Postgraduate Diploma Maternal-Fetal Medicine



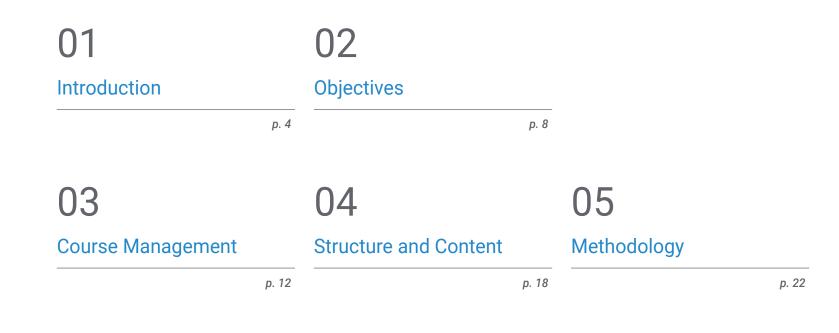


## Postgraduate Diploma Maternal-Fetal Medicine

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/in/medicine/postgraduate-diploma/postgraduate-diploma-maternal-fetal-medicine

## Index



06 Certificate

## 01 Introduction

Maternal-Fetal Medicine is a relatively new area worldwide, especially in developed countries, where the vast majority of women have access to specialized clinical care. Thanks to this, it is possible to control possible complications that may occur during pregnancy, not only with treatment, but also with prevention and early diagnosis. This is precisely the focus of this program, designed by TECH with the aim of providing the medical professional with a dynamic update based on the latest developments in Gynecology and Obstetrics. Everything you need in 450 hours of the best theoretical, practical and additional content 100% online.

A program that brings together the latest developments in medicine related to the management of maternal-fetal pathology in only 450 hours of the best theoretical, practical and additional content"

## tech 06 | Introduction

The considerable increase in gestational problems in the last decade is a matter of concern for professionals in the field of Gynecology and Obstetrics. However, the studies carried out in this area have made it possible to concretely determine many of the causes that lead to miscarriages and malformations, helping to prevent them from specialized clinical care. For this reason, the importance that Maternal-Fetal Medicine has taken is notorious, manifesting itself in the exhaustive control during pregnancy through increasingly specific diagnostic tests, even focused on the physiological or congenital characteristics of the mother.

For this reason, TECH has considered it necessary to develop a program that gathers the most advanced information in this regard, allowing the professional to keep abreast of developments in maternal-fetal pathology through a program exclusively focused on it. It is a program consisting of 450 hours of the best theoretical, practical and additional content developed by a team versed in Gynecology and Obstetrics with decades of experience in the field. Thus, the graduates will be able to delve into the most innovative therapeutic diagnostic guidelines to treat, among others, placental pathology and fetal growth restriction. In addition, they will work intensively on perfecting their clinical skills through the simulated resolution of dozens of real cases related, for example, to anomalies of the umbilical cord, congenital infections, endocrinological diseases, etc.

Thus, in just 6 months of 100% online educational experience, the professionals will have managed to update their knowledge in a guaranteed way, contributing to the advancement of medicine through a medical practice of the highest level focused on the latest advances. In addition, all the content can be downloaded to any electronic device with an internet connection, so that you can consult it whenever you need it, even once all the requirements of the Postgraduate Diploma have been fulfilled.

This **Postgraduate Diploma in Maternal-Fetal Medicine** contains the most complete and up-to-date scientific program on the market. The most important features include:

- \* The development of case studies presented by experts in Gynecology and Obstetrics
- 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 the self-assessment process can be carried out 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



You will work comprehensively on the diagnosis and prevention of preterm labor, improving your intervention skills in even the most complex cases"

Introduction | 07 tech

A unique opportunity to delve into the latest in placental pathology and fetal growth restriction through detailed videos, research articles, readings and more!"

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.

Its 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 an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professionals must try to solve the different professional practice situations that are presented throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts. A 100% online program with which you will be able to update your gynecological and obstetric practice from wherever and whenever you wish, without fixed schedules or in-person classes.

