Postgraduate Diploma Physiology of Pregnancy and Childbirth for Nurses

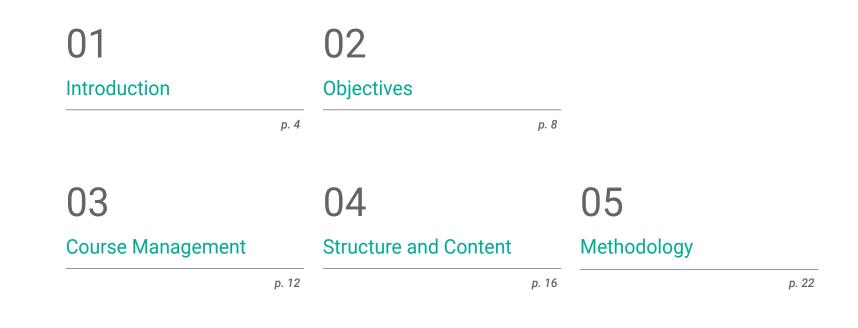




## **Postgraduate Diploma** Physiology of pregnancy and Childbirth for Nurses

Course Modality: Online Duration: 6 months. Certificate: TECH Technological University 19 ECTS Official N° of Hours: 475 h. Website: www.techtitute.com/nursing/postgraduate-diploma/postgraduate-diploma-physiology-pregnancy-childbirth-nurses

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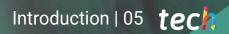
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Certificate

р. 30

## 01 Introduction

The Spanish Society of Gynecology and Obstetrics (SEGO) considers that the birth of a healthy child is not, although it may seem so, a casual event. It is the result of a great deal of care and attention given with generosity and professionalism by different professional categories. For this reason, protocols for assistance during dilatation and expulsion must prioritize the safety and health of both the mother and the newborn. The ultimate goal is to ensure, both the mother's and the newborn's well-being throughout the delivery process.



The Postgraduate Diploma in Physiology of Pregnancy and Childbirth for Nurses contains the most complete and up to date scientific program on the market"

## tech 06 | Introduction

The Nursing Staff works in the care and attention of the pregnant woman ensuring basic care such as hygiene, comfort, psychological support and nutritional care, basic principles to ensure effective care. Thanks to the evolution of low-intervention childbirth advocated by the Ministry of Health and Social Policy, the different health professionals who work with the pregnant woman must provide adequate and effective care, reducing unnecessary interventions to a minimum and ensuring the privacy of the pregnant woman, as well as favoring the newborn's care such as cleaning, placing identification bracelets, etc., keeping in close contact with the mother, favoring the maternal-filial bond.

The role of nursing in the evolution of the pregnant woman, the puerpera and her newborn is essential, provided by professionals dedicated directly to the care of the woman, as joint knowledge allows us to achieve care in favour of the recommendations on normal birth, as well as the latest standards developed in the Clinical Guide to Normal Birth published by the Ministry of Health and Social Policy this year.

This line of thought and action coincides with a strong change that has to take place in the relationship between health teams and the woman user, to move from a technical relationship to one in which the bioethical principle of autonomy and attention to the integrity of the person involved is prioritised. The aim is to comprehensively address the process that women face during childbirth and thus improve health outcomes for them and their babies.

The general purpose of this training proposal is to train nursing professionals to meet the health needs of people with scientific rigor and the highest professional level. This training was created in response to multiple needs in the hospital environment for all professionals, both for those recently incorporated and those who have been providing their professional services for some time and who require constant updating in this very specific area of practice. This **Postgraduate Diploma in Physiology of Pregnancy and Childbirth for Nurses** contains the most complete and up to date scientific program on the market. The most important features of the program include:

- Development of clinical cases presented by experts in the different areas of multidisciplinary knowledge. The graphic, schematic, and eminently practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional practice
- Advances in Physiology of Pregnancy and Childbirth for Nurses
- Algorithm-based interactive learning system for decision-making in the presented clinical situations
- With a special emphasis on evidence-based nursing and research methodologies in Physiology of Pregnancy and Childbirth for Nurses
- All of this will be complemented by theoretical lessons, questions to the Postgraduate Diploma, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

Increase your competencies in the Physiology of Pregnancy and Childbirth for Nurses through this program"



This Postgraduate Diploma may be the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge in the Physiology of Pregnancy and Childbirth, you will obtain a Postgraduate Diploma from TECH Technological University"

Its teaching staff includes health professionals belonging to the field of obstetrics and gynecology nursing, who contribute their work experience to this training, as well as recognized specialists belonging to leading scientific societies.

