

# Postgraduate Certificate

## Clinical Management and Personalization of Care with Artificial Intelligence



## Postgraduate Certificate Clinical Management and Personalization of Care with Artificial Intelligence

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

Website: [www.techtute.com/us/nursing/postgraduate-certificate/clinical-management-personalization-care-artificial-intelligence](http://www.techtute.com/us/nursing/postgraduate-certificate/clinical-management-personalization-care-artificial-intelligence)

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01

# Introduction to the Program

Health systems currently face multiple challenges, such as the growing demand for medical services, the scarcity of resources and the need to offer more personalized and efficient care. In this context, the integration of Artificial Intelligence has emerged as an innovative solution to address these difficulties, optimizing healthcare processes and improving patient care outcomes. For this reason, TECH has designed a university qualification that provides nursing professionals with a comprehensive view of the practical applications of Artificial Intelligence in Clinical Management. In addition, it is a 100% online format with the most innovative teaching content, developed by leading experts in the field.



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*With this university qualification, taught using the innovative Relearning method, you will develop key skills to integrate leading platforms such as IBM Watson Health and Qventus into Clinical Management”*



Clinical Management and Personalization of Care with Artificial Intelligence are emerging areas in the digital transformation of healthcare systems. These disciplines integrate advanced technologies such as predictive analysis, process automation and remote monitoring, allowing not only a more efficient management of hospital resources, but also an approach focused on the unique needs of each patient.

Furthermore, according to a report by the World Health Organization, Artificial Intelligence has the potential to save six million lives a year through more accurate diagnoses, better allocation of medical resources and the personalization of treatments. This impact is backed up by the massive adoption of intelligent systems in hospitals and clinics around the world, which report reductions in operating costs of 15-30% and a significant improvement in patients' clinical outcomes.

In view of this situation, TECH has produced this exhaustive study in Clinical Management and Personalization of Care with Artificial Intelligence, a cutting-edge educational program that combines technical knowledge of the most innovative technologies with their application in specific areas such as remote patient monitoring and resource optimization. In this way, and throughout the program, nursing professionals will examine market-leading tools such as Mediktor, Zocdoc and Glytec, and analyze success stories that illustrate the transformative impact of intelligent systems on healthcare.

In this context, TECH offers a fully online academic program, designed to adapt flexibly to the needs of professionals. In this way, through a device with Internet access, it will be possible to access all the teaching materials, available anytime and anywhere. In addition, the innovative Relearning methodology is implemented, which uses the strategic reiteration of key concepts to guarantee a natural, effective and lasting assimilation of the contents.

This **Postgraduate Certificate in Clinical Management and Personalization of Care with Artificial Intelligence** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Practical case studies presented by experts
- ♦ The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable 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



*You will gain an in-depth understanding of the ethical and regulatory implications of the use of Artificial Intelligence in healthcare”*

“

*You will catch up with the latest postulates in the field, thanks to a 100% online structure, which will allow you to balance your professional responsibilities with continuous learning”*

*You will be prepared to face the current challenges of the healthcare sector, combining a practical approach with strategic knowledge in applied Artificial Intelligence.*

*You will lead the implementation of innovative strategies to optimize hospital resources, manage schedules and personalize care with the support of the most advanced technologies.*

The program's teaching staff includes professionals from the sector who contribute their work experience to this specializing program, as well as renowned specialists from leading societies 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 immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional 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 experts.



02

# Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it relies on an enormous faculty of more than 6,000 professors of the highest international renown.





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*Study at the world's largest online university  
and guarantee your professional success.  
The future starts at TECH”*

### The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

### The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

### The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.



### The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

### A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

#### The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

#### Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.



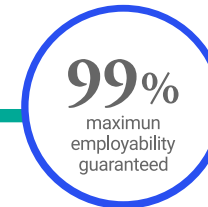
#### Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.



#### The top-rated university by its students

Students have positioned TECH as the world's top-rated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.



# 03 Syllabus

The syllabus for this university program offers a comprehensive journey through the most advanced applications of Artificial Intelligence in the healthcare field. Over six weeks of intensive study, topics will range from an introduction to tools such as IBM Watson Health to the development of personalized plans with leading platforms. In addition, the program delves into resource optimization, remote monitoring and the ethical analysis of these technologies, always with a focus on improving the quality of Care and clinical efficiency.





