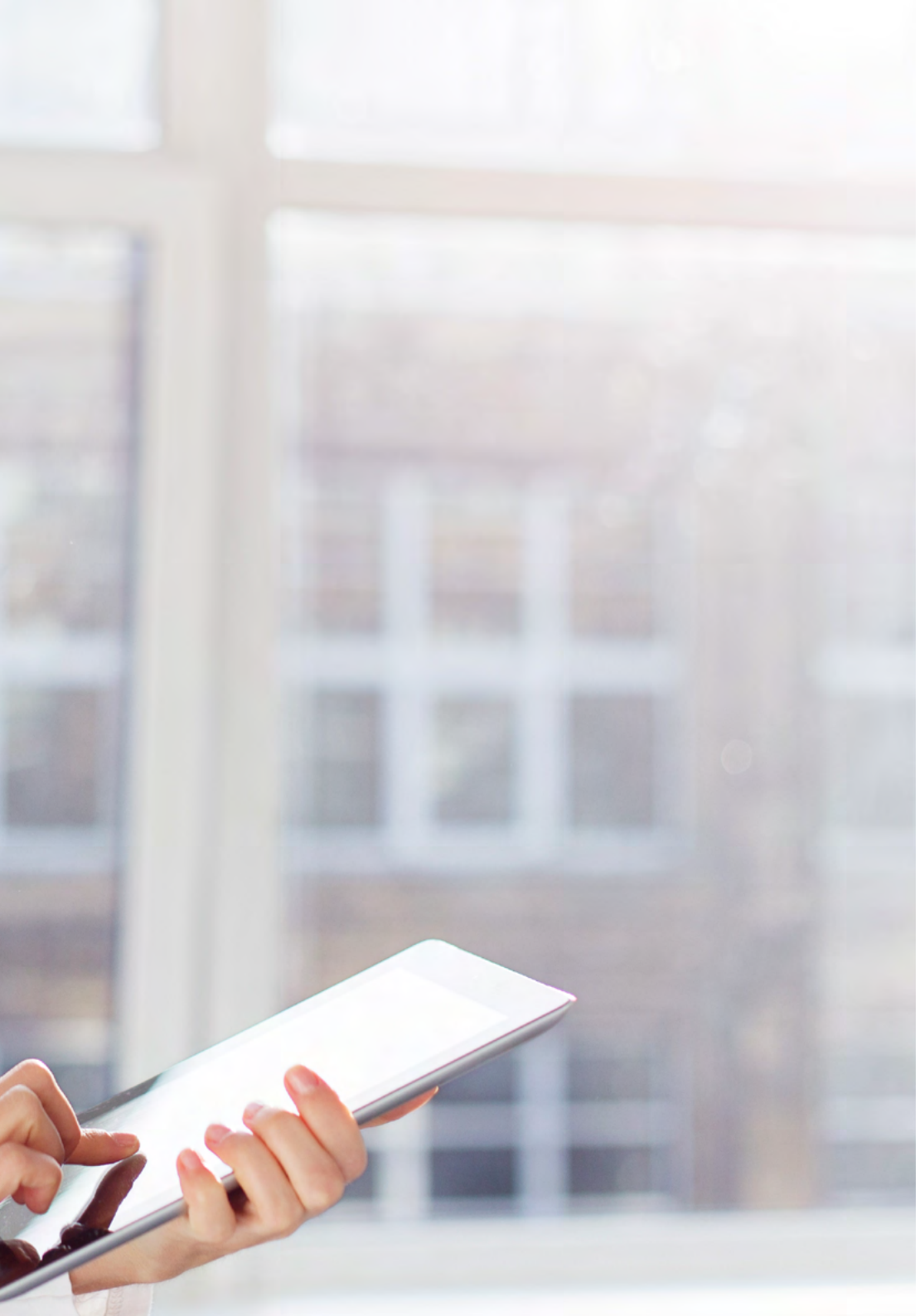
This updating program will instill a sense of confidence in the performance of the research function in nursing"

General Objective

- Update nursing professionals in the understanding of scientific literature and provide the necessary skills to quickly exclude low-quality scientific articles and accept those with sufficient scientific quality to improve decision-making in patient care

Make the most of the opportunity and take the step to get up to date with the latest developments in Critical Reading of Scientific Articles"