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 training program to train in real situations.

This program is designed around Problem Based Learning, whereby the student must try to solve the different professional practice situations that arise during the course. This will be done with the help of an innovative interactive video system developed by recognized experts in the field of obstetrics and gynecology nursing with extensive teaching experience. Increase your confidence in decision making by updating your knowledge through this Postgraduate Diploma in Physiology of Pregnancy and Childbirth for Nurses.

> Don't miss the opportunity to update your knowledge in Physiology of Pregnancy and Childbirth for Nurses to improve patient care.

# 02 **Objectives**

The main objective of the program is the development of theoretical and practical learning, so that the nurse can master in a practical and rigorous way the study of the Physiology of Pregnancy and Childbirth.

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This refresher program will generate a sense of confidence in the performance of nursing praxis, which will help you grow personally and professionally"

## tech 10 | Objectives



- Acquire knowledge in specific obstetric care
- Promote work strategies based on a comprehensive approach to the patient as a standard model for achieving excellent care
- To favour the acquisition of technical skills and abilities, through a powerful audiovisual system, and the possibility of development through specific training
- Encourage professional stimulus through continuing education and research





## Objectives | 11 tech



## Specific Objectives

- Involve the woman in decision-making throughout the process
- Facilitate companion access at all times
- Compliance with Decree 101/95, which determines the rights of parents and children in the healthcare environment during the birth process
- Favouring a climate of trust, security, and intimacy, respecting the privacy, dignity and confidentiality of women
- Promotion of Breastfeeding

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Make the most of the opportunity and take the step to get up to date on the latest developments in the Physiology of Pregnancy and Childbirth"

## 03 Course Management

This program includes in its teaching staff health professionals of recognized prestige, who belong to the field of obstetric-gynecological nursing and who bring.

Also participating in its design and preparation are renowned specialists who are members of prestigious national and international scientific societies.

*Learn from leading professionals the latest advances in the Physiology of Pregnancy and Childbirth*"

## tech 14 | Course Management

## Management



## Dr. Rodríguez Díaz, Luciano

- Matron. University Hospital of Ceuta
- Lecturer at the University Centre of Nursing of Ronda
- Lecturer in the Ceuta Midwifery Teaching Unit
- Member of the Obstetric and Gynecologic Emergency Group of the SEEUE.
- Responsible for Perinatal Health: Reproductive Sexual Health and Normal Childbirth of Ingesa
- Member of the Clinical Commission for Research and Continuing Education of the University Hospital of Ceuta
- Full member of the Institute of Ceuta Studies
- Member of the Editorial Board of the European Journal of Health Research
- Doctor from the University of Granada



## Dr. Vázquez Lara, Juana María

- Nurse of the 061 of Ceuta
- Ceuta Health Area Matron
- Head of Studies of the Ceuta Midwifery Teaching Unit
- Professor of the Ceuta Midwifery Teaching Unit
- Coordinator of the Obstetrics and Gynecology Emergency Group of the SEEUE.
- PhD from the University of Granada

## Course Management | 15 tech

## Professors

### Dr. Andrés Núñez, Carmen Patricia

• Specialist in Obstetrics and Gynecology at the University Hospital of Ceuta

### Dr. Carrasco Racero, María Mercedes

Nurse and Internship Coordinator at the University Center of Ronda

### Mrs. De Dios Pérez, María Isabel

Midwife at the Zaragoza University Hospital

### Dr. Díaz Lozano, Paula

• Midwife at the Ceuta University Hospital

### Dr. Gilart Cantizano, Patricia

• Specialized Care Midwife Campo de Gibraltar and Quirón Campo de Gibraltar

### Dr. Llinás Prieto, Lucía

Nurse in Specialized Care Cadiz

### Dr. Márquez Díaz, Antonio

Midwife at Hospital Costa del Sol de Marbella and Hospital Quirón Campo de Gibraltar

### Dr. Mérida Téllez, Juanma

• Midwife Costa del Sol de Marbella Hospital

## Mrs. Mérida Yáñez, Beatriz

• Dr. Primary Care Midwife Extremadura

## Dr. Muñoz Vela, Francisco Javier

• Midwife in Specialized Care at the Maternal-Children's Hospital of Malaga

### Dr. Palomo Gómez, Rocío

Ceuta Specialized Care Midwife

### Dr. Revidiego Pérez, María Dolores

• Specialized Care Midwife Campo de Gibraltar and Quirón Campo de Gibraltar

### Dr. Rivero Gutiérrez, Carmen

Ceuta Specialized Care Midwife

## Dr. Rodríguez Díaz, David

• Nurse at Nuestra Señora de Candelaria University Hospital

## Dr. Vázquez Lara, Francisco José

• Degree in Biological Sciences

## Dr. Vázquez Lara, María Dolores

Campo de Gibraltar Primary Care Nurse

## 04 Structure and Content

The structure of the contents has been designed by a team of professionals knowledgeable about the implications of training in daily nursing practice, aware of the relevance of the relevance of current training to be able to act before the pregnant patient and committed to quality teaching through new educational technologies.

