



Application of Conversational Assistants in Artificial Intelligence for Nursing

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Accreditation: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/nursing/postgraduate-certificate/application-conversational-assistants-artificial-intelligence-nursing

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# tech 06 | Introduction to the Program

According to a new study carried out by the World Health Organization, Nursing is one of the most internationally in-demand professions, with more than 28 million specialists currently working in the field. However, the growing workload in the healthcare sector has posed significant challenges in the provision of quality care. In this context, Artificial Intelligence has emerged as a cutting-edge technological solution to optimize the work of experts. For example, through Conversational Assistants based on intelligent systems, professionals provide continuous support to individuals tailored to their specific needs. At the same time, these tools facilitate other aspects such as information management, clinical monitoring and the execution of repetitive administrative tasks.

In this scenario, TECH has developed a pioneering Postgraduate Certificate in Application of Conversational Assistants in Artificial Intelligence for Nursing. Devised by true experts in the field, the academic program will delve into subjects ranging from the creation of individualized virtual agents using ChatGPT or the implementation of algorithms to analyze large volumes of clinical data to sophisticated machine learning techniques for psychological support. Thanks to this, graduates will gain advanced technical skills to handle different methods of Artificial Intelligence to create intelligent dialogue systems to provide patients with continuous and individualized emotional support that increases their overall well-being.

To reinforce the mastery of such content, this university qualification is based on TECH's ground-breaking Relearning system, which promotes the assimilation of complex concepts through their natural and progressive reiteration. Similarly, the program draws on materials in a variety of formats such as explanatory videos, interactive summaries, and readings backed by the latest scientific evidence. All this in a convenient 100% online mode, which allows nurses to adjust schedules based on their responsibilities.

This Postgraduate Certificate in Application of Conversational Assistants in Artificial Intelligence for Nursing contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of case studies presented by experts in Artificial Intelligence applied to Nursing
- The graphic, schematic and eminently practical content of the book provides scientific and practical information on those disciplines that are essential for professional practice
- Practical exercises where the process of self-assessment can be used 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



With TECH's revolutionary Relearning methodology, you will assimilate the fundamental concepts of the syllabus in an effective and immediate way"



You will analyze the most innovative techniques to create Virtual Agents with ChatGPT that meticulously manage routine queries"

The program's teaching staff includes professionals from the field who contribute their work experience to this educational 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.

You will manage therapeutic programs based on Artificial Intelligence to treat Emotional Disorders such as Anxiety.

You will apply ethical principles in the use of Intelligent Systems, ensuring respect for patients' rights and privacy.







# tech 10 | Why Study 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 syllabus





World's
No.
The World's largest
online university

#### 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**

Through this exclusive university program, nurses will stand out for their solid understanding of the applications of Artificial Intelligence in the clinical environment. The syllabus will delve into issues ranging from the creation of Virtual Assistants to offer comprehensive emotional support to patients, to the most sophisticated machine learning techniques, to different methods to guarantee the security of clinical data stored by intelligent systems. In this way, graduates will acquire advanced skills in developing virtual agents that provide individuals with high-quality psychological support.



# tech 14 | Syllabus

# **Module 1.** Application of Conversational Assistants in Artificial Intelligence for Nursing

- 1.1. Introduction to Conversational Assistants in Artificial Intelligence for Nursing
  - 1.1.1. Context of Artificial Intelligence in Health and Its Application in Nursing
  - 1.1.2. Benefits of Conversational Assistants in Nursing Care
  - 1.1.3. Specific Applications in Nursing
  - 1.1.4. Trends in Conversational Assistants in the Healthcare Sector
- 1.2. Types of Conversational Assistants in Healthcare
  - 1.2.1. Types of Conversational Assistants in Healthcare (Synthesia, Heygen)
  - 1.2.2. Differences between Assistants in Support, Diagnostic, and Follow-Up Functions
  - 1.2.3. Examples of Conversational Assistants and Nursing Use Cases
  - 1.2.4. Comparison between Automated Assistants and Hybrid Assistants (with Human Intervention)
- 1.3. Implementation of Conversational Assistants in Healthcare
  - 1.3.1. Advantages of Assistants in the Healthcare Environment for Nurses
  - 1.3.2. Challenges in the Implementation of Assistants in Clinical Processes
  - 1.3.3. Technical Requirements for Implementation in Healthcare
  - 1.3.4. Evaluation of Effectiveness and Benefits in the Educational Healthcare Setting
- 1.4. Creating Personalized Assistants in ChatGPT
  - 1.4.1. Introduction to the Creation of a Chatbot in ChatGPT
  - 1.4.2. Process of Customizing a Nursing Assistant (Part 1)
  - 1.4.3. Process of Customizing a Nursing Assistant (Part 2)
  - 1.4.4. Practical Examples of Personalized Healthcare Assistants
- 1.5. Impact of Artificial Intelligence and Automation in the Healthcare Sector
  - 1.5.1. Changes in Job Roles Due to Artificial Intelligence
  - 1.5.2. Adaptation of Nursing Professionals to Artificial Intelligence Technologies
  - 1.5.3. Effects of Conversational Assistants on the Training of the Healthcare Workforce
  - 1.5.4. Evaluation of the Impact of Automation on the Healthcare Sector
- 1.6. Integrating Conversational Assistants in Nursing Education
  - 1.6.1. Role of Conversational Assistants in Clinical Learning
  - 1.6.2. Using Conversational Assistants in Clinical Case Simulations
  - 1.6.3. Application in Clinical Practice and Decision Making
  - 1.6.4. Tools for Continuing Education with Assistants





