



## Postgraduate Certificate

## Assisted Reproductive Nursing Techniques

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Credits: 6 ECTS

» Schedule: at your own pace

» Exams: online

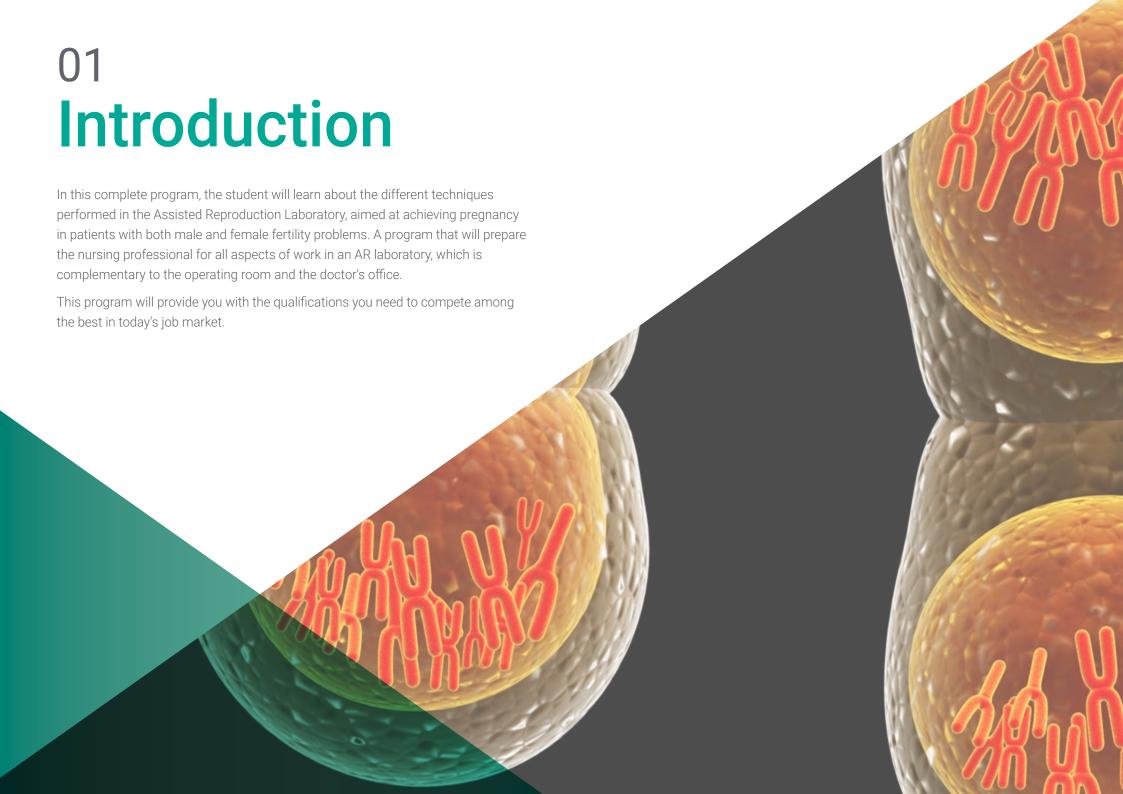
Website: www.techtitute.com/us/nursing/postgraduate-certificate/assisted-reproductive-nursing-techniques

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## tech 06 | Introduction

We will begin by describing less complex techniques, such as artificial insemination, to solve less severe problems. Then we will address more complex techniques, such as In Vitro Fertilization and Intracytoplasmic Microinjection, in order to cover all infertility problems. Current techniques, such as vitrification and freezing, which help preserve both female and male fertility and facilitate gamete donation, will be studied.

Nowadays, there are many types of families that require new techniques adapted to them, giving more options to share a gestation and that both are part of the pregnancy, such as the ROPA Method. The day-to-day laboratory procedures associated with all these techniques will be analyzed.

It is important to have absolute control of everything used in the laboratory, thereby minimizing the possibility of errors, so we will know what traceability is and what it entails, as well as recording and reporting adverse reactions in patients according to the legislation in force. Finally, a series of diagnostic tests that can help diagnose the problem of infertility in the patient will be reviewed.

