



## Postgraduate Certificate

Endometriosis and Fertility

» 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/endometriosis-fertility

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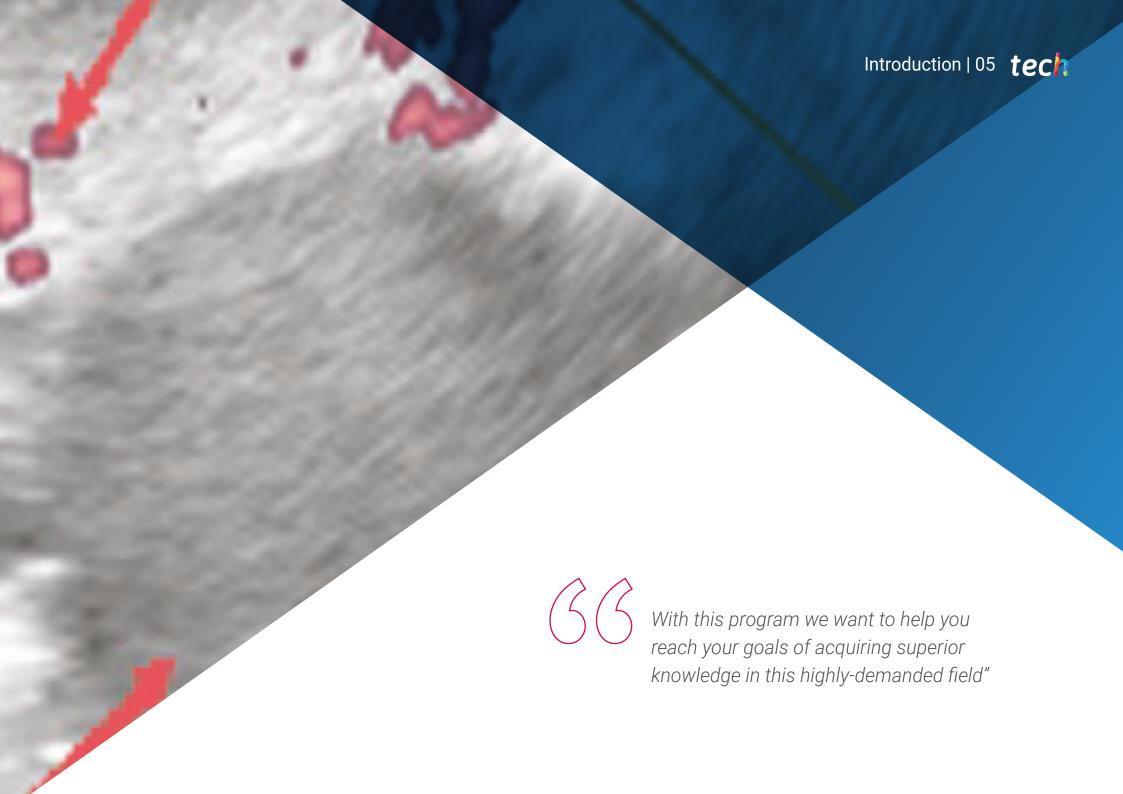
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# 01 Introduction

One of the most common symptoms and the one with the greatest psychological impact is sterility. This program provides an in-depth look at the diagnosis, treatment and follow-up of patients with endometriosis and infertility.

You will have access to the most advanced didactic resources and the most innovative and up-to-date knowledge in Endometriosis and Fertility. A unique program that stands out for the quality of its contents and its excellent teaching staff, which is composed of prestigious professionals.

endometrioma



### tech 06 | Introduction

Although it is still unknown how endometriosis affects reproductive capacity, there are certain characteristics that cause certain patients to have difficulty in reproduction. Therefore, this program will delve into the pathogenic features of endometriosis that affect ovarian and endometrial function. Ovarian reserve is fundamental for the prognosis of reproductive treatments, so the correct evaluation of this area is crucial in these patients who may have a diminished ovarian reserve.

From the perspective of prevention, the indication for fertility preservation in these women has been questioned. However, it is logical to think that a disease that can affect reproductive capacity is going to be oriented towards oocyte cryopreservation in a precautionary way.

