



# Postgraduate Diploma

# Physiology of pregnancy and Childbirth for Nurses

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 19 ECTS

» Schedule: at your own pace

» Exams: online

We bsite: www.techtitute.com/us/nursing/postgraduate-diploma/postgraduate-diploma-physiology-pregnancy-childbirth-nurses

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# 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 certificate from TECH Global 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.







# tech 10 | Objectives



# **General 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.



# **Specific Objectives by Modules**

- 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.







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"





# 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

### **Professors**

#### Andrés Núñez, Carmen Patricia

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

# Carrasco Racero, María Mercedes

• Nurse and Internship Coordinator at the University Center of Ronda.

# De Dios Pérez, María Isabel

• Midwife at the Zaragoza University Hospital

#### Díaz Lozano, Paula

• Midwife at the Ceuta University Hospital

#### Gilart Cantizano, Patricia

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

# Llinás Prieto, Lucía

• Nurse in Specialized Care Cadiz

# Márquez Díaz, Antonio

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

### Mérida Téllez, Juanma

• Midwife Costa del Sol de Marbella Hospital

# Mérida Yáñez, Beatriz

• Dr. Primary Care Midwife Extremadura

### Muñoz Vela, Francisco Javier

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

#### Palomo Gómez, Rocío

• Ceuta Specialized Care Midwife

# Revidiego Pérez, María Dolores

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

#### Rivero Gutiérrez, Carmen

• Ceuta Specialized Care Midwife

# Rodríguez Díaz, David

• Nurse at Nuestra Señora de Candelaria University Hospital

# Vázquez Lara, Francisco José

• Degree in Biological Sciences

# Vázquez Lara, María Dolores

• Campo de Gibraltar Primary Care Nurse





# 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 Changes.
    - 1.2.1.1. Cardiac Changes.
    - 1.2.1.2. Hematological Changes.
    - 1.2.1.3. Vascular Changes.
  - 1.2.2. Respiratory Changes.
    - 1.2.2.1. Anatomical Changes.
    - 1.2.2.2. Functional Changes.
  - 1.2.3. Renal and Urinary Changes.
    - 1.2.3.1. Anatomical Modifications.
    - 1.2.3.2. 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.



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- 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.
- 1.3. 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.
    - 1.4.4.1. Definition.
    - 1.4.4.2. Objectives.
    - 1.4.4.3. Personnel Involved.
    - 1.4.4.4. Process.

- 1.5. Prenatal Diagnosis.
  - 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 Situations.
    - 1.7.2.1. Pharmacological Treatment.
    - 1.7.2.2. 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.

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- 2.1.5. Abdominal Muscles.
- 2.1.6. Causes of Onset of Labor.
- 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.



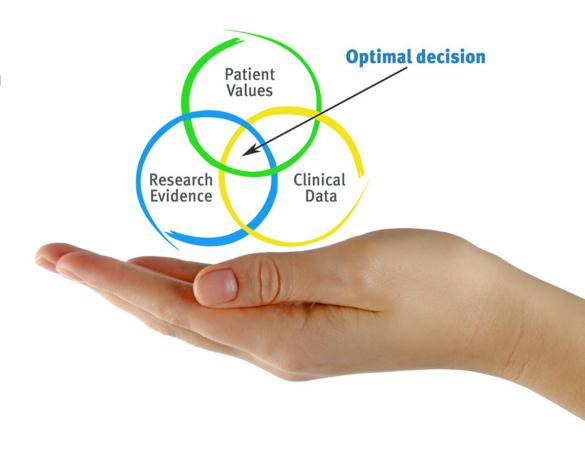


# tech 22 | Methodology

# At TECH Nursing School we use the Case Method

In a given clinical situation, what would you do? Throughout the program, you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant 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 university program.



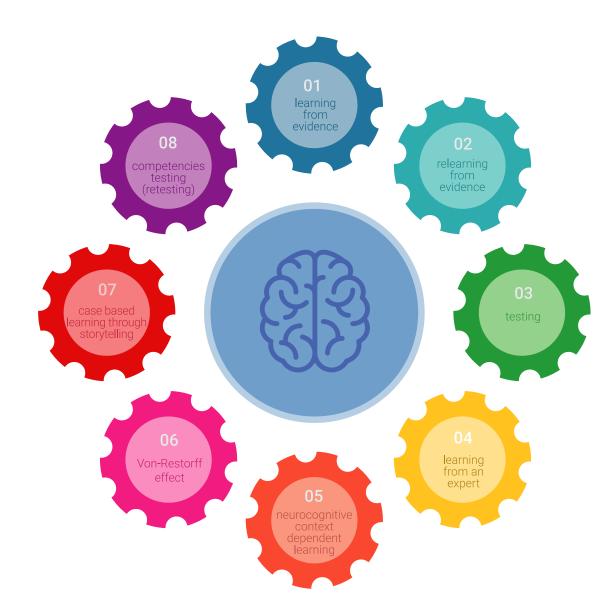


# **Re-Learning Methodology**

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

Our 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, which represent a real revolution with respect to simply studying and analyzing 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 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 Spanish-speaking online university (Columbia University).

With this methodology we have trained more than 175,000 nurses with unprecedented success, in all specialties regardless of from the workload. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

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 (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

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

In this program you will have access to the best educational material, prepared with you 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.

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.



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

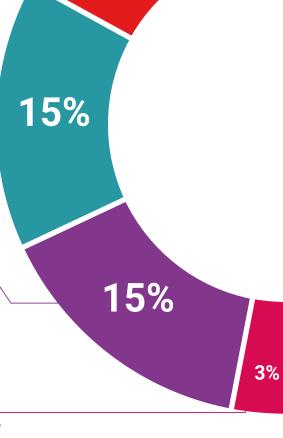
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current nursing procedures and techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **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.

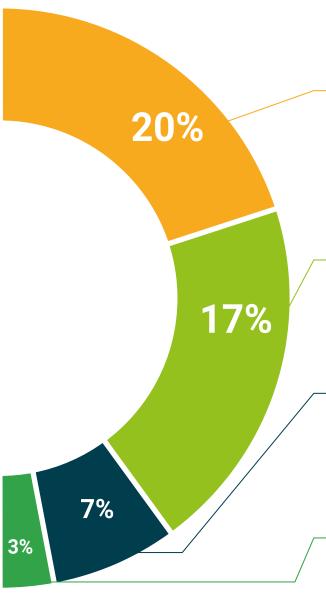
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





#### **Additional Reading**

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



# **Expert-led case studies and case analysis**

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through the development of attention and the resolution of different situations: a clear and direct way to achieve the highest degree of understanding.



# **Testing & Re-testing**

We periodically evaluate and re-evaluate your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.



#### Classes

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





#### **Quick Action Guides**

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.







# tech 32 | Certificate

This private qualification will allow you to obtain a **Postgraduate Diploma in Physiology of Pregnancy and Childbirth for Nurses** 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 Diploma in Physiology of Pregnancy and Childbirth for Nurses

Modality: online

Duration: 6 months

Accreditation: 19 ECTS



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

# Postgraduate Diploma in Physiology of Pregnancy and Childbirth for Nurses

This is a private qualification of 570 hours of duration equivalent to 19 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.

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Physiology of Pregnancy and Childbirth for Nurses