This Postgraduate Certificate in Assisted Reproductive Nursing Techniques contains the most complete and up-to-date scientific program on the market. The most important features include:

- » The latest technology in online teaching software
- » A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- » Practical cases presented by practising experts
- » State-of-the-art interactive video systems
- » Teaching supported by telepractice
- » Continuous updating and recycling systems
- » Autonomous learning: full compatibility with other occupations
- » Practical exercises for self-evaluation and learning verification
- » Support groups and educational synergies: questions to the expert, debate and knowledge forums
- » Communication with the teacher and individual reflection work
- » Content that is accessible from any fixed or portable device with an Internet connection
- » Complementary documentation banks permanently available, even after the Postgraduate Certificate



With this Postgraduate Certificate you will be able to balance a high-intensity program with your personal and professional life, achieving your goals in a simple and real way"

## Introduction | 07 tech



Study Assisted Reproduction Techniques in a highly qualified Postgraduate Certificate and act with the solvency of a high level nursing professional"

Our teaching staff is made up of professionals from different fields related to this specialty. In this way, we ensure that we provide you with the educational update we are aiming for. A multidisciplinary staff, made up of prepared and experienced professionals in different environments, who will develop the theoretical knowledge in an efficient way, but, above all, will put at the service of the Postgraduate Certificate the practical knowledge derived from their own experience: one of the differential qualities of this program.

This mastery of the subject matter is complemented by the effectiveness of the methodological design of this Postgraduate Certificate in Assisted Reproductive Nursing Techniques. Developed by a multidisciplinary team of experts, it integrates the latest advances in educational technology. This way, you will be able to study with a range of comfortable and versatile multimedia tools that will give you the operability you need in your education.

The design of this program is based on Problem-Based Learning: an approach that conceives learning as a highly practical process. To achieve this remotely, we will use telepractice learning: with the help of an innovative interactive video system, and learning from an expert, you will be able to acquire the knowledge as if you were actually dealing with the scenario you are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

The learning of this Postgraduate
Certificate is developed through the
most advanced teaching methods in
online teaching to guarantee that your
effort will have the best possible results.

Our innovative telepractice concept will give you the opportunity to learn through an immersive experience, which will provide you with a faster integration and a much more realistic view of the contents: "learning from an expert".







## tech 10 | Objectives

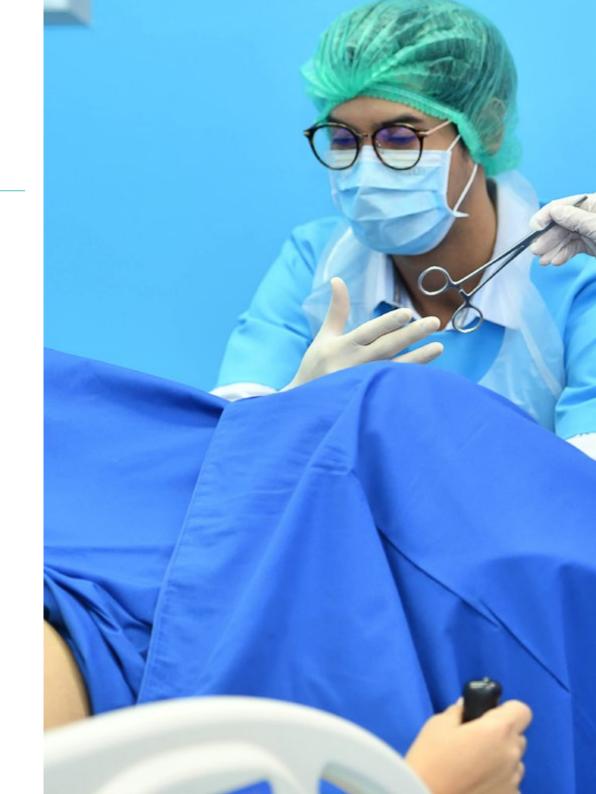


## **General objectives**

- » Broaden specific knowledge of each of the fields of work in assisted reproduction
- » Enable students to be interdependent and problem solvers
- » Facilitate good performance of nursing professionals in order to provide the best care throughout the process



A boost to your professional profile that will give you the competitiveness of the best prepared professionals in the labor market"







## **Specific objectives**

- » Know the treatments that currently exist in AR and that are appropriate for each patient according to their infertility diagnosis
- » Learn from the most basic techniques (AI) to the most complex techniques (IVF/ICSI) to obtain quality embryos that result in pregnancy
- » Discover complementary techniques that help improve fertilization rates and facilitate embryo selection to transfer the best embryo to the patient
- » Differentiate between freezing and vitrification, and the possibilities of donation
- » Understand traceability as an indispensable tool to avoid errors in the laboratory
- » Understand what biosurveillance is and how to notify it according to the Royal Decree
- » Know other techniques that can help in the diagnosis of the patient







