

Postgraduate Certificate Study of the Male Factor

Endorsed by:





Postgraduate Certificate Study of the Male Factor

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

Website: www.techtute.com/us/medicine/postgraduate-certificate/study-male-factor

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01

Introduction

When addressing reproductive problems, male factor analysis is a protocol that has included numerous advances and developments in recent times. Professionals must remain at the forefront of these advances in order to offer their patients the best possible chance of success. This program offers students all the necessary knowledge to apply it safely and successfully, with the most comprehensive and efficient means of study in the online teaching market.





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All the diagnostic and intervention techniques in the treatment of reproductive problems from the analysis of the male factor, in a highly qualified and highly interesting course for professionals"

Reproductive Medicine is a specialty which has been advancing at an incredible rate in the last few years, fundamentally thanks to the improvement in laboratory techniques and the development of new genetic diagnosis techniques. In many cases, they can shed light on the failure of previous reproductive treatments by offering new alternatives.

Doctors in this field should stay up-to-date on the area of diagnosis and treatment, but should also deepen their knowledge of the work that takes place in the laboratory. This helps to be able to transmit the necessary information to patients, especially if treatments aren't successful. Likewise, within the laboratory, there must be an understanding of the work of the practice, the types of stimulation and the different factors that can affect the outcome of the treatments. Team work in the Human Reproduction Unit is what allows the treatments to be more personalized.

The objective of this Postgraduate Certificate is to give a global vision to all professionals that allows them to keep up to date in the work of the entire Assisted Reproduction Unit.

This program will address important and innovative aspects such as new developments in the study of the female factor, especially at the level of endometrial factor, in-depth study of the male factor, applications of genetic techniques in improving results, improvements in the laboratory through *time-lapse* systems, culture media and quality control systems. All this has been designed by a team of leading specialists in Reproductive Medicine in each one of the aspects dealt with throughout the course.

This **Postgraduate Certificate in Study of the Male Factor** contains the most complete and up-to-date scientific program on the market. Its most outstanding features are:

- ◆ The latest technology in online teaching software
- ◆ Intensely visual teaching system, supported by graphic and schematic contents, easy to assimilate and understand
- ◆ Practical cases presented by practicing experts
- ◆ State-of-the-art interactive video systems.
- ◆ Teaching supported by telepractice
- ◆ Continuous updating and recycling systems
- ◆ Autonomous learning: full compatibility with other occupations
- ◆ Practical exercises for self-assessment and learning verification
- ◆ Support groups and educational synergies: questions to the expert, debate and knowledge forums.
- ◆ Communication with the teacher and individual reflection work
- ◆ Content that is accessible from any fixed or portable device with an Internet connection
- ◆ Supplementary documentation databases are permanently available, even after the program



You will learn through teaching techniques proven for their effectiveness, this comprehensive Postgraduate Certificate will take you through different teaching approaches to allow you to learn in a dynamic and effective way"

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Our innovative telepractice concept will give you the opportunity to learn through an immersive experience, which will provide you with a faster integration and a much more realistic view of the contents: learning from an expert”