# Syllabus | 15 tech

- 1.7. Conversational Assistants in the Emotional Support of Patients
  - 1.7.1. Applications of Assistants for Emotional Accompaniment
  - 1.7.2. Examples of Conversational Assistants in Psychological Support
  - 1.7.3. Limitations in the Emotional Support of Conversational Assistants
  - 1.7.4. Considerations for the Use of Artificial Intelligence in Emotional Support
- 1.8. Improving Efficiency and Patient Care with Artificial Intelligence Assistants
  - 1.8.1. Managing Queries and Frequently Asked Questions with Assistants
  - 1.8.2. Optimizing Patient-Nurse Communication
  - 1.8.3. Assistant Applications in Care Coordination
  - 1.8.4. Evaluation of the Impact of Assistants on Clinical Efficiency
- 1.9. Development and Customization of Conversational Tools for Nurses
  - 1.9.1. Process of Developing a Conversational Nurse Assistant from Scratch
  - 1.9.2. Customization for Specific Nursing Needs
  - 1.9.3. Updating and Continuous Improvement of Conversational Assistants
  - 1.9.4. Implementing Assistants in Various Healthcare Settings
- 1.10. Virtual Learning and Continuing Education in Artificial Intelligence for Nursing
  - 1.10.1. Importance of Artificial Intelligence Continuous Learning for Nursing
  - 1.10.2. Artificial Intelligence E-Learning Platforms and Assistants
  - 1.10.3. Artificial Intelligence Professional Development for Healthcare Workers
  - 1.10.4. Future of Artificial Intelligence Training for Nursing and Healthcare Workers



You will have at your disposal a variety of additional multimedia resources such as clinical case studies, interactive summaries and explanatory videos"



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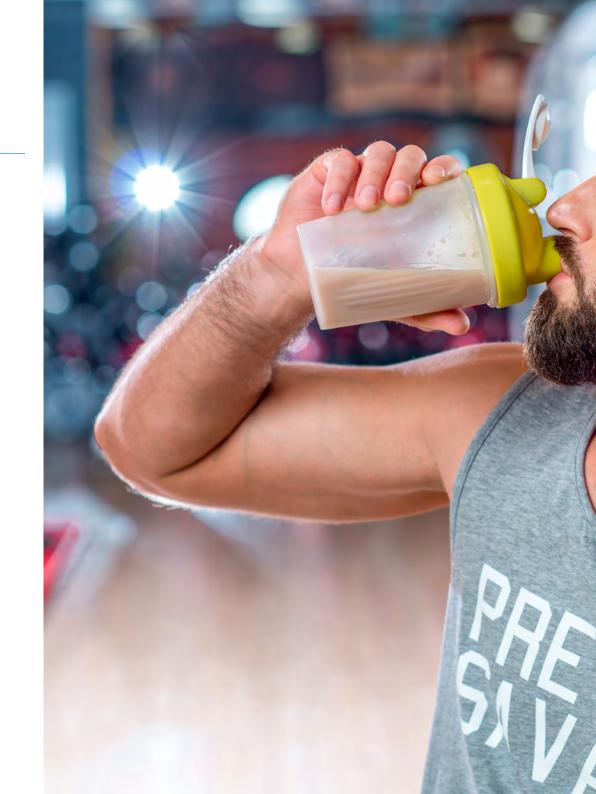
You will carry out interventions based on data and predictive analysis to prevent emotional complications including Post-Traumatic Stress Disorder"

# tech 18 | Teaching Objectives



### **General Objectives**

- Develop advanced skills to integrate Artificial Intelligence tools into clinical practice, improving patient care and the efficiency of care processes
- Be able to design and implement personalized conversational assistants that optimize communication and clinical information management
- Manage intelligent systems for resource planning, remote monitoring of users and individualization of care plans
- Utilize emerging technologies such as Virtual Reality to provide psychological support to individuals
- Use applications based on Artificial Intelligence to create personalized physical activity and nutrition programs
- Develop scientific dissemination resources based on specialized software, such as presentations, posters or interactive avatars
- Ensure responsible handling of sensitive personal data, complying with ethical standards and privacy regulations in the adoption of technological tools
- Implement Al-assisted remote monitoring systems to improve early detection of clinical complications and optimize the management of Chronic Diseases
- Design personalized care plans based on data analysis and supported by intelligent systems
- Acquire a multidisciplinary approach to facilitate rapid adaptation to changes in the healthcare environment