Correctly diagnosing patients with endometriosis and infertility is not without complexity. In this program, the diagnostic tests used will be studied in depth. Likewise, the student will learn the different diagnostic algorithms used in patients with infertility and endometriosis to aid in decision making in daily clinical practice. Artificial insemination treatment with the different protocols will also be studied in depth. Similarly, and more widely discussed, is the use of GnRH agonists in in vitro fertilization versus the use of GnRH antagonists, therefore, sufficient knowledge is going to be acquired to know when to perform one protocol or the other. In addition, as an endometriosis specialist, you will know about the effect of the disease in terms of oocyte/embryo quality and uterine implantation. Finally, the consequences of pregnancy in endometriosis and endometriosis in pregnancy will be discussed.

This Postgraduate Certificate is designed to help professionals to offer better treatment to their patients affected by endometriosis. Effective education and training in Endometriosis and Fertility is provided through practical and theoretical teaching by highly qualified professors.

This **Postgraduate Certificate in Endometriosis and Fertility** 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 Endometriosis
- 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
- New developments in Endometriosis Techniques
- Practical exercises where the self-assessment process can be carried out to improve learning
- Special emphasis on innovative methodologies in Endometriosis techniques
- 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



A Postgraduate Certificate created to take the professional through the essential knowledge in Endometriosis, which they will be able to apply in their daily practice"



Expand your knowledge through this Postgraduate Certificate and specialize in Endometriosis in order to achieve excellence in this field"

This 100% online Postgraduate Certificate course will allow you to balance your studies with your professional work while increasing your knowledge in this field.

The program includes in its teaching staff professionals belonging to the field of medicine, who contribute to this program the experience of their work, 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 training programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the physician must try to solve the different professional practice situations that arise during the academic year. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts in Endometriosis.







### tech 10 | Objectives



### **General objectives**

- Develop your educational and professional expertise in all the core areas of Endometriosis, giving you the appropriate knowledge, understanding and professional skills to improve the management of the patient with this chronic disease
- Develop leadership skills in Endometriosis, so that you will be able to form a multidisciplinary team focused on this pathology
- Acquire an understanding of the processes involved in the etiopathogenesis and pathophysiology of endometriosis, as well as their epidemiological aspects, which will provide adequate knowledge to provide a correct clinical history of the disease
- Achieve sufficient skills to make a diagnostic approach to the patient through the clinical symptoms they present. Broaden knowledge about less frequent symptomatology
- Explore, in depth, the different diagnostic approaches to Endometriosis from a critical perspective of routine clinical practice. Analyze combined diagnostic criteria
- Gain knowledge of diagnostic techniques in research ranging from immunology to genetics and epigenetics. Develop the competencies to know how to interpret results and in which situations to apply them
- Achieve competent skills for the correct classification of Endometriosis. Know the types of Endometriosis and their severities according to different classifications
- Develop the ability to have an integrative vision of adenomyosis. Have the ability to diagnose, follow up and treat patients affected by this disease. Know, in depth, the current fields of research

- Gain in-depth knowledge of Endometriosis from the treatment point of view.
   Deepen knowledge of new medical therapies. Gain knowledge of new therapeutic lines of research
- Acquire knowledge of the most appropriate surgical techniques depending on the patient's situation and the type of Endometriosis. Increase knowledge about complications and their treatment
- Deepen knowledge about the medical and preventive aspects of the effects of Endometriosis from the field of reproductive medicine. Know the perspectives of embryology and the in vitro fertilization laboratory
- Know, in depth, the associations with different pathological situations. Expand knowledge of the management of Endometriosis associated with autoimmune diseases. Learn more about cancer risk and the different diagnostic and preventive approaches