Specific Objectives

- Develop critical reading skills in quantitative and qualitative research designs, using checklists and criteria for communicating research results
- Identify the structure and elements that give a scientific article coherence and methodological rigor
- Identify relevant information sources
- Design and develop bibliographic searches and reviews
- Analyze the adequacy of the methods to the article's objective
- Optimize the handling of information and scientific reading in Health Sciences
- Update the methodology for writing scientific articles published in Health Sciences journals
- Foster an attitude of progress and professional development through continuous learning and improvement based on the search for available knowledge, its critical assessment, and its application to clinical practice

03

Structure and Content

The structure of the content has been designed by a team of professionals familiar with the implications of ICT in research processes. It is aimed at enabling nursing professionals to use these tools to improve their bibliographic searches and enhance their professional research development.

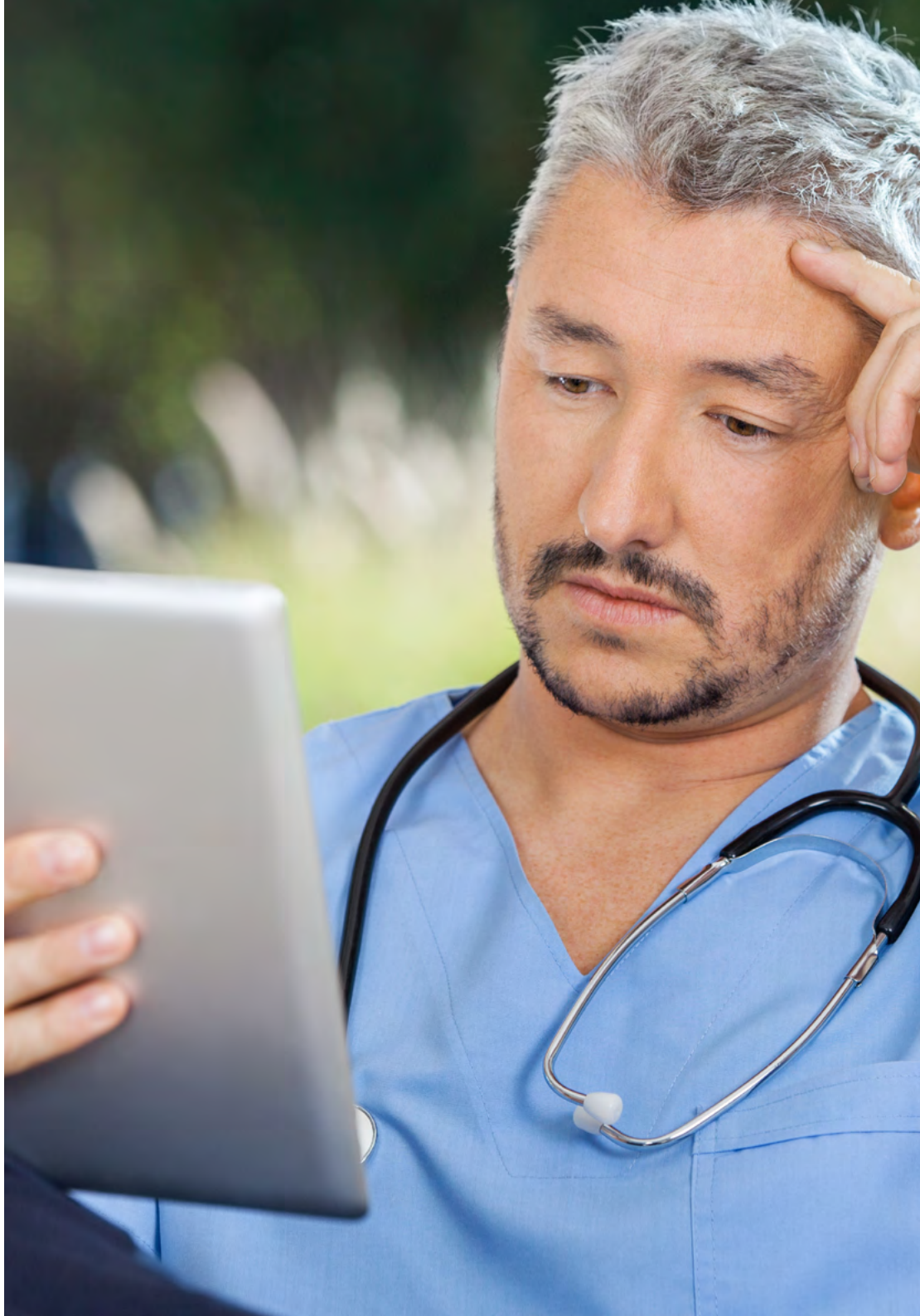
This Postgraduate Certificate in Critical Reading of Scientific Articles contains the most complete and up-to-date program on the market"