## tech 14 | Course Management

#### Management



#### Ms. Agra Bao, Vanesa

- · Operating room supervisor at EVA FERTILITY-DORSIA
- · Degree in Nursing University of La Coruña
- Postgraduate Diploma in Legal Nursing. UNED
- · Official Master's Degree in Occupational Risk Prevention. USP-CEU
- · Master's Degree in Physical Activity and Health. Miguel de Cervantes University
- Instructor of Basic Life Support and DESA. SEMICYUC
- · Postgraduate Diploma in Surgical Anesthesiology for Nursing. CEU Cardenal Herrera University
- · Biosafety and Occupational Risk Prevention in Microbiology Laboratories. SEM
- The male in Assisted Reproduction EVA FERTILITY CLINICS
- · Biosafety Laboratories and Research Animal Facilities with Biocontainment Level 3. SEGLA
- · Nursing action in traumatic emergencies, poisoning and other urgent situations. DAE



## Ms. Boyano Rodríguez, Beatriz

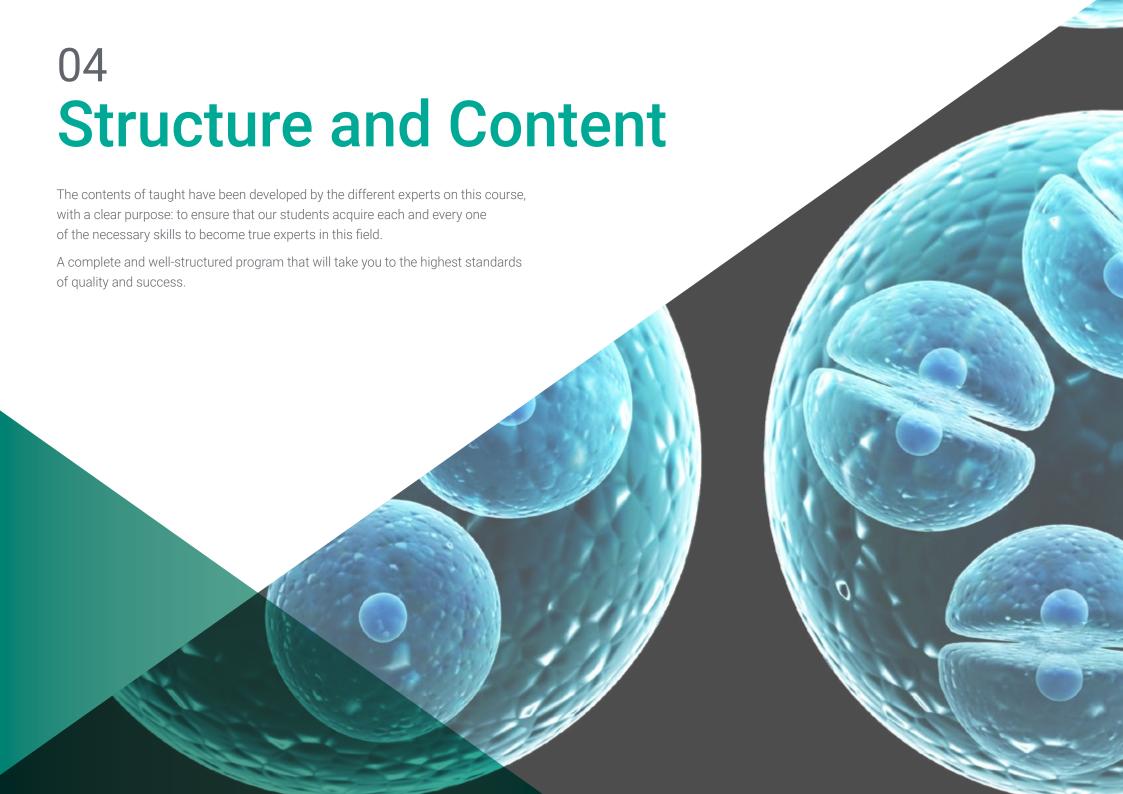
- · Embryologist at Clínicas EVA, Madrid
- · Postgraduate Diploma in Clinical Genetics, Universidad de Alcalá de Henares, Madrid
- · Master's Degree in Assisted Human Reproduction Biotechnology, IVI and University of Valencia
- · Postgraduate in Medical Genetics, University of Valencia, Spain
- Degree in Biology, Universidad de Salamanca
- Member of the Association for the Study of Reproductive Biology
- Member of the Spanish Association of Human Genetics