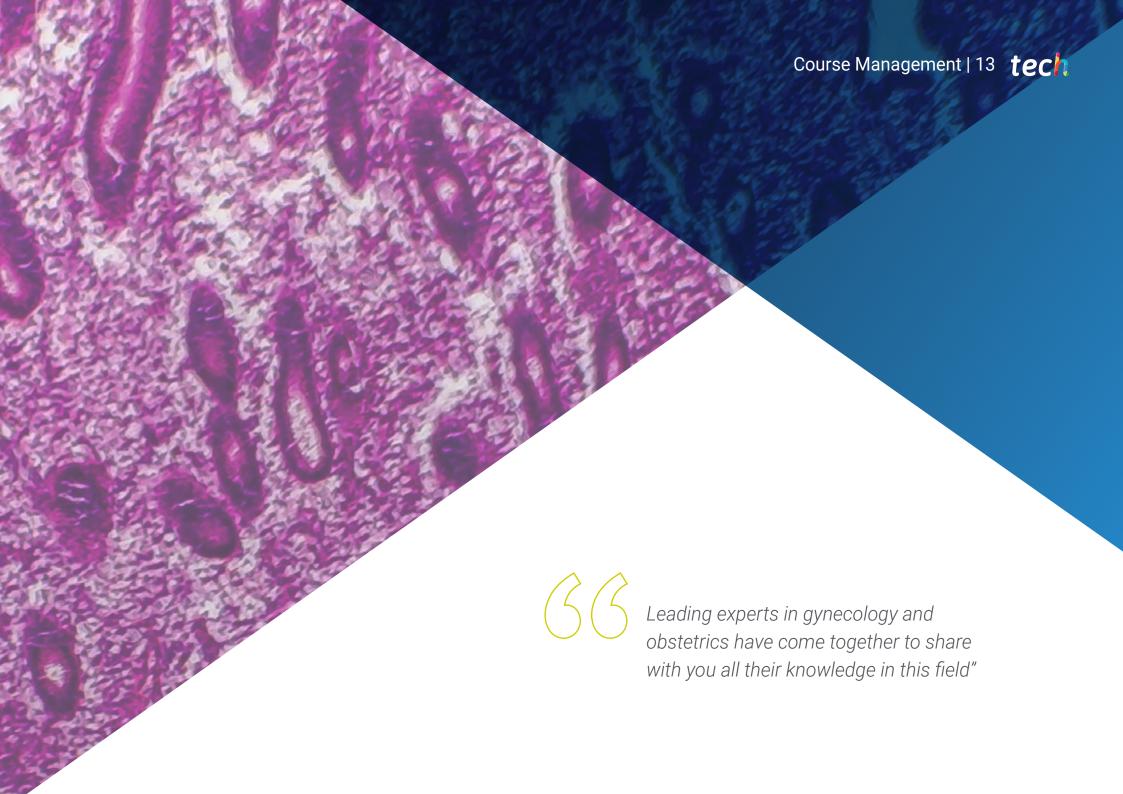


### **Specific objectives**

- Know, in depth, thepathophysiological bases that explain the sterility in a high percentage of patients affected by endometriosis
- Know the ways in which the ovarian reserve is affected by endometriosis, know the evaluation of the ovarian reserve in depth. Know the association between decreased ovarian reserve and endometriosis
- Deepen knowledge of the diagnosis of infertility in the patient affected with endometriosis. Know the most common pathologies involved in the reproductive capacity. Know which diagnostic tests are most commonly used in each diagnosis
- Develop the algorithms used in Reproductive Medicine to know the strategies to follow depending on the patient's age, symptomatology and ovarian reserve. Know when to indicate surgery as a method to improve reproductive capacity
- Acquire knowledge about oocyte cryopreservation for the preservation of future fertility. Know the indication for this strategy in patients with endometriosis, and the time at which this indication is made
- Know, in depth, the indication for artificial insemination in patients with infertility and endometriosis. Know which protocols are used to obtain an optimal result. Know the pregnancy rates in patients with endometriosis
- Know the indications for in vitro fertilization. Know, in depth, the protocols used in controlled ovarian stimulation. Know the usefulness of preparation protocols prior to stimulation
- Acquire the skills necessary to advise on fresh embryo transfer versus elective freezing strategy. Know the risks and benefits in terms of pregnancy rate