Module 1. Critical Reading on Outcomes Research

1.1. Introduction. Critical Reading
- 1.1.1. Introduction
- 1.1.2. Definition of Critical Reading and the Validity of an Article
- 1.1.3. Objectives of Critical Reading
- 1.1.4. Phases in Critical Reading
- 1.1.5. Critical Reading of Materials and Methods

1.2. Some Basic Concepts in Epidemiology
- 1.2.1. The Concept of Variable and Types of Variables in Epidemiology
- 1.2.2. Errors in Measurements and Clinical Classifications: Precision and Validity
- 1.2.3. Data Analysis and Measures of Association
- 1.2.4. Assessment of Causality
- 1.2.5. Interpretation of Outcome Measurement Criteria
- 1.2.6. Interpretation of Risk Factor Studies
- 1.2.7. Interpretation of Diagnostic Test Studies
- 1.2.8. Interpretation of Studies Presenting Intervention Results

1.3. Quantitative Research Designs. Interpretation of Data and Techniques for Controlling Reliability, Validity, and Scientific Rigor
- 1.3.1. Introduction
- 1.3.2. Main Types of Experimental and Observational Studies
  - 1.3.2.1. Experimental Studies: Clinical Trials
  - 1.3.2.2. Quasi-experimental Studies
  - 1.3.2.3. Descriptive Cross-sectional or Prevalence Studies
  - 1.3.2.4. Descriptive Case-Control Studies
  - 1.3.2.5. Cohort or Follow-up Studies
  - 1.3.2.6. Ecological Studies
  - 1.3.2.7. Case Series
- 1.3.3. Validity and Reliability in Quantitative Research
- 1.3.4. Biases in Epidemiological Study Designs
  - 1.3.4.1. Confounding Bias
- 1.3.5. Scientific Rigor: Tools for Publishing Research Results: CONSORT, STROBE, and STARD



1.4. Qualitative Research Designs and Identification of the Social and Cultural Components of Health and Illness
- 1.4.1. Importance of Qualitative Research for Nursing
- 1.4.2. Study Subjects in Qualitative Research
- 1.4.3. Types of Qualitative Research
- 1.4.4. Most Common Techniques in Qualitative Data Collection
- 1.4.5. Ethical Aspects
- 1.4.6. Evaluation of Methodological Rigor
- 1.4.7. The Role of Qualitative Research in Evidence-Based Nursing Practice

1.5. Instruments for Critical Reading: AGREE Instruments
- 1.5.1. Introduction
- 1.5.2. CASPE Checklist
  - 1.5.2.1. Diagnostic Studies
  - 1.5.2.2. Prognostic Studies
  - 1.5.2.3. Review
  - 1.5.2.4. Case-Control Studies
  - 1.5.2.5. Cohort Studies
  - 1.5.2.6. Clinical Trials
  - 1.5.2.7. Economic Evaluations
  - 1.5.2.8. Qualitative Studies
  - 1.5.2.9. AGREE Instrument

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

04

Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.

TECH will prepare you to face new challenges in uncertain environments and achieve success in your career"

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.

"At TECH you will NOT have live classes (which you might not be able to attend)"

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"*

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.

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.