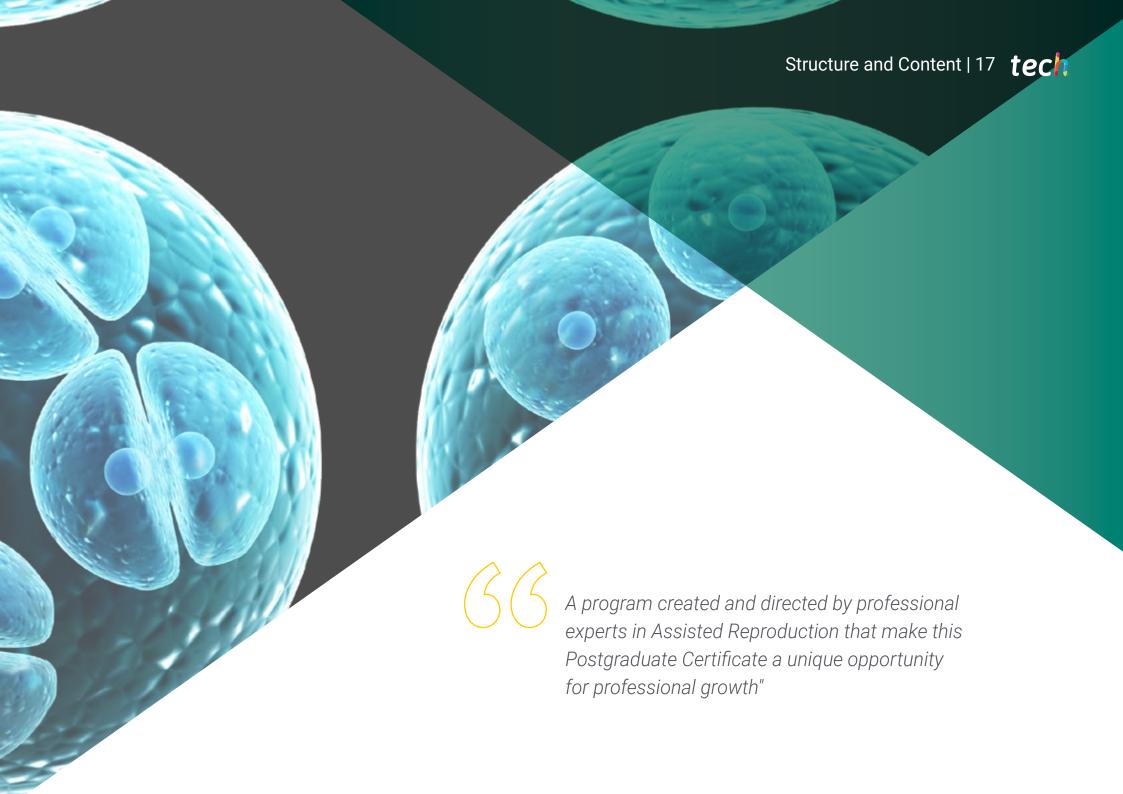
#### **Professors**

#### Ms. De Riva, María

- » Embryologist. Laboratory management, orders, shipments, protocol development, database control, administrative tasks. EVA CLINICS
- » Degree in Biological Sciences. Alcalá de Henares University
- » Research work on gene expression in mouse embryos. Brussels Free University
- » Assisted Reproduction Postgraduate basic degree: Alcalá de Henares Hospital
- » Assisted Reproduction Advanced postgraduate course: Alcalá de Henares Hospital
- » Master on Theoretical Basis and Laboratory Procedures of Assisted Reproduction. IVI