You will have a section dedicated exclusively to gestational loss from the point of view of prenatal diagnosis in the current clinical field.

# 02 **Objectives**

TECH and its team of experts in Maternal-Fetal Medicine have developed this program with the aim that graduates will find in it all the information that will allow them to catch up on the latest developments in the management of pathologies and conditions that may arise in this field. Thus, through the best theoretical, practical and additional material, they will be able to increase and update their knowledge in diagnosis and therapeutics, strengthening their praxis for an even safer control of pregnancies.

If your goals include getting up to date on the management of endocrinological diseases such as diabetes mellitus or thyroid pathology during pregnancy, this program is perfect for you"

## tech 10 | Objectives



## **General Objectives**

- Provide the graduates with all the content they need to keep up to date with the latest developments in Maternal-Fetal Medicine from the clinical, diagnostic and therapeutic point of view
- Address the different cases that can be found in the consultation from an up-to-date perspective, following the clinical protocols of the current Maternal-Fetal Medicine



A syllabus designed for you to achieve even your most ambitious goals from a dynamic, innovative and multidisciplinary perspective"



## Objectives | 11 tech





## **Specific Objectives**

### Module 1. Maternal-Fetal Pathology

- Delve into the scientific novelties related to the different types of maternal pathology with fetal repercussions that can be prevented, diagnosed and/or treated prenatally
- Delve into the latest development related to the treatments applicable to fetuses of different ages

### Module 2. Diagnosis and Prevention of the Premature Birth

- Have a thorough and up-to-date understanding of the epidemiological impact and incidence of preterm birth today
- Understand the new scientific developments related to the triggers of preterm labor
- Know how to identify and treat the threat of preterm labor based on the latest clinical innovations
- Update the keys to the correct ultrasound evaluation of cervical length
- \* Gain up-to-date knowledge on the various preventive measures for preterm labor

## Module 3. Placental pathology and fetal growth restriction

- Obtain up-to-date knowledge on the mechanism of placentation and how it influences the development of pathologies such as preeclampsia and fetal growth restriction
- Get up to date on the rules to perform a proper doppler study in order to be able to make a correct maternal and fetal hemodynamic evaluation
- Know what early screening for preeclampsia and its prophylactic treatment
- Know in an exhaustive and up-to-date way the definition of preeclampsia, severity criteria and treatment
- identify fetal growth restriction, stages and management

## 03 Course Management

One of TECH's strong points is, without a doubt, its teaching teams. It designs each of them always thinking about how they will benefit the graduates. Therefore, the faculty of this Postgraduate Diploma is composed of a group of professionals of the highest level specialized in Gynecology and Obstetrics, which combine educational practice with clinical practice. Thanks to this, they are up to date with the latest developments in the profession, while at the same time they know the most effective pedagogical strategies to transmit their knowledge and guarantee a dynamic and effective update for all students. /oluson

Course Management | 13 tech

The teaching team will accompany you during the six months of educational experience, providing you with all the resources you need to expand each section of the syllabus in a personalized way"

## tech 14 | Course Management

## Management



### Dr. Gallardo Arozena, Margarita

- FEA in Obstetrics and Gynecology at HU Nuestra Señora of Candelaria
- + Founder and Medical Director of Natum Center Ultrasound and Fetal Medicine
- Doctor in Health Sciences, University of La Laguna
- · Master's Degree in Refresher for Gynecologists and Obstetricians from the University of Barcelona
- Master's Degree in Healthcare Management in Gynecology and Obstetrics from the Francisco de Vitoria University
- Diploma in Fetal Medicine and Surgery from the Fetal Medicine Foundation (King's College Hospital in London)
- Invasive Techniques and Intrauterine Fetal Therapy at San Cecilio Granada University Hospital
- Postgraduate Certificate Training in obstetric-gynecological ultrasound by the Spanish Society of Gynecology and Obstetrics (SEGO)
- Researcher and author of scientific articles published in high-impact journals
- Member of the Prenatal Diagnosis Unit at the Human Reproduction Assistance Center of Canary (FIVAP)