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*You will acquire a complete understanding of the impact of Artificial Intelligence on improving clinical outcomes and strategic decision-making”*

## Module 1. Clinical Management and Personalization of Care with Artificial Intelligence

- 1.1. Introduction to Clinical Management with Artificial Intelligence (IBM Watson Health)
  - 1.1.1. Basic Concepts of Artificial Intelligence-Assisted Clinical Management
  - 1.1.2. Importance of Artificial Intelligence in the Optimization of Clinical Resources
  - 1.1.3. Successful Cases in the Implementation of Artificial Intelligence in Hospitals
  - 1.1.4. Analysis of Results and Improvements in Clinical Management
- 1.2. Optimizing Hospital Resources with Artificial Intelligence (Qventus)
  - 1.2.1. Bed and Resource Management with Artificial Intelligence
  - 1.2.2. Artificial Intelligence in Medical Equipment Management
  - 1.2.3. Integration of Artificial Intelligence with Existing Hospital Systems
  - 1.2.4. Benefits and Challenges of Automation in Clinical Resources
- 1.3. Comparison between Traditional Tools and Emotional Support from Artificial Intelligence
  - 1.3.1. Differences in the Efficiency of Traditional and Artificial Intelligence Tools
  - 1.3.2. Advantages of Artificial Intelligence Tools in Clinical Management
  - 1.3.3. Cost Analysis of Traditional vs. Artificial Intelligence Tools
  - 1.3.4. Case Studies of the Application of Artificial Intelligence Tools
- 1.4. Artificial Intelligence in Schedule and Appointment Management (Zocdoc, Qure4u)
  - 1.4.1. Optimization of Clinical Schedules of Artificial Intelligence
  - 1.4.2. Artificial Intelligence for Appointment Management and Consultation Scheduling
  - 1.4.3. Reducing Waiting Times through Artificial Intelligence
  - 1.4.4. Efficiency in the Allocation of Time Resources with Artificial Intelligence
- 1.5. Remote Patient Monitoring with Artificial Intelligence (Current Health, Biofourmis)
  - 1.5.1. Introduction to Remote Patient Monitoring
  - 1.5.2. Artificial Intelligence Tools for Remote Monitoring
  - 1.5.3. Early Warning Systems in Assisted Monitoring
  - 1.5.4. Telemedicine Platforms with Artificial Intelligence
- 1.6. Artificial Intelligence Applications in Chronic Diseases (Glytec, Kaia Health)
  - 1.6.1. Using Artificial Intelligence to Monitor Chronic Diseases
  - 1.6.2. Using ORMON CONNECT
  - 1.6.3. Comparison of Traditional and Artificial Intelligence-Assisted Monitoring
  - 1.6.4. Benefits of Artificial Intelligence in the Management of Chronic Diseases







- 1.7. Ethical Considerations in Artificial Intelligence Monitoring
  - 1.7.1. Ethics in the Use of Artificial Intelligence in Patient Monitoring
  - 1.7.2. Data Protection in Remote Monitoring
  - 1.7.3. Privacy Regulations in Artificial Intelligence Systems
  - 1.7.4. Examples of Successful and Ethical Practices in Monitoring
- 1.8. Personalized Care Management with Artificial Intelligence
  - 1.8.1. Introduction to Personalized Care with Artificial Intelligence
  - 1.8.2. Clinical Decision Support Systems
  - 1.8.3. Creating Personalized Advice with ChatGPT
  - 1.8.4. Artificial Intelligence Tools for Care Personalization
- 1.9. Care Planning with Artificial Intelligence (Mediktor)
  - 1.9.1. Creating Personalized Care Plans
  - 1.9.2. Benefits and Applications of Assisted Care Plans
  - 1.9.3. Comparison of Traditional and Personalized Care
  - 1.9.4. Case Studies of Artificial Intelligence Care Plans
- 1.10. Implementing Personalized Nursing Plans
  - 1.10.1. Implementing Artificial Intelligence in Personalized Nursing
  - 1.10.2. Case Studies on Care Personalization with Artificial Intelligence
  - 1.10.3. Implementation Strategies in Care Plans
  - 1.10.4. Future of Artificial Intelligence in Nursing and Personalized Care

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*You will analyze global success stories that will allow you to apply real solutions to the challenges of the healthcare sector through cutting-edge intelligent systems”*

04

# Teaching Objectives

With this TECH program, nursing professionals will develop key skills to optimize hospital resources, design personalized plans and apply advanced technologies in clinical practice. At the same time, they will acquire key skills to analyze results, manage remote monitoring systems and address the ethical and legal challenges of using these tools. By the end of this educational program, graduates will be highly qualified to lead innovation processes in healthcare, integrating intelligent systems to guarantee more precise and patient-centered care.