## tech 18 | Structure and Content

#### **Module 1.** Assisted Reproduction Techniques

- 1.1. Artificial Insemination
  - 1.1.1. Definition
  - 1.1.2. Types
  - 1.1.3. Indications
  - 1.1.4. Requirements
  - 1.1.5. Procedure
  - 1.1.6. IVF/ICSI Results and Pregnancy Probability
  - 1.1.7. Definition and Differences
  - 1.1.8. IVF/ICSI Indications
  - 1.1.9. Requirements
  - 1.1.10. Advantages and Disadvantages
  - 1.1.11. Probability of Pregnancy
  - 1.1.12. Procedure
    - 1.1.12.1. Oocyte Puncture
    - 1.1.12.2. Oocyte Evaluation
    - 1.1.12.3. Oocyte Insemination (IVF/ICSI)
      - 1.1.12.3.1. Other Insemination Techniques: IMSI, PICSI, ICSI+MACS, Use of Polarized Light
    - 1.1.12.4. Evaluation of Fertilization
    - 1.1.12.5. Embryo Culture
      - 1.1.12.5.1. Types
      - 1.1.12.5.2. Cultivation Systems
      - 1.1.12.5.3. Time-Lapse Culture Equipment
  - 1.1.13. Possible Risks

- 1.2. Preimplantation Genetic Testing (PGT)
  - 1.2.1. Definition
  - 1.2.2. Types
  - 1.2.3. Indications
  - 1.2.4. Procedure
  - 1.2.5. Advantages and Disadvantages
- 1.3. Embryo Transfer
  - 1.3.1. Definition
  - 1.3.2. Embryo Quality and Selection
    - 1.3.2.1. Transfer Day
    - 1.3.2.2. Number of Embryos to Be Transferred
  - 1.3.3. Assisted Eclosion
  - 1.3.4. Procedure
- 1.4. Freezing and Vitrification
  - 1.4.1. Differences
  - 1.4.2. Sperm Freezing
    - 1.4.2.1. Definition
  - 1.4.3. Egg Vitrification
    - 1.4.3.1. Definition
    - 1.4.3.2. Procedure
    - 1.4.3.3. Devitrification
    - 1.4.3.4. Advantages: Preservation and Donation
  - 1.4.4. Embryo Vitrification
    - 1.4.4.1. Definition
    - 1.4.4.2. Indications
    - 1.4.4.3. Vitrification Day
    - 1.4.4.4. Procedure
    - 1.4.4.5. Devitrification
    - 1.4.4.6. Advantages