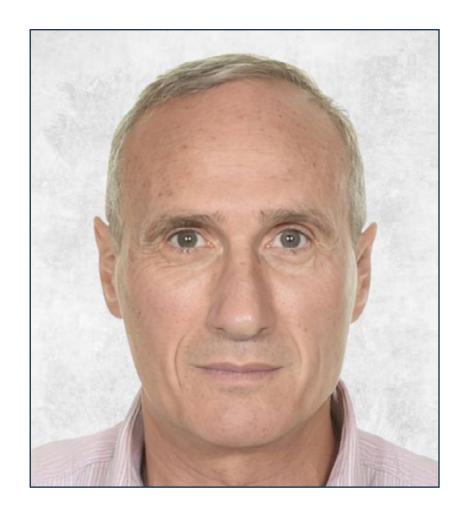
#### **International Guest Director**

Dr. Stephen Kennedy has a long career in the field of Reproductive Medicine. In this field, he directs the Oxford Institute of Maternal and Perinatal Health. He has also served as Director of the Nuffield Department of Women's and Reproductive Health. His research focuses on all aspects of women's health, including maternal and fetal health, the study of cancer, and reproductive and genetic medicine. In particular, he has been internationally recognized as a leader in the study and treatment of Endometriosis, a gynecological disorder that is estimated to affect nearly 200 million women worldwide.

Throughout his extensive experience he has participated in the design and validation of the Oxford Endometriosis Health Profile tool. This disease-specific assessment was the first to be based on Patient-Reported Outcomes. It therefore uses self-identified data to measure the wide range of consequences that the pathology can produce in women's lives, from physical pain to emotional distress. This tool is used in numerous clinical trials to evaluate the efficacy of medical and surgical treatments.

In addition, he co-leads the INTERGROWTH-21st project, a large-scale multidisciplinary initiative involving health institutions from more than 10 geographically diverse countries. Its goal is to assess fetal and newborn growth under optimal and suboptimal conditions, such as exposure to malaria, HIV and malnutrition.

Dr. Stephen Kennedy has published an extensive list of scientific papers focusing on Reproductive Medicine. In addition, he has served as an Advisor to the World Foundation for Endometriosis Research and has acted as a consultant to several pharmaceutical companies.



### Dr. Kennedy, Stephen

- Director of the Institute of Maternal and Perinatal Health, Oxford, United Kingdom
- Director of the Nuffield Department of Women's and Reproductive Health
- Professor of Reproductive Medicine, Oxford University
- Director of the INTERGROWTH-21st Project
- Research Fellow in Reproductive Medicine
- Degree in Experimental Psychology from Keble College, Oxford



### tech 14 | Course Management

#### Management



#### Dra. Moliner Renau, Belén

- Director of the Endometriosis Unit, Bernabeu Institute
- Head of the Reproductive Medicine Ultrasound Department at the Bernabeu Institute
- Coordinator of the "Image and Fertility" Working Group of the Spanish Fertility Society
- Specialist in Obstetrics and Gynecology via MIR, Clinical University Hospital of Valencia
- PhD in Medicine and Surgery "Cum Laude", University of Valencia
- Master's Degree in Human Reproduction, Rey Juan Carlos University
- Master's Degree in Research Methodology, Autonomous University of Barcelona
- Advanced studies for the use of STATA in biomedical research, Autonomous University of Barcelona
- Expert in Medical Genetics, University of Valencia, Spain
- Master's Degree in Autoimmune Disease
- University Certificate in Introduction to Regenerative Medicine: Biology and Applications of Human Stem Cells, University of Valencia

#### **Professors**

#### Dra. Martín-Ondarza González, Carmen

- · Head of the Obstetrics and Gynecology Department, Móstoles Hospital
- Head of the Gynecological Surgery Section, Bernabeu Institute

#### Dr. Llacer Aparicio, Joaquín

• Co-Medical Director of the Reproductive Medicine Department at Bernabeu Institute

#### Dr. Guerrero Villena, Jaime

- Embryologist specialized in oocyte and embryo cryopreservation
- In vitro Fertilization Unit supervisor, Bernabeu Institute, Alicante

#### Dr. Lizán Tudela, César

- Specialist in Gynecology and Obstetrics, University Clinical Hospital in Valencia, Spain
- Associate Professor, University of Valencia
- Co-director of the Professional Master's Degree in Assisted Reproduction, UJI

