

# Postgraduate Certificate

## Scientific Evidence in Natural Childbirth



## Postgraduate Certificate Scientific Evidence in Natural Childbirth

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

Website: [www.techtitute.com/us/medicine/postgraduate-certificate/scientific-evidence-natural-childbirth](http://www.techtitute.com/us/medicine/postgraduate-certificate/scientific-evidence-natural-childbirth)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 14*

04

Structure and Content

---

*p. 18*

05

Methodology

---

*p. 22*

06

Certificate

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*p. 30*

# 01

# Introduction

There is a wealth of scientific evidence supporting natural childbirth, dispelling myths and traditional beliefs that suggest these procedures are not beneficial for the health of the mother and the child. More and more women are opting for natural childbirth, and this is where the role of the specialist becomes even more crucial. Today, specialists must stay updated on the various evidence-based techniques surrounding natural childbirth. Therefore, TECH has developed a program in which students will delve into the neural and hormonal changes during pregnancy, as well as research in the field, all in a 100% online format.





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*Recent studies show that mothers prefer Natural Childbirth in the company of experts in the field. Delve into this area by enrolling in this Postgraduate Certificate today”*

More and more women are choosing to give birth naturally to enjoy the experience and avoid potential complications associated with other types of procedures. However, it is essential that the attending physician of the childbirth has knowledge and scientific evidence-based practice surrounding this crucial topic.

In order to pay closer attention to the needs and desires of women during the process of childbirth, it is of vital importance that the specialist is updated on the scientific evidence to manage these types of births.

The available evidence indicates that natural childbirth is the best alternative for most women and their babies, provided the appropriate conditions for this process are met. Over time, studies have shown that unnecessary interventions, such as cesarean sections or induced labor, can increase the risk of future complications and injuries for both the mother and the newborn.

Considering this, a well-informed physician about the scientific evidence surrounding natural childbirth becomes increasingly important, not only for the patient but also for the professional themselves, as it gives them the opportunity to update their knowledge and stay at the forefront of the latest techniques they can put into practice.

Therefore, TECH has developed a comprehensive program in Scientific Evidence in Natural Childbirth, offering students knowledge of the most relevant and up-to-date aspects of the subject. It delves into the emotional needs of the mother, studies on brain changes, the breastfeeding process, and neuroscience.

With a 100% online plan that combines high-quality multimedia content and the expertise of leading experts in the field, and the ability to coordinate professional updates and daily activities thanks to a flexible program with no fixed schedules.

This **Postgraduate Certificate in Scientific Evidence in Natural Childbirth** contains the most complete and up-to-date scientific program on the market.

The most important features include:

- ♦ The development of practical cases presented by experts in Scientific Evidence in Natural Childbirth
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where 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



*Thanks to this program, you will be able to foster a closer connection between the mother and the child, applying your skills based on the most recent scientific evidence”*

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*With this program, you will adapt your knowledge and apply current Scientific Evidence to Natural Childbirth”*

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 academic year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*With TECH, update yourself in the latest techniques based on the most recent Scientific Evidence in Natural Childbirth.*

*Acquire knowledge about the physical and emotional needs of the mother during childbirth.*



# 02 Objectives

The program is designed for medical professionals to apply scientific evidence in clinical practice and to support a safer and more effective natural childbirth. The physician will explore the most current evidence regarding natural childbirth and its benefits, best practices for helping the mother connect more emotionally with her baby, the different non-invasive techniques offered by this type of procedure, and a series of neuroscientific research that will confirm the importance of a well-assisted natural childbirth.







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*Enroll now and delve into updated techniques in Scientific Evidence to assist in a more humane Natural Childbirth”*