### Professors

#### Dr. Caamiña Álvarez, Sara

- Doctor Specialist in Obstetrics and Gynecology at HU Nuestra Señora of Candelaria
- Author of several scientific articles related to Obstetrics and Gynecology
- Speaker at national and international medicine congresses
- Researcher in different projects related to the maternal-fetal area, pregnancy and childbirth
- Master's Degree Refresher for Gynecologists and Obstetricians from the University
  of Barcelona

### Dr. De Ganzo Suárez, Tania del Carmen

- Doctor Specialist in Obstetrics and Gynecology at HU Nuestra Señora of Candelaria
- Specialised doctor of the Fetal Medicine Unit, Tenerife Hospiten Group
- Diploma in Fetal Medicine and Surgery from the Fetal Medicine Foundation (King's College Hospital in London). Invasive Techniques and Intrauterine Fetal Therapy at San Cecilio Granada
- University Hospital
- Diploma of Qualification in Obstetric-Gynecological Ultrasound by the Spanish Society of Gynecology and Obstetrics (SEGO)
- Researcher and author of scientific articles published in high-impact journals

## Course Management | 15 tech



### Dr. Company Calabuig, Ana María

- \* FEA in Obstetrics and Gynecology at La Fe Polytechnic University Hospital
- Diploma in Fetal Medicine and Surgery from the Fetal Medicine Foundation (King's College Hospital, London)
- Master's Degree in Refresher Communication Management for Gynecologists and Obstetricians from the University of Barcelona
- Master's s Degree in Nutrition and Health from the International University of Valencia
- Author of scientific publications in high impact journals and participation in book chapters

### Dr. Gibbone, Elena

- Specialist at Ecography and Fetal Medicine Unit of Zuatzu clinic
- Researcher in several lines related to preeclampsia, twin pregnancy and its complications and maternal pathology in pregnancy
- Degree in Medicine and Surgery, University of the Basque Country
- Degree in Medicine and Surgery
- Specialist in Gynecology and Obstetrics
- Sub-Specialization in Fetal Medicine and Surgery at King's College University Hospital in London
- \* Sub-Specialization in Fetal Medicine and Surgery at San Cecilio Clinical Hospital, Granada
- Author of over 10 scientific publications in international high-impact journals

## tech 16 | Course Management

### Dr. Chulilla Pérez, Carolina

- Doctor Specialist in Obstetrics and Gynecology at Nuestra Señora de Candelaria University Hospital
- Professor at the Midwifery Teaching Unit of the Nuestra Señora de Candelaria University Hospital
- Researcher and author of pubications related to maternal-fetal medicine
- Participation as author in papers presented at congresses and courses from the specialty
- Training in obstetric-gynecological ultrasound by the Spanish Society of Gynecology and Obstetrics (SEGO)

### Dr. De Paco Matallana, Catalina

- Specialist in Maternal-Fetal Medicine Unit, Hospital Clínico Universitario Virgen de Zaragoza
- Regular reviewer of articles in international and national journals on Gynecology and Obstetrics
- Associate Professor of Obstetrics and Gynaecology at Murcia University
- PhD in Medicine and Surgery
- Degree in Medicine and Surgery from the University of Murcia
- Specialist MIR in Gynecology and Obstetrics
- Sub-specialization in Fetal Medicine and Surgery at King's College University Hospital in London

### Dr. Molina García, Francisca Sonia

- Doctor Specialist in Obstetrics and Gynecology at Nuestra Señora of Granada University Hospital
- Head of the Ultrasound Unit of the Gutenberg Center in Granada
- Director of several lines of research projects funded on preeclampsia, preterm delivery, fetal and maternal complications during pregnancy and fetal surgery
- Regular reviewer of articles in five international and national journals on Gynecology
  and Obstetrics

- Contributing Editor in Fetal Diagnosis and Therapy
- European PhD in Medicine and Surgery from the University of Granada
- Sub-specialization in Fetal Medicine and Surgery at King's College University Hospital in London