#### Dr. Abad De Velasco, Lorenzo

• Obstetrics and Gynecology Specialist in Reproductive Medicine Unit, General Univeristy Hospital, Valencia, Spain

#### Dra. Luque Martínez, Lydia

- Director of Bernabeu Institute, Albacete
- · Specialist in Obstetrics and Gynecology, specializing in Reproductive Medicine

#### Dr. Ten Morro, Jorge

- Director of the Reproductive Biology Operational Unit at Bernabeu Institute
- Associate Professor, Department of Biotechnology, University of Alicante, Spain

#### Dra. Rodriguez Arnedo, Adoración

• Coordinator of the Embryology Laboratory at Bernabeu Institute, Alicante

#### Dr. Sellers López, Francisco

• Director of the Department of Obstetrics and directly responsible for the Ultrasound and Prenatal Diagnosis Section, Bernabeu Institute



The best professionals are at the best university. Don't miss the opportunity to learn with them"

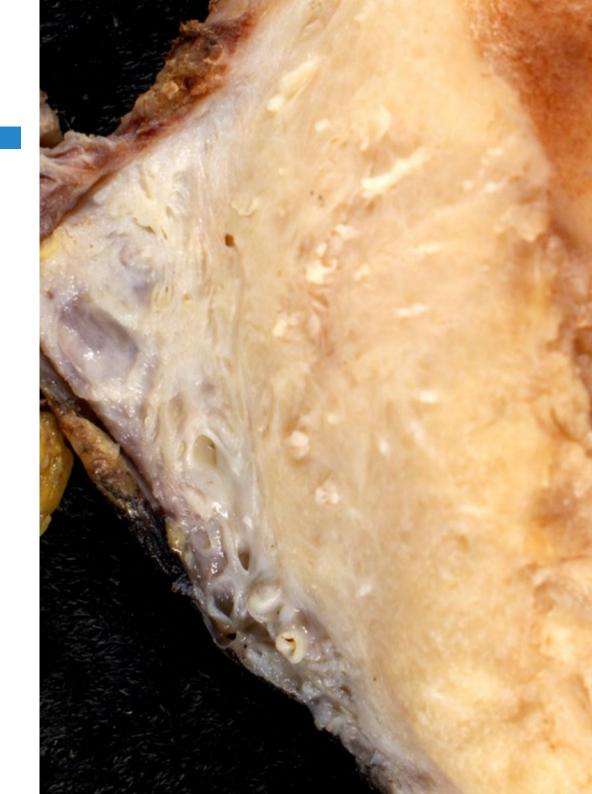




### tech 18 | Structure and Content

#### Module 1. Endometriosis and Fertility

- 1.1. Hormonal and Immunological Causes of Infertility Associated with Endometriosis
- 1.2. Ovarian Reserve and Endometriosis
- 1.3. Fertility Preservation. Oocyte Vitrification
- 1.4. Diagnosis in the Infertile Patient with Endometriosis
  - 1.4.1. Uterine Pathology
  - 1.4.2. Ovarian Pathology
  - 1.4.3. Tubal Pathology
  - 1.4.4. Associated Factors
- 1.5. Algorithm for the Management of Endometriosis Associated with Infertility
- 1.6. Artificial Insemination in the Endometriosis Patient
- 1.7. In Vitro Fertilization in the Patient with Endometriosis
  - 1.7.1. Dienogest Prior to In Vitro Fertilization
  - 1.7.2. Long Protocol vs. Antagonist
- 1.8. Elective Embryo Freezing vs. Fresh Embryo Transfer
- 1.9. Oocyte and Embryo Quality
- 1.10. Pregnancy and Endometriosis
  - 1.10.1. Endometriosis Improvement
  - 1.10.2. Complications







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







### 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.



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.
- **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.



### 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.

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.









### tech 30 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Endometriosis and Fertility** 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 Endometriosis and Fertility

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



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

#### Postgraduate Certificate in Endometriosis and Fertility

This is a program of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



<sup>\*</sup>Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

tech global university



### Postgraduate Certificate Endometriosis and Fertility

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