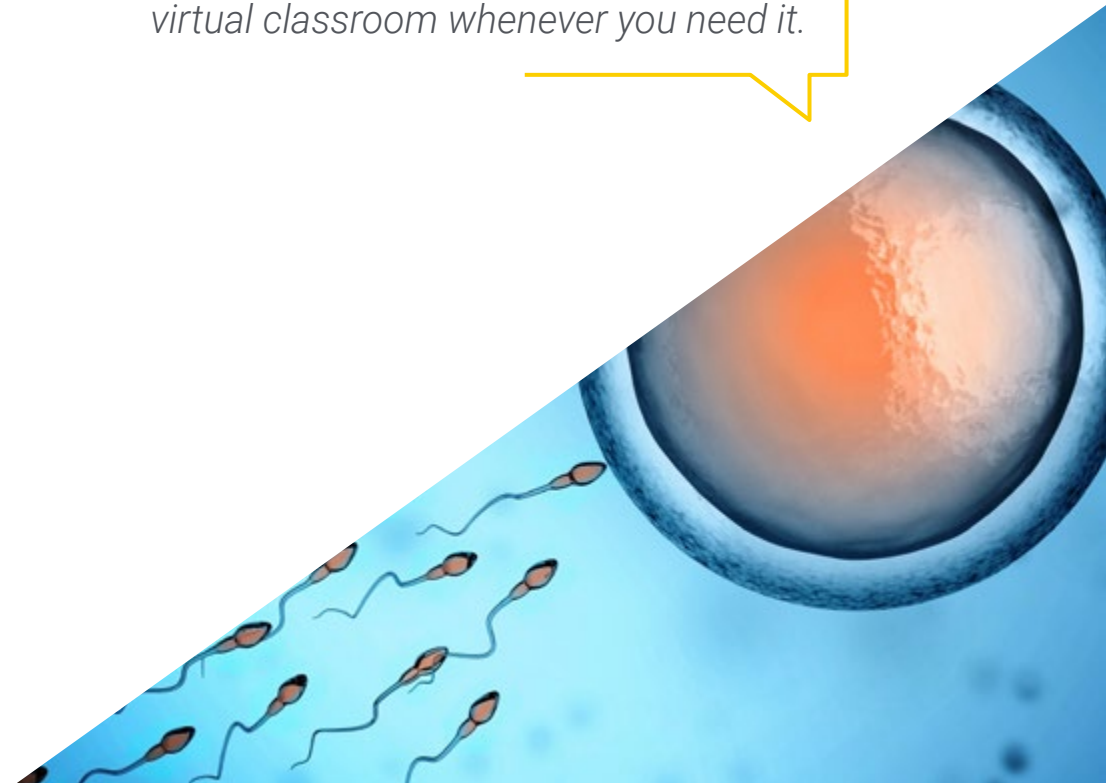
The program’s teaching staff includes professionals from sector who contribute their work experience to this program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will provide the professionals 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 academic course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned experts.

Update your information in the medical sector and identify the main pathologies affecting men.

Study this program in the Study of the Male Factor from the comfort of your own home and download all the content of the virtual classroom whenever you need it.



02

Objectives

This main objective of this Postgraduate Diploma is to bring the students' knowledge up to date in all areas surrounding decision-making during the evaluation of the patient and their partner. This includes the diagnosis, prognosis and the subsequent treatments. A structured approach in all areas related to assisted reproduction, that will allow you to make a leap in your professional career with the expertise of the best online university in the world.



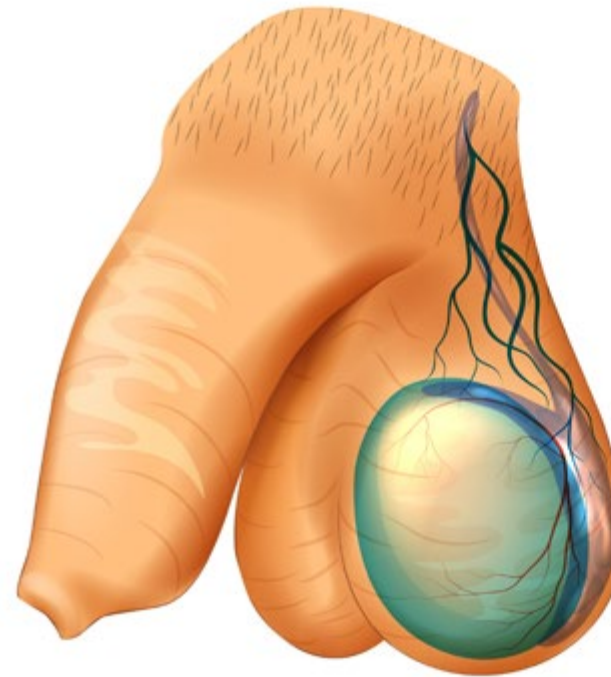
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The objective of this program is to enable specialists to acquire the theoretical and practical skills necessary to apply the most interesting and advanced advances in the field of the Male Factor and its reproductive problems"