## Teaching Objectives | 19 tech



# **Specific Objectives**

- Understand the context and current trends in the use of conversational assistants in health care
- Design and implement personalized conversational assistants to optimize communication, information management and emotional support
- Evaluate the benefits, challenges and technical requirements of integrating conversational assistants into clinical processes
- Apply tools such as ChatGPT for the creation of wizards tailored to specific healthcare needs



An immersive educational experience, without fixed timetables and with content available 24 hours a day.

What are you waiting for to enroll?"



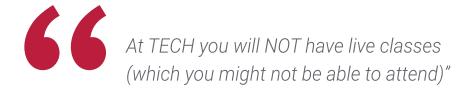


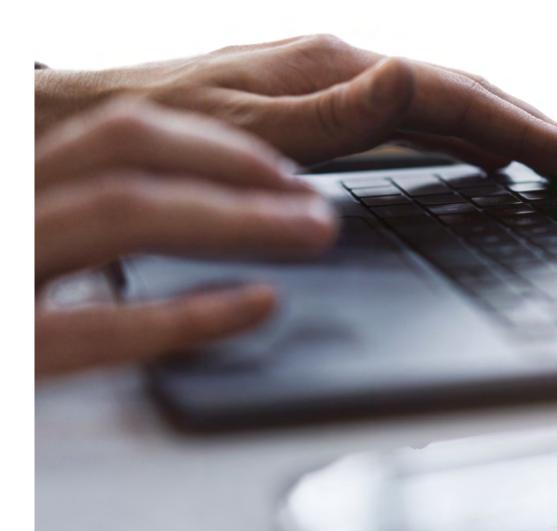
#### The student: the priority of all TECH programs

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 24 | 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.





#### 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 | 27 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.

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**

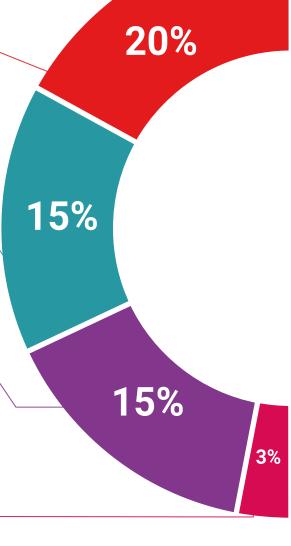
You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



#### **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**



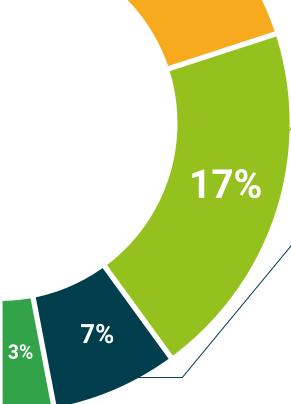
There is scientific evidence suggesting that observing third-party experts can be useful.

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.



# 05Teaching Staff

For the design and implementation of this Postgraduate Certificate, TECH has brought together the most outstanding experts in the field of Artificial Intelligence applied to Nursing. These professionals have extensive work experience, having helped numerous healthcare institutions to implement technological solutions such as Conversational Assistants to provide personalized care to patients. As a result, they have managed to optimize the general well-being of multiple patients. In this way, graduates will enter a high-intensity experience that will significantly improve both their daily clinical practice and their job prospects.



# tech 32 | Teaching Staff

#### Management



#### Dr. Peralta Martín-Palomino, Arturo

- CEO and CTO at Prometeus 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

#### Ms. Del Rey Sánchez, Cristina

- Talent Management Administrator at Securitas Seguridad España, S.L.
- Extracurricular Activities Center Coordinator
- Tutor and pedagogical interventions with Primary and Secondary Education students
- Postgraduate in Development, Delivery and Tutoring of e-Learning Training Actions
- Postgraduate in Early Childhood Care
- Degree in Pedagogy from the Complutense University of Madrid





# tech 36 | Certificate

This private qualification will allow you to obtain a **Postgraduate Certificate in Application of Conversational Assistants in Artificial Intelligence for Nursing** 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 Application of Conversational Assistants in Artificial Intelligence for Nursing

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



# Postgraduate Certificate in Application of Conversational Assistants in Artificial Intelligence for Nursing

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





# Postgraduate Certificate

**Application of Conversational** Assistants in Artificial Intelligence for Nursing

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