### Dr García Rodríguez, Raquel

- Doctor Specialist in Obstetrics and Gynecology at Mother and Child University Hospital of Canary
- Expert level in Obstetric-Gynecologic Ultrasound by SESEGO
- Author of scientific publications in high impact journals and participation in several book chapters
- Reviewer of articles in international journals on Gynecology and Obstetrics
- Speaker at national and international congresses and courses related to Prenatal Diagnosis
- Accredited by the Fetal Medicine Foundation to perform first trimester screening, second trimester screening, echocardiography and fetal Doppler

### Dr. Plasencia Acevedo, Walter

- Doctor Specialist in Obstetrics and Gynecology at University Hospital of Canary
- Specialised doctor of the Fetal Medicine Unit of Canary Hospiten Group
- \* Doctor in Medicine and Surgery from the University of La Laguna
- Sub-Specialization in Fetal Medicine and Surgery at King's College University Hospital from London
- Supervisor of more than 3,000 ultrasound studies annually
- Author of over 50 scientific publications in international high-impact journals
- Director of several national and international research projects on fetal anomalies, placental abnormalities, preeclampsia, preterm delivery and fetal and maternal complications during gestation
- Regular reviewer of articles in multiple international and national journals on his specialty



## Course Management | 17 tech

A unique, key, and decisive educational experience to boost your professional development"

## 04 Structure and Content

The syllabus for this Postgraduate Diploma includes 450 hours of the best theoretical, practical and additional content, elaborated by the teaching team of this program. Thus, the graduates who access the program will find the latest information on the subject, which will serve to get up to date with aspects related to specialized clinical guidelines, specific treatments or recommendations for each case. All this in a 100% online way, allowing them to combine it with their activity in the practice.

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A program that will give you the keys to master Preeclampsia from the innovative approach of the leading experts in Gynecology and Obstetrics"

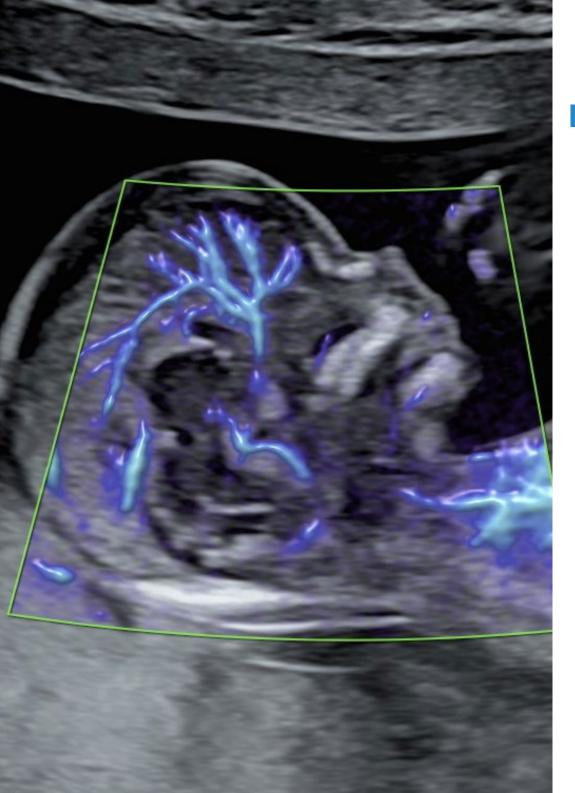
## tech 20 | Structure and Content

### Module 1. Maternal-Fetal Pathology

- 1.1. Gestational Loss from the Point of View of Prenatal Diagnosis
  - 1.1.1. Recurrent Miscarriages
  - 1.1.2. Early Miscarriage
  - 1.1.3. Late Miscarriage
  - 1.1.4. Ectopic Pregnancy
  - 1.1.5. Trophoblastic Disease
- 1.2. Abnormalities of Amniotic Fluid
  - 1.2.1. Polyhydramnios and Oligohydramnios
  - 1.2.2. Diagnostic Methods
  - 1.2.3. Study Protocol
  - 1.2.4. Clinical Implications
- 1.3. Placental Abnormalities
  - 1.3.1. Placentomegaly
  - 1.3.2. Placental Lagunae Hematomas. Tumours
  - 1.3.3. Placenta Accrete
- 1.4. Umbilical Cord Anomalies
  - 1.4.1. Anomalous Insertion
  - 1.4.2. The Single Umbilical Artery
  - 1.4.3. Cord Cysts
  - 1.4.4. True Knot
- 1.5. Congenital Infections
  - 1.5.1. TORCH: Toxoplasmosis, Rubella, CMV , and Herpes Simplex
  - 1.5.2. Others: Lupus, Varicella and ZIKA
  - 1.5.3. Parvovirus B19
- 1.6. Rh Isoimmunization
- 1.7. Alloimmune Fetal Thrombocytopenia
- 1.8. Maternal Endocrinology Disease
  - 1.8.1. Diabetes Mellitus
  - 1.8.2. Thyroid Disease
- 1.9. Maternal Rheumatological Disease
- 1.10. Maternal Cardiopathy