General Objectives

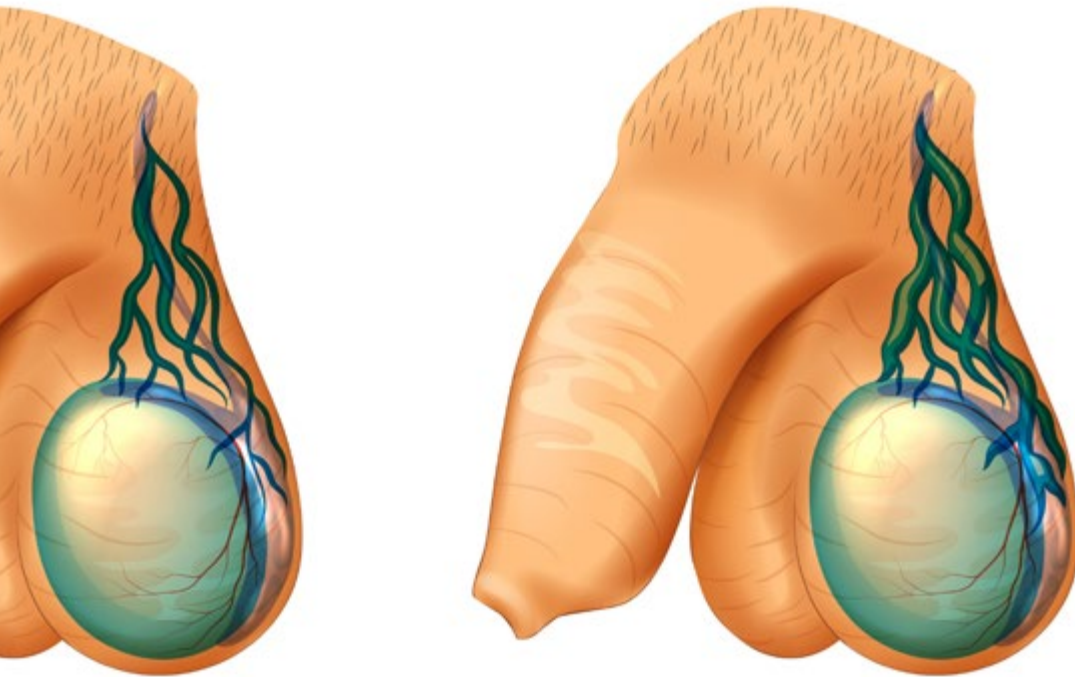
- ◆ Acquire up-to-date concepts in anatomy, physiology, embryology and genetics, which will help to understand reproductive diagnostics and treatments.
- ◆ Understand in detail the aspects related to the initial assessment of a sterile couple. Study criteria and referral to Reproduction Units. Basic clinical examination, request and interpretation of the results of complementary tests
- ◆ Perform an appropriate assessment and clinical orientation of the couple. Indication of request for specific tests based on the above findings
- ◆ Have an exhaustive knowledge of the different types of medical treatment, indications and their choice according to the profile of the patient and their partner
- ◆ Know the indications and surgical techniques that could improve the reproductive results of our patients. Uterine morphology disorders (congenital or acquired) Endometriosis. Tubal Surgery
- ◆ Know the techniques used in the Andrology, IVF and cryobiology laboratories. Diagnostic techniques and sperm selection techniques. Oocyte evaluation. Embryonic Development
- ◆ Describe the types of genetic embryonic studies that are available, know their possible indications and be able to interpret the results
- ◆ Know the current legal situation of Assisted Reproduction treatments in the country
- ◆ Know the main scientific and patient societies in the field of Reproductive Medicine



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Specific Objectives

- ◆ Deepening the basic study at the male level
- ◆ Interpret normal values of a semen analysis
- ◆ Know the factors that may affect male reproductive capacity in terms of sperm quality, motility, morphology, aneuploidy or sperm DNA fragmentation
- ◆ Delve into the current specific studies for male factor, as well as advanced techniques
- ◆ Develop the indications for testicular biopsy and its procedure

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A comprehensive, in-depth study of the latest advances and ways of approaching assisted reproduction, in all its care fields”

03

Course Management

For our Postgraduate Certificate to be of the highest quality, we are proud to work with a teaching staff of the highest level, chosen for their proven track record in the field of education. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.