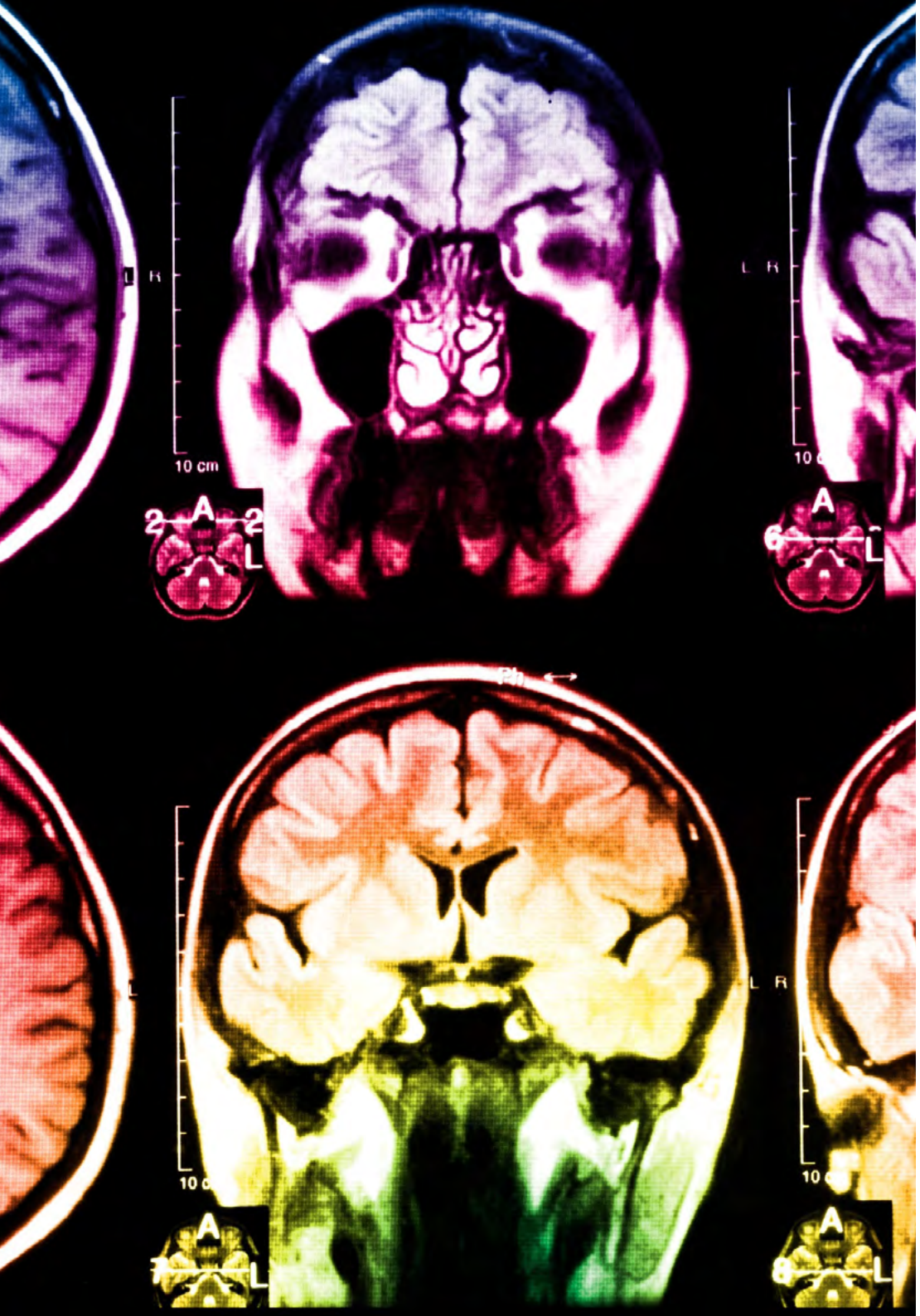
In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

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.



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.

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.