### Module 2. Diagnosis and Prevention of the Premature Labor

- 2.1. Epidemiology and Impact Preterm Labor
- 2.2. Types of Prematurity
  - 2.2.1. Spontaneous Pre-Term Birth
  - 2.2.2. Premature Rupture of Membranes
  - 2.2.3. Latrogenic Prematurity
- 2.3. Evaluation of Cervical Length
  - 2.3.1. Indications
  - 2.3.2. Abdomen Route vs. Transvaginal Route
  - 2.3.3. Technique
- 2.4. Early Screening
- 2.5. Medical Treatment for the Prevention of Preterm Birth: Progesterone
- 2.6. Mechanical Treatment for the Prevention of Preterm Birth: Pessary
- 2.7. Surgical treatment for the Prevention of Preterm Birth: Cerclage
- 2.8. Threat of Preterm Birth
  - 2.8.1. Etiology
  - 2.8.2. Diagnosis
  - 2.8.3. Treatment
- 2.9. Corticoids Therapy to Fetal Lung Maturation
  - 2.9.1. Indications
  - 2.9.2. Guidelines
  - 2.9.3. Booster
  - 2.9.4. Controversies
- 2.10. Neuroprophylaxis



## Structure and Content | 21 tech

### Module 3. Placental Pathology and Fetal Growth Restriction

- 3.1. Pathophysiology of Placentation. Angiogenic and Anti-Angiogenic Factors
- 3.2. Basis for the Doppler Study
  - 3.2.1. Umbilical Artery
  - 3.2.2. Middle Brain Artery
  - 3.2.3. Uterine Arteries
  - 3.2.4. Aortic Isthmus
  - 3.2.5. Venous Ductus
  - 3.2.6. Umbilical Vein
- 3.3. Early Screening and Prevention of Preeclampsia
- 3.4. Diagnosis and Management of Preeclampsia
  - 3.4.1. Definition
  - 3.4.2. Determination of the Degree of Severity
  - 3.4.3. Treatment
- 3.5. Eclampsia
- 3.6. HELLP Syndrome
- 3.7. Fetal Growth Restriction
  - 3.7.1. Pathophysiological Bases
  - 3.7.2. Classification
  - 3.7.3. Follow-up and Handing
- 3.8. Early Intrauterine Growth Restriction
- 3.9. Late Intrauterine Growth Restriction
- 3.10. Application of the sFIt-1/PIGF Ratio in Clinical Practice

Do not miss this opportunity and enroll now in a program in which you will find the keys that will help you to save lives based on the latest developments in Obstetric Medicine"

## 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.



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"

## tech 24 | Methodology

## 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:

 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.
- 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

## **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.



## Methodology | 27 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, 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.



## 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 highly 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.



#### 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.

## 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**

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.



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 Diploma in Maternal-Fetal Medicine guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.



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Successfully complete this program and receive your Postgraduate Diploma without having to travel or fill out laborious paperwork"

## tech 32 | Certificate

This **Postgraduate Diploma in Maternal-Fetal Medicine** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** via 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 in Maternal-Fetal Medicine** Official N° of Hours: **450 h.** 



technological university Postgraduate Diploma Maternal-Fetal Medicine » Modality: online » Duration: 6 months » Certificate: TECH Technological University » Dedication: 16h/week » Schedule: at your own pace » Exams: online

## Postgraduate Diploma Maternal-Fetal Medicine