This Postgraduate Diploma in Physiology of Pregnancy and Childbirth for Nurses contains the most complete and up to date scientific program on the market"

## tech 18 | Structure and Content

### Module 1. Pregnancy

- 1.1. Duration of Pregnancy. Nomenclature
- 1.2. Anatomo-physiological Modifications
  - 1.2.1. Cardiovascular and Cardiac Changes1.2.1.1. Cardiac Changes1.2.1.2. Hematological Changes1.2.1.3. Vascular Changes
  - 1.2.2. Respiratory Changes1.2.2.1. Anatomical Changes1.2.2.2. Functional Changes
  - 1.2.3. Renal and Urinary Changes1.2.3.1. Anatomical Modifications1.2.3.2. Functional Modifications
  - 1.2.4. Metabolic Changes 1.2.4.1. Weight Gain 1.2.4.2. Basal Metabolism. 1.2.4.3. Carbohydrate Metabolism 1.2.4.4. Lipid Metabolism 1.2.4.5. Protein Metabolism 1.2.4.6. Acid-- Base Balance 1.2.4.7. Water Metabolism 1.2.4.8. Minerals and Vitamins 1.2.5. Genital and Mammary Changes 1.2.5.1. External Genitalia 1.2.5.2. Internal Genitalia 1.2.5.3. Breast Changes 1.2.6. Endocrine Changes 1.2.6.1. Constitution of the Fetoplacental Unit 1.2.6.2. Pituitary
    - 1.2.6.3. Thyroid
    - 1.2.6.4. Parathyroid
    - 1.2.6.5. Pancreas
    - 1.2.6.6. Adrenal Gland



## Structure and Content | 19 tech

- 1.2.7. Skin and Eye Changes 1.2.7.1. Vascular Changes 1.2.7.2. Pigmentation Changes 1.2.7.3. Tegumentary System 1.2.7.4. Eye Changes 1.2.8. Gastrointestinal Changes 1.2.8.1. Mouth 1.2.8.2. Esophagus and Stomach 1.2.8.3. Intestine 1.2.8.4. Liver 1.2.8.5. Gallbladder 1.2.9. Musculoskeletal Changes 1.2.9.1. Change of the Center of Gravity 1.2.9.2. Pelvis 1.2.9.3. Musculoskeletal Alterations Diagnosis of Pregnancy 1.3.1. Diagnosis of Pregnancy 1.3.2. Biochemical Tests 1.3.2.1. Biological Tests 1.3.2.2. Immunological Tests 1.3.3. Ultrasound 1.3.4. Signs and Symptoms 1.3.4.1. Signs 1.3.4.2. Symptoms 1.4. Prenatal Care. Pregnancy Control Program 1.4.1. Prenatal Care 1.4.2. Pregnancy Control Program 1.4.2.1. First Pregnancy Control Visit (10 weeks) 1.4.2.2. Successive Prenatal Visits 1.4.3. Perinatal Risk Assessment
  - 1.4.4. Prenatal Control Protocols

1.3.

- 1.4.4.1. Definition
- 1.4.4.2. Objectives
- 1.4.4.3. Personnel Involved
- 1.4.4.4. Process

Prenatal Diagnosis 1.5. 1.5.1. Non-Invasive Techniques 1.5.2. Invasive Techniques 1.5.3. Counseling of the Couple in Prenatal Diagnosis 1.5.3.1. Definition 1.5.3.2. General Objectives 1.5.3.3. Specific Objectives 1.5.3.4. Targeted Population 1.5.3.5. Description of the Process 1.6. Health Education to the Pregnant Woman 1.6.1. Health Education to the Pregnant Woman 1.6.2. Healthy Habits 1.6.2.1. Food 1.6.2.2. Consumption of Harmful Substances 1.6.2.3. In Work 1.6.2.4. Sports 1.6.2.5. Travel 1.6.2.6. Hygiene, Clothing, and Footwear 1.6.2.7. Violence in Pregnancy 1.6.3. Sexuality 1.6.4. Common Discomforts during Pregnancy 1.6.4.1. Cardiovascular 1.6.4.2. Dermatological 1.6.4.3. Digestive 1.6.4.4. Locomotor 1.6.4.5. Respiratory 1.6.4.6. Genitourinary 1.6.5. Alarm Signs 1.6.6. Promotion of Breastfeeding 1.6.7. Birth Plan