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*You will develop key skills to compare traditional approaches based on intelligent systems, evaluating costs, benefits and the impact on hospital management”*



## General Objectives

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- ♦ Develop an in-depth understanding of the principles and applications of Artificial Intelligence in Clinical Management and Personalization of Care
- ♦ Identify and analyze the most advanced technological tools for the optimization of hospital resources and the improvement of clinical efficiency
- ♦ Promote the implementation of Artificial Intelligence based strategies for remote patient monitoring and chronic disease follow-up
- ♦ Analyze international success stories that demonstrate the positive impact of Artificial Intelligence in Healthcare Management
- ♦ Address the ethical, legal and regulatory considerations related to the implementation of Artificial Intelligence systems in clinical settings
- ♦ Delve into the integration of Artificial Intelligence in the management of schedules and appointments to optimize care and reduce waiting times
- ♦ Train for the integration of clinical decision support systems using Artificial Intelligence
- ♦ Promote innovation in the healthcare field through the knowledge and use of emerging technologies adapted to the current needs of the sector







## Specific Objectives

- ♦ Skillfully manage IBM Watson Health to efficiently manage resources and optimize clinical planning
- ♦ Design personalized care plans based on data analytics and AI technologies
- ♦ Establish remote patient monitoring systems to improve continuity and quality of care
- ♦ Analyze the effectiveness and cost-benefit of intelligent tools versus classical methods in clinical management

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*You will identify the benefits of remote monitoring assisted by Artificial Intelligence, from early warnings to the proactive management of chronic illnesses”*

# 05 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.





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*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.

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*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.

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*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.

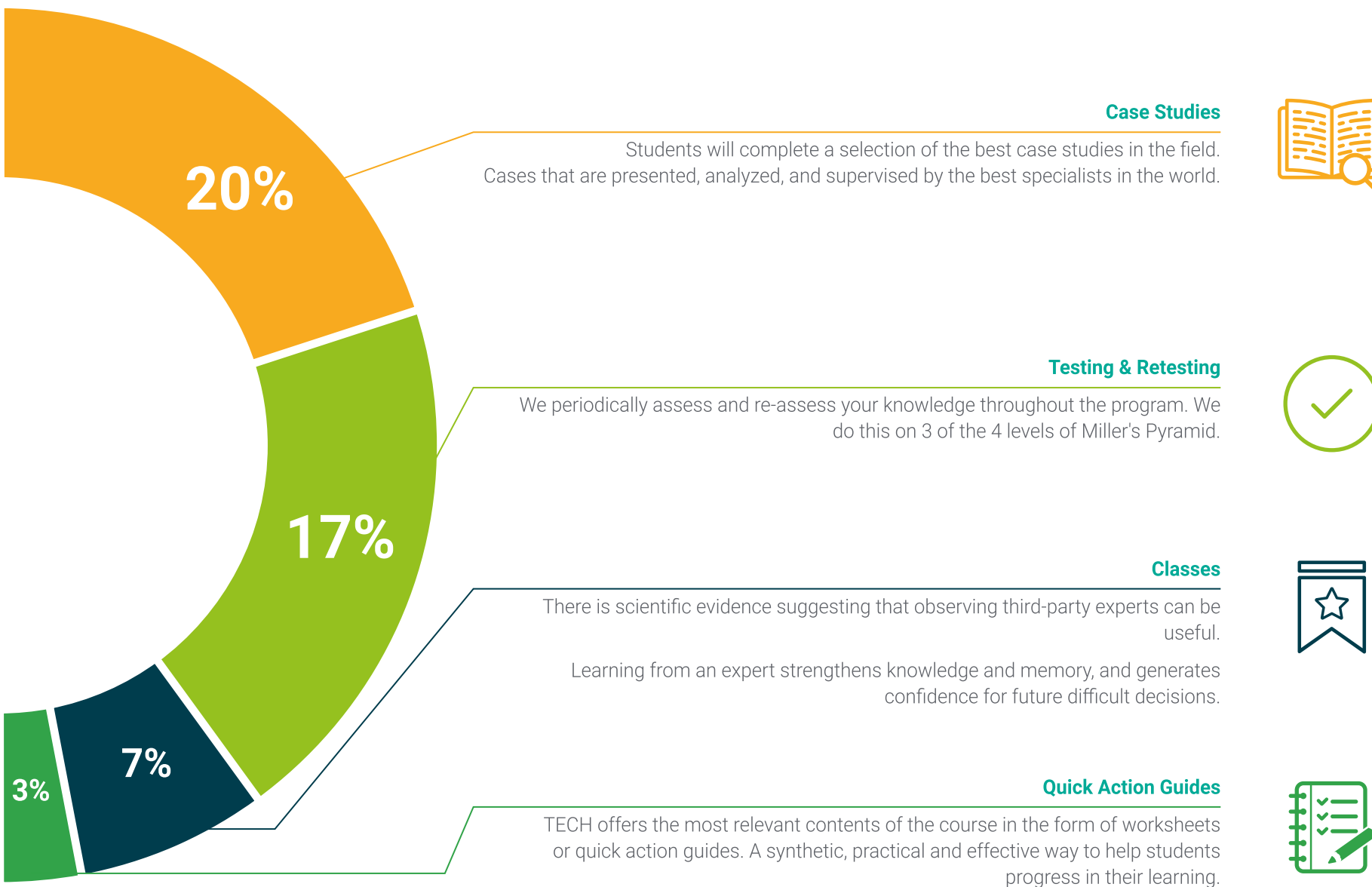
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### Additional Reading