1.4.5. Fertility Preservation (experimental)

1.4.5.1. Ovarian Tissue

1.4.5.2. Testicular Tissue

1.5. Donation

1.5.1. Definition

1.5.2. Types of Donation

1.5.2.1. Egg Donation

1.5.2.1.1. Definition

1.5.2.1.2. Indications

1.5.2.1.3. Types of Egg Donation

1.5.2.1.4. Procedure

1.5.2.1.4.1. Donor Ovarian Puncture

1.5.2.1.4.2. Recipient Endometrial Preparation

1.5.2.1.5. Egg Bank: Storage System

1.5.2.1.6. Advantages and Disadvantages

1.5.2.2. Sperm Donation

1.5.2.2.1. Procedure

1.5.2.3. Embryo Donation

1.5.2.3.1. Definition

1.5.2.3.2. Indications

1.5.2.3.3. Procedure

1.5.2.3.4. Advantages

1.5.2.4. Double Donation

1.5.2.4.1. Definition

1.5.2.4.2. Indications

1.5.2.4.3. Procedure

1.6. ROPA Method

1.6.1. Definition

1.6.2. Indications

1.6.3. Procedure

1.6.4. Legal Requirements

1.7. Traceability

1.7.1. Definition

1.7.2. Materials

1.7.3. Samples

1.7.4. Double Check

1.7.5. Technological Traceability Systems (Witness, Gidget)

1.8. Biovigilance

1.9. Other Techniques

1.9.1. Endometrial Receptivity Test (ERA)

1.9.2. Study of the Vaginal Microbiome

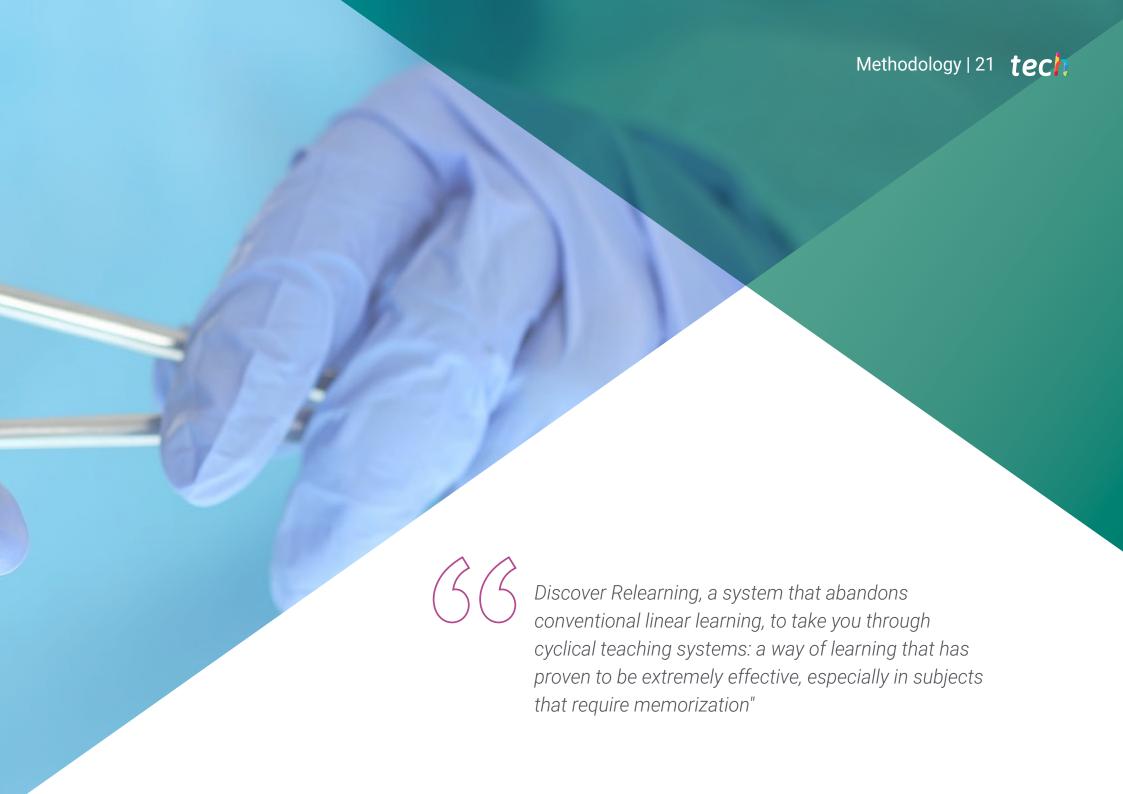


A comprehensive teaching program, structured in well-developed teaching units, oriented towards learning that is compatible with your personal and professional life"



This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.** 

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

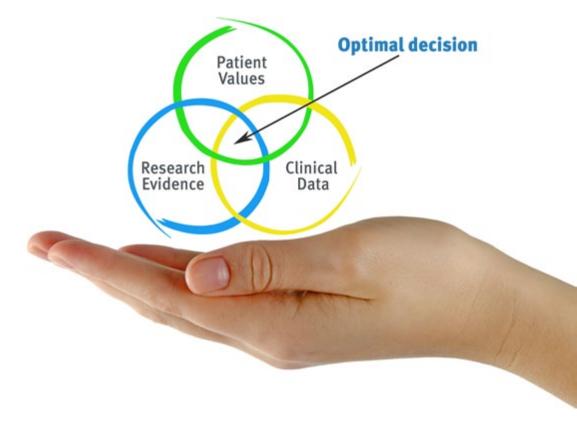


## tech 22 | Methodology

#### At TECH Nursing School we use the Case Method

In a given situation, what should a professional do? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Nurses learn better, faster, and more sustainably over time.

With TECH, nurses can experience a learning methodology that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the real conditions in professional nursing practice.



Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

#### The effectiveness of the method is justified by four fundamental achievements:

- Nurses who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
- 2. The learning process has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- 4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.





### Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.

The nurse will learn through real cases and by solving complex situations in simulated learning environments.

These simulations are developed using state-of-the-art software to facilitate immersive learning.



## Methodology | 25 tech

At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology we have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

This program offers the best educational material, prepared with professionals in mind:



#### **Study Material**

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is really specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



#### **Nursing Techniques and Procedures on Video**

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **Interactive Summaries**

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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





#### **Additional Reading**

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.



## **Testing & Retesting**

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



#### Classes

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

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **Quick Action Guides**

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.





20%

17%





## tech 30 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Assisted Reproductive Nursing Techniques** 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** title 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 Assisted Reproductive Nursing Techniques

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



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

#### Postgraduate Certificate in Assisted Reproductive Nursing Techniques

This is a program 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



<sup>\*</sup>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.

health confidence people
leducation information tutors
guarantee accreditation teaching
institutions technology learning



# Postgraduate Certificate Assisted Reproductive Nursing Techniques

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