## tech 20 | Structure and Content

- 1.7. Nutrition of the Pregnant Woman
  - 1.7.1. Evaluation of the Diet
    - 1.7.1.1. Energy Requirements
    - 1.7.1.2. Food Selection
    - 1.7.1.3. Supplements during Pregnancy
    - 1.7.1.4. Weight gain
  - 1.7.2. Special Situations1.7.2.1. Pharmacological Treatment1.7.2.2. Vegetarians
  - 1.7.3. Dietary Counseling during Pregnancy
- 1.8. Pharmaceuticals in Pregnancy
  - 1.8.1. Pharmaceuticals in Pregnancy
  - 1.8.2. Pharmacology in Pregnancy
  - 1.8.3. Mechanisms of Action in the Mother and Fetus 1.8.3.1. Mother
    - 1.8.3.2. Placenta
    - 1.8.3.3. Fetus
  - 1.8.4. Use and Management of Pharmaceuticals in Pregnancy
  - 1.8.5. Indications, Pharmaceutical Interaction, and Dosage
    - 1.8.5.1. Anti-inflammatory, Analgesic, and Antipyretic Medications
    - 1.8.5.2. Gastroesophageal Reflux Prophylactics and Antiulcer Medications
    - 1.8.5.3. Anticoagulantes
    - 1.8.5.4. Laxatives
    - 1.8.5.5. E. Vitamins
    - 1.8.5.6. Antianemic Medications
    - 1.8.5.7. Antiarrhythmics
    - 1.8.5.8. Antihypertensives
    - 1.8.5.9. Hormones
    - 1.8.5.10. Oral Contraceptives
    - 1.8.5.11. Oral Antidiabetics

- 1.8.5.12. Corticosteroids
- 1.8.5.13. Dermatological Treatments
- 1.8.5.14. N. Antiviral Treatments
- 1.8.5.15. Trichomonicides
- 1.8.5.16. Antibiotics
- 1.8.5.17. Antiasthmatics
- 1.8.5.18. Antitussives
- 1.8.5.19. Rhinologicals
- 1.8.5.20. Antihistamines
- 1.8.5.21. Antiepileptics
- 1.8.5.22. Antidepressants
- 1.8.5.23. Antipsychotics
- 1.8.6. Annex. FDA Classification of the Different Groups of Medications
- 1.9. Psychosocial Aspects of Pregnancy
  - 1.9.1. Psychosocial Aspects of Pregnancy
  - 1.9.2. Cultural and Religious influences
  - 1.9.3. The Meaning and Impact of Pregnancy on the Couple and on the Family and Social Environment
  - 1.9.4. Psychological Changes in Pregnancy 1.9.4.1. First Trimester
    - 1.9.4.2. Second Trimester
    - 1.9.4.3. Third Trimester
  - 1.9.5. Bonding

### Module 2. Labor

- 2.1. Physiology of Uterine Contraction. Uterine Activity
  - 2.1.1. Basic PhyAsiological Aspects of Uterine Contraction
  - 2.1.2. Basic Biochemistry of Uterine Contraction
  - 2.1.3. Uterine Activity. Brief Historical Review
  - 2.1.4. Components of Uterine Activity
  - 2.1.5. Abdominal Muscles
  - 2.1.6. Causes of Onset of Labor

## Structure and Content | 21 tech

#### 2.2. Factors Involved in Labor

- 2.2.1. The Fetus. Fetal Head
- 2.2.2. Fetal Statics
- 2.2.3. Leopold's Maneuvers
- 2.2.4. Obstetric Nomenclature Determined by Fetal Statics
- 2.2.5. Diagnosis by Vaginal Examination
- 2.2.6. Birth Canal
- 2.2.7. Pelvic Axis
- 2.2.8. Hodge Planes
- 2.2.9. Soft Birth Canal
- 2.2.10. Motor of Labor
- 2.3. Assessment of Fetal Well-being
  - 2.3.1. Evaluation of Fetal Activity
  - 2.3.2. Non-stress Test (NST)
  - 2.3.3. Stress Test or Contraction Tolerance Test
  - 2.3.4. Biophysical Profile
  - 2.3.5. Amnioscopy
  - 2.3.6. Ultrasound. Doppler Study
  - 2.3.7. Bioelectronic Monitoring in Labor
  - 2.3.8. Fetal Heart Rate Monitoring
  - 2.3.9. Fetal Heart Rate Parameters
  - 2.3.10. Biochemical Monitoring
- 2.4. Onset of Labor and Periods of Labor
  - 2.4.1. Onset of Labor. Prodromes of Labor
  - 2.4.2. Dilatation Period
  - 2.4.3. Expulsion Period
  - 2.4.4. Delivery Period