## General Objectives

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- ◆ Acquire fundamental knowledge about the physiology of Natural Childbirth, ancient cultural practices, and the emotional needs of women during childbirth, as well as the implications of medical interventions
- ◆ Acquire essential skills and knowledge for the care of pregnant women and their fetuses, including promoting healthy pregnancies and identifying potential complications
- ◆ Acquire fundamental knowledge and skills in the diagnosis, management, and prevention of childbirth emergencies, with a focus on interprofessional collaboration and patient rights advocacy
- ◆ Acquire fundamental knowledge and skills in the assessment, diagnosis, and management of neonatal emergencies, with an emphasis on early problem recognition and the application of appropriate interventions
- ◆ Emphasize fundamental knowledge about the neuroscience of pregnancy, motherhood, and perinatal care, as well as the scientific evidence related to Natural Childbirth and evidence-based care practices
- ◆ Acquire fundamental knowledge about home births, including team management and organization, pregnancy, childbirth, and postpartum preparation and support, as well as the identification and management of special situations and home obstetric emergencies
- ◆ Acquire fundamental knowledge about Natural Childbirth units, such as birthing centers and hospital units, and develop skills to assess, plan, and manage these environments, ensuring a high level of care and satisfaction for women and their families
- ◆ Acquire fundamental knowledge and practical skills in newborn care, as well as the ability to provide comprehensive and safe care in this critical stage of life and collaborate with other health professionals and families to ensure the well-being of the newborn.
- ◆ Acquire knowledge about the physical and emotional needs of the mother during the perinatal period.
- ◆ Develop skills to provide emotional support and comprehensive care to the mother during the postpartum period, including difficult and emotionally intense situations





- ◆ Promote the prevention and care of maternal mental health during the perinatal period, including the detection and treatment of mood disorders and addressing obstetric trauma and obstetric violence
- ◆ Analyze the stages of labor and pain management and relaxation techniques
- ◆ Develop skills in creating and monitoring personalized birth plans
- ◆ Examine the importance of interdisciplinary collaboration in childbirth care
- ◆ Promote emotional preparation and support for women and their families during the childbirth process
- ◆ Acquire skills to identify and manage high-risk situations in pregnancy and childbirth
- ◆ Acquire fundamental knowledge and practical skills in newborn care, as well as the ability to provide comprehensive and safe care in this critical stage of life and collaborate with other health professionals and families to ensure the well-being of the newborn.
- ◆ Acquire knowledge about the physical and emotional needs of the mother during the perinatal period.
- ◆ Develop skills to provide emotional support and comprehensive care to the mother during the postpartum period, including difficult and emotionally intense situations
- ◆ Promote the prevention and care of maternal mental health during the perinatal period, including the detection and treatment of mood disorders and addressing obstetric trauma and obstetric violence
- ◆ Analyze the stages of labor and pain management and relaxation techniques
- ◆ Develop skills in creating and monitoring personalized birth plans
- ◆ Examine the importance of interdisciplinary collaboration in childbirth care
- ◆ Promote emotional preparation and support for women and their families during the childbirth process
- ◆ Acquire skills to identify and manage high-risk situations in pregnancy and childbirth



## Specific Objectives

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- Analyze brain plasticity during Motherhood and the importance of research in animals and humans in this field
- Examine brain changes in rodents and humans during pregnancy and postpartum and the involvement of hormones in Motherhood.
- Examine the Neurobiology of Breastfeeding and how empathy and altruism influence baby care
- Navigate neuroscientific research to psychosocial interventions and emotional and cognitive support for future mothers and fathers
- Analyze the scientific evidence in Natural Childbirth and evidence-based care practices
- Examine the use of non-invasive technology and analgesia and anesthesia in Natural Childbirth
- Identify the benefits and risks of Natural Childbirth and adapting care according to the context, including hospital and home settings





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*Enhance your medical practice  
based on the most up-to-date  
Scientific Evidence surrounding  
Natural Childbirth”*

# 03

## Course Management

This Postgraduate Certificate in Scientific Evidence in Natural Childbirth is led by professionals with extensive experience in the field. This is why students can be assured of receiving up-to-date education with the guidance of experts who will provide all the techniques and methods of applying scientific evidence to natural childbirth. Students will have the opportunity to develop and analyze various research alongside highly experienced professionals in the field of scientific evidence, aimed at achieving better results, both in the emotional aspect of the mother and her child, as well as in postpartum care and recovery.





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*You will be able to investigate and analyze high-caliber studies focused on current evidence, accompanied by professionals with a wealth of experience”*