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An impressive teaching staff, made up of specialized professionals from different areas of expertise, will be your professors throughout the program: A unique opportunity not to be missed"

International Guest Director

Dr. Michael Grynberg is a prominent Obstetrician-Gynecologist whose research in Reproductive Endocrinology, Infertility and Andrology has achieved international impact. Likewise, this specialist has been a pioneer in fertility preservation in oncology patients. His avant-garde studies in this field have allowed people facing aggressive medical treatments to maintain options to preserve their reproductive capacity.

Thanks to his extensive knowledge in this scientific area, Dr. Grynberg participated in the foundation of the French Oncofertility Society and later became its elected president. At the same time, he directs the Department of Reproductive Medicine and Fertility Preservation at the Antoine-Béclère University Hospital Center. At the same time, he is a member of the Reproductive Endocrinology Group of the European Society of Human Reproduction and Embryology (ESHRE). In addition, he runs the National College of Obstetricians-Gynecologists (CNGOF) in his country.

He has also published 3 books and accumulated more than 350 scientific publications in journals and conference presentations. In them he has addressed topics ranging from in vitro oocyte maturation in case of ovarian resistance, to investigating the role of ZO-1 in the differentiation of human placental trophoblast cells. Another of his contributions has been the description of the Follicular Outflow Rate (FORT) as a means to evaluate the sensitivity of follicles to FSH hormone. He is also the author of a disruptive proposal based on intraovarian administration of AMH to prevent follicular loss and fertility impairment after cyclophosphamide administration.

In terms of competency development, Dr. Grynberg has sustained intensive academic updating. He completed his specialization at the Lariboisière Faculty in Paris and, in turn, has a training stay at the Center for Reproductive Medicine of the New York Presbyterian Hospital.



Dr. Michael Grynberg

- ♦ Director of Reproductive Medicine at the Antoine-Béclère Hospital Center, Paris, France
- ♦ Head of the Department of Reproductive Medicine-Fertility Preservation at the Jean-Verdier de Bondy Hospital
- ♦ Director of the French National College of Obstetricians and Gynecologists
- ♦ President of the French Society of Oncofertility
- ♦ Doctor of Medicine at the Lariboisière Faculty in Paris
- ♦ Fellowship at the Center for Reproductive Medicine, New York Presbyterian Hospital
- ♦ Member of: European Society of Human Reproduction and Embryology (ESHRE)

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Thanks to TECH, you will be able to learn with the best professionals in the world”

Management



Dr. Iniesta Pérez, Silvia

- ♦ Coordinator of the Reproduction Unit at La Paz University Hospital.
- ♦ Degree in Medicine and Surgery from the University of Alcalá, Madrid
- ♦ Specialist in Obstetrics and Gynecology, via MIR. Santa Cristina University Hospital, Madrid
- ♦ Doctorate Courses at the Autonomous University of Madrid
- ♦ Research Sufficiency in the Department of Obstetrics and Gynecology, Universidad Autónoma de Madrid, Qualification: Outstanding.
- ♦ Doctoral Thesis, Obstetrics and Gynecology Department, Autonomous University of Madrid Outstanding- Cum Laude
- ♦ Levels I, II, III and IV obstetric-gynecological ultrasound (SESEGO accreditation)
- ♦ Professional Master's Degree in Human Reproduction IVI
- ♦ Professional Master's Degree in Genomics and Medical Genetics 2nd edition, Granada University
- ♦ Online Professional Master's Degree in Minimally Invasive Surgery in Gynecology. CEU Cardenal Herrera University
- ♦ Masterclass Patient-Centered Clinical Management. Deusto Business School, Madrid
- ♦ Area Specialist Doctor at the Santa Cristina University Hospital, Madrid
- ♦ Interim Labor Doctor, Hospital Infanta Sofía, Madrid
- ♦ Physician on Secondment at the Hospital Universitario La Paz