- 2.5. Delivery Mechanism in Vertex Presentation
  - 2.5.1. Accommodation and Wedging in the Upper Strait
  - 2.5.2. Descent and Intrapelvic Rotation
  - 2.5.3. Flexion
  - 2.5.4. Detachment
  - 2.5.5. E. External Rotation and Delivery of the Shoulders
- 2.6. Pharmacology in Childbirth
  - 2.6.1. Pharmacokinetic Principles
  - 2.6.2. Mechanisms of Action between Mother and Fetus
  - 2.6.3. Use and Management of Pharmaceuticals in Childbirth

## 05 **Methodology**

This training program offers a different way of learning. Our methodology uses a cyclical learning approach: *Re-learning*.

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.

Discover Re-learning, 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"

## tech 24 | 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:

- 1. 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.



## tech 26 | Methodology

## **Re-learning Methodology**

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

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 | 27 tech

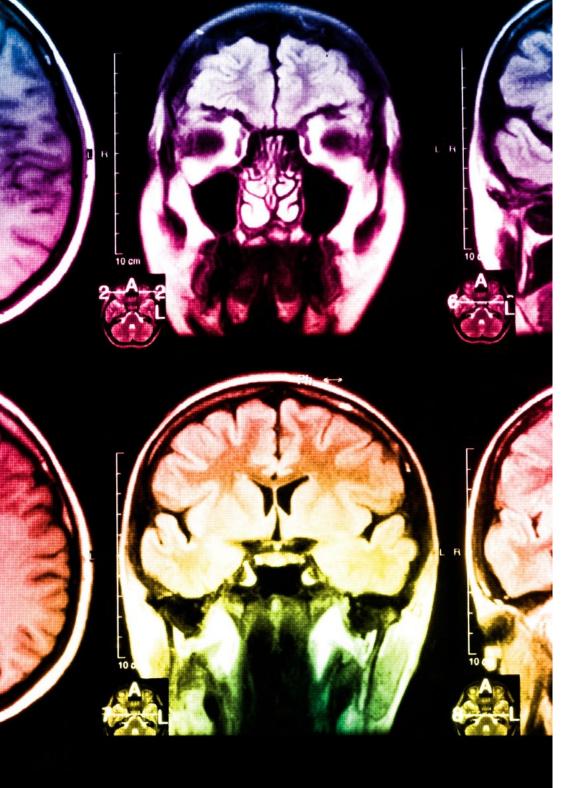
At the forefront of world teaching, the Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

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 high socioeconomic profile and an average age of 43.5 years old.

Re-learning 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.



## tech 28 | Methodology

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.

20%

15%

3%

15%

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 multimedia content presentation training Exclusive system 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.

## Methodology | 29 tech



### **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.

20%

7%

3%

17%



### **Testing & Retesting**

The student's knowledge is periodically assessed and re-assessed throughout the program, through evaluative and self-evaluative activities and exercises: in this way, students can check how they are doing in terms of 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.

## 06 **Certificate**

The Postgraduate Diploma in Physiology of Pregnancy and Childbirth for Nurses guarantees you, in addition to the most rigorous and updated training, access to a Postgraduate Diploma issued by TECH Technological University.



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Successfully complete this training and receive your university degree without travel or laborious paperwork"

## tech 32 | Certificate

This **Postgraduate Diploma in Physiology of Pregnancy and Childbirth for Nurses** contains the most complete and up to date scientific program on the market. After the student has passed the evaluations, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** by tracked delivery\*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: Postgraduate Diploma en Physiology of Pregnancy and Childbirth for Nurses

ECTS: **19** 

Official N° of Hours: 475 h.



# technological university Postgraduate Diploma Physiology of Pregnancy and Childbirth for Nurses Course Modality: Online Duration: 6 months. Certificate: TECH Technological University **19 ECTS** Official Nº of Hours: 475 h.

**Postgraduate Diploma** Physiology of Pregnancy and Childbirth for Nurses