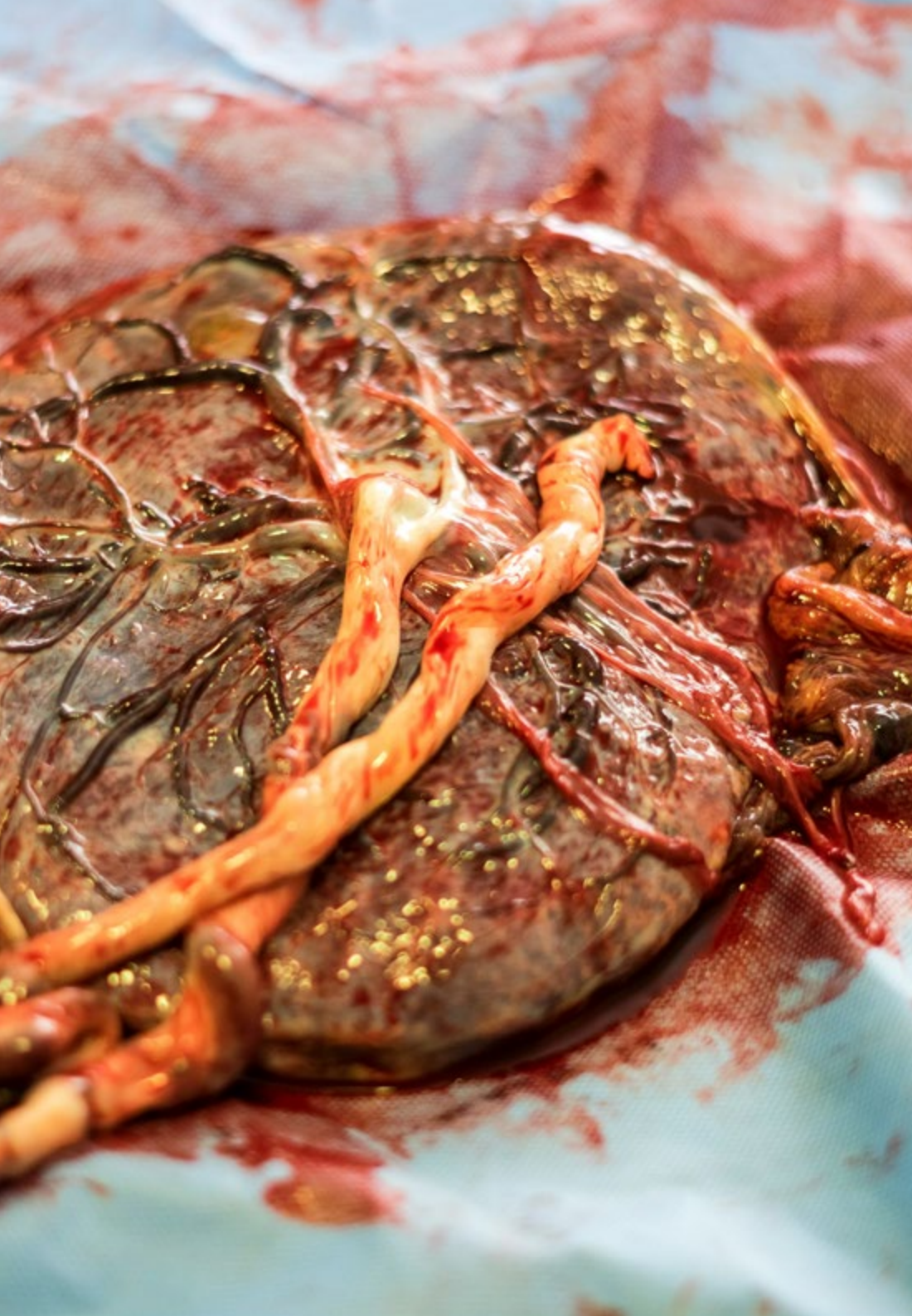
## Management



### Dr. Santos Leal, Emilio

- Medical specialist in University Hospital Fundación Alcorcón
- Medical specialist in Consorcio Hospital General Universitario de Valencia
- Medical specialist at Pius Hospital de Valls
- Medical specialist at Clínica Perpetuo Socorro
- Specialty in Gynecology and Obstetrics at San Carlos Clinical Hospital
- Degree in Medicine and Surgery from the University of Cantabria





## Professors

### Dr. Espinosa Barraión, José Ángel

- ◆ Director of the Affective Childbirth Unit at the Hospital San Francisco de Asís
- ◆ Head of the Obstetrics and General Gynecology Team at Hospital San Francisco de Asís
- ◆ Specialist in Gynecology and Obstetrics at Clínica de la Concepción
- ◆ Master's Degree in Minimally Invasive Surgery in Gynecology from the Universidad Cardenal Herrera
- ◆ Degree in Medicine and Surgery from the Universidad Autónoma de Madrid

### Ms. García García, María Dolores

- ◆ Midwife in Specialized Care at the Hospital General Universitario de Valencia
- ◆ Master's Degree in Business Management from the Universidad Católica San Antonio de Murcia
- ◆ Master's Degree in Bioethics from the Universidad Católica San Antonio de Murcia
- ◆ Expert in Breastfeeding Advice and Consultancy, Universidad Católica de Ávila
- ◆ Degree in Nursing, specializing in Midwifery

### Ms. Lanza del Rivero, Cristina

- ◆ Field Psychologist at Casa de la Salud
- ◆ Postgraduate in Theory and Practice of Psychodrama, Sociodrama and Sociometry at the Universidad de Salamanca
- ◆ Postgraduate in Theory and Practice of Group Analysis at the Universidad de Salamanca
- ◆ Master's Degree in Behavior Modification from the Universidad de Salamanca
- ◆ Degree in Psychology from the Universidad de Salamanca

# 04

## Structure and Content

The student will encounter a comprehensive program that covers various topics related to neuroscience, brain plasticity, and hormones, among others. They will delve into current evidence regarding labor monitoring, non-invasive technology, and analgesia/anesthesia. All of this in a 100% online program that also includes educational materials and videos to facilitate ongoing updates.





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*You will find a very comprehensive program that covers topics such as the study of brain plasticity and neuroscience”*

## Module 1. Scientific and Neuroscientific Evidence

- 1.1. Neuroscience of Pregnancy and Maternity
  - 1.1.1. Brain Plasticity During the Transition to Motherhood
  - 1.1.2. Comparison of Studies in Animals and Humans
  - 1.1.3. Evolution and Biological Mechanisms of Maternal Care
  - 1.1.4. Hormones and Their Role in Motherhood
- 1.2. Animal Models in Maternity Research
  - 1.2.1. Brain Changes in Animals During Pregnancy and Offspring Care
  - 1.2.2. Hormones and Regulation of Maternal Behavior in Animals
  - 1.2.3. Applications of Animal Findings to Human Research
- 1.3. Brain Changes in Human During Pregnancy and Postpartum
  - 1.3.1. Brain Reorganization During Pregnancy
  - 1.3.2. Limbic System and Mother-Child Connection
  - 1.3.3. Social Cognition, Empathy, and Maternal Adaptations
- 1.4. Clinical Implications and Practical Applications
  - 1.4.1. Impact of Breastfeeding and Care on Caregiver's Brain
  - 1.4.2. Neurobiology of Breastfeeding
  - 1.4.3. Clinical Approach to Behavioral Changes in Motherhood
- 1.5. Oxytocin and Its Role in Bonding
  - 1.5.1. Oxytocin in Humans
  - 1.5.2. Oxytocin in baby
  - 1.5.3. Oxytocin in Maternal Care
- 1.6. Scientific Evidence in Pregnancy Monitoring
  - 1.6.1. Nutrition in pregnancy
  - 1.6.2. Diabetes screening
  - 1.6.3. Weight Gain
- 1.7. Evidence-Based Delivery Care Practices
  - 1.7.1. Labor Monitoring
  - 1.7.2. Non-Invasive Technology
  - 1.7.3. Analgesia and Anesthesia





- 1.8. Evidence-Based Intervention I
  - 1.8.1. Big baby
  - 1.8.2. Prolonged gestation
  - 1.8.3. Rupture of membranes
- 1.9. Evidence-Based Intervention II
  - 1.9.1. Oxytocin IV
  - 1.9.2. Fetal distress
  - 1.9.3. Labor Induction
- 1.10. Evidence-Based Intervention III
  - 1.10.1. Cord cutting
  - 1.10.2. Delivery

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*You will delve into Scientific Evidence in Natural Childbirth with high-quality multimedia materials. Enroll now!”*

05

# Methodology

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.





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*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## At TECH we use the Case Method

What should a professional do in a given situation? 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. Specialists learn better, faster, and more sustainably over time.

*With TECH you will experience a way of learning 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, trying to recreate the real conditions in the physician's professional practice.



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*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:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate 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.



## 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 the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

*Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.*



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, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. 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 highly 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.



#### Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and 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 the videos as many times as you like.



#### 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.





#### Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### 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 on the usefulness of learning by observing experts. The system known as 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.



# 06 Certificate

The Postgraduate Certificate in Scientific Evidence in Natural Childbirth 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 program will allow you to obtain your **Postgraduate Certificate in Scientific Evidence in Natural Childbirth** 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 Scientific Evidence in Natural Childbirth**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



\*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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Scientific Evidence  
in Natural Childbirth

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