Dr. Franco Iriarte, Yosu

- ♦ Laboratory and scientific director, International Ruber Hospital
- ♦ Head of the Assisted Reproduction Laboratory of the Virgen del Pilar Health Centre in San Sebastián
- ♦ Head of the Assisted Reproduction Laboratory of Policlínica Guipúzcoa, including the laboratory of Clínica del Pilar
- ♦ Collaboration with the Assisted Reproduction Center, Navarro Medical Center
- ♦ Senior Embryologist at Cornell University Hospitals of New York and RMA of New Jersey
- ♦ Creation of the company Donostia Basque Institute of Fertility located in Onkologikoa. Managing Director.
- ♦ Managing Director of the Donostia Basque Institute of Fertility.
- ♦ Graduate in Biology, University of Navarra (Fundamental and Health Specialty)
- ♦ CAP Qualification (Certificate of Pedagogical Competency)
- ♦ PhD in Science from the University of Navarra. Thesis Title: "Genetic risk factors for venous thrombosis"
- ♦ University Specialist in Assisted Reproduction: Psychological and Legal Aspects from the Complutense University of Madrid.
- ♦ Discussion Table Moderator of the North Forum Reproduction Units on embryonic and oocyte morphological criteria and embryo freezing.
- ♦ Postgraduate Certificate in Nursing. UPV-EHU "Donostia School of Nursing" Donostia- San Sebastián
- ♦ Professional Master's Degree in "Genetic Counseling". San Pablo University CEU in Madrid

Professors

Dr. Hurtado de Mendoza, María Victoria

- ◆ Head of Quality Control of the IVF Laboratory and Senior Clinical Embryologist at Caremujer SL
- ◆ Responsible for the design and start-up of the first IVF laboratory in Andalusia
- ◆ Senior Clinical Embryologist at MásVidaReproducción, in Seville, Spain
- ◆ Medical Specialist in the Cell Culture Genetics and Cytogenetic Analysis Unit, Puerta del Mar University Hospital, Cadiz
- ◆ Degree in Biological Sciences, University of Seville, Spain
- ◆ Doctorate from the Faculty of Biology, University of Seville

Dr. Fernández Pascual, Esaú

- ◆ Member of the Spanish Association of Urology
- ◆ Andrology and Sexual Medicine at the La Paz University Hospital
- ◆ Degree in Medicine from the Autonomous University Madrid.
- ◆ Co-Editor-in-Chief of the International Journal of Andrology



Dr. Cabezuelo Sánchez, Vega María

- ◆ Gynecologist and Obstetrician Expert in Assisted Reproduction
- ◆ Gynecologist and Obstetrician at the Ruber International Hospital
- ◆ Researcher in Human Reproduction at the Ruber Internacional Hospital
- ◆ Collaborator in several publications and scientific communications
- ◆ Member: Spanish Fertility Society (SEF), Spanish Society of Gynecology and Obstetrics (SEGO)

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Make the most of this opportunity to learn about the latest advances in this field in order to apply it to your daily practice"

04

Structure and Content

The contents of this program have been developed by the different experts on the course, with a clear purpose: to ensure that our students acquire each and every one of the necessary skills to become true experts in this field. Knowledge that will enable the student to respond in an efficient way to each and every one of the needs in this area of medicine.





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A comprehensive teaching program, structured in well-developed teaching units, oriented toward learning that is compatible with your personal and professional life”

Module 1. Andrology Laboratory

- 1.1. Basic Analysis of Semen WHO 2010 Criteria
- 1.2. Sperm Mobility and Morphometry Analysis Using Automated Systems (CASA/CASMA)
- 1.3. Analysis of Sperm DNA: TUNEL, SCD, COMET, SCSA Relationship with Fertility
- 1.4. Oxidative Damage Assessment Determination of Antioxidants, Free Radicals and Evaluation of Lipid Peroxidation
- 1.5. Sperm Functionality by Molecular Markers: Apoptosis (AnnexinV, Caspases, Membrane Permeability), Ubiquitination, Protein Phosphorylation
- 1.6. Epigenetic Alterations in Spermatozoa
- 1.7. Selection and Control of Semen Donors
- 1.8. Managing a Sperm Bank
- 1.9. Cleaning the Sperm in Patients with HIV or Hepatitis
- 1.10. Preparation of Semen in Artificial Insemination





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

05

Methodology

This academic program offers students a different way of learning. Our methodology follows a cyclical learning process: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the ***New England Journal of Medicine*** have considered it to be one of the most effective.



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

At TECH, we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainable over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a “case”, an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician’s professional practice.

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Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method.”

The effectiveness of the method is justified by four fundamental achievements:

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

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

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



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

With this methodology, more than 250,000 physicians have been prepared with unprecedented success in all