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





06

# Teaching Staff

The teaching team for this university program is made up of experts with a proven track record in the field of Clinical Management and the application of Artificial Intelligence in clinical practice. Through their practical experience and specialized knowledge in the field, they guarantee a rigorous and up-to-date preparation, focused on the real demands of the sector. In this way, with an academic and professional approach, these specialists offer a solid guide to mastering the most innovative tools and transforming healthcare processes.







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*You will be guided by renowned international specialists with extensive experience in the implementation of Artificial Intelligence in complex clinical environments”*

## Management



### Dr. Peralta Martín-Palomino, Arturo

- CEO and CTO at Prometheus Global Solutions
- CTO at Korporate Technologies
- CTO at AI Shepherds GmbH
- Consultant and Strategic Business Advisor at Alliance Medical
- Director of Design and Development at DocPath
- Doctorate in Psychology from the University of Castilla La Mancha
- Doctorate in Economics, Business and Finance from the Camilo José Cela University
- Doctorate in Psychology from University of Castilla La Mancha
- Master's Degree in Executive MBA from the Isabel I University
- Master's Degree in Sales and Marketing Management from the Isabel I University
- Expert Master's Degree in Big Data by Hadoop Training
- Master's Degree in Advanced Information Technologies from the University of Castilla La Mancha
- Member of: SMILE Research Group



## Professors

### Mr. Popescu Radu, Daniel Vasile

- ◆ Independent Specialist in Pharmacology, Nutrition and Dietetics
- ◆ Freelance Producer of Didactic and Scientific Content
- ◆ Nutritionist and Community Dietitian
- ◆ Community Pharmacist
- ◆ Researcher
- ◆ Master's Degree in Nutrition and Health from the Open University of Catalonia
- ◆ Master's Degree in Psychopharmacology from the University of Valencia
- ◆ Pharmacist from the Complutense University of Madrid
- ◆ Nutritionist-Dietitian by the European University Miguel de Cervantes

### Mr. Del Rey Sánchez, Alejandro

- ◆ In Charge of Implementing Programs to Improve Tactical Emergency Care
- ◆ Degree in Industrial Organization Engineering
- ◆ Certification in Big Data and Business Analytics
- ◆ Certification in Microsoft Excel Advanced, VBA, KPI and DAX
- ◆ Certification in CIS Telecommunication and Information Systems



# 07 Certificate

The Postgraduate Certificate in Clinical Management and Personalization of Care with Artificial Intelligence guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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*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 **Postgraduate Certificate in Clinical Management and Personalization of Care with Artificial Intelligence** 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 Clinical Management and Personalization of Care with Artificial Intelligence**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**







**Postgraduate Certificate**  
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