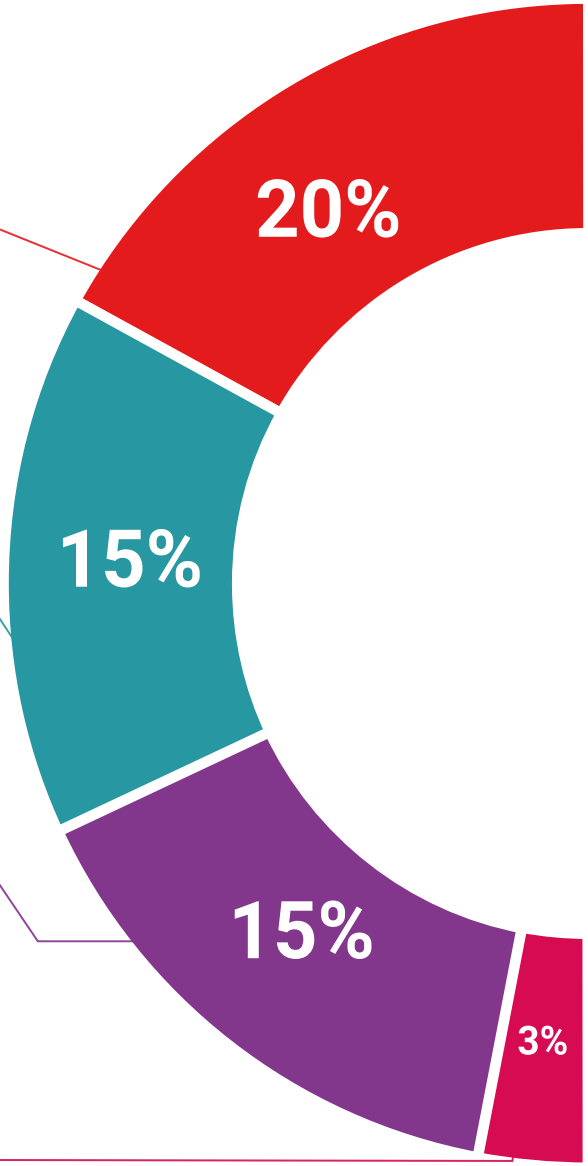
Interactive Summaries

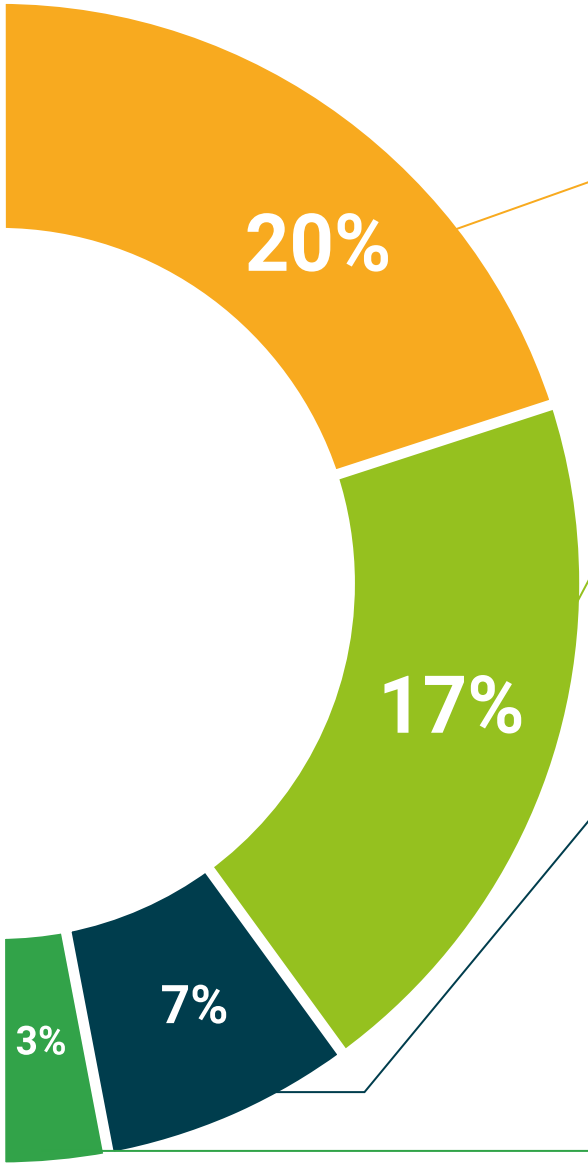
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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.





Case Studies

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.

Learning from an expert strengthens knowledge and memory, and generates confidence for 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.

05

Certificate

This Postgraduate Certificate in Critical Reading of Scientific Articles guarantees students, in addition to the most rigorous and up-to-date education, access to a diploma for the Postgraduate Certificate issued by TECH Global University.

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

This private qualification will allow you to obtain a diploma for the **Postgraduate Certificate in Critical Reading of Scientific Articles** 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 Critical Reading of Scientific Articles**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**


tech global university

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

Postgraduate Certificate in Critical Reading of Scientific Articles

This is a private qualification of 180 hours of duration equivalent to 6 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

Dr. Pedro Navarro Illana
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 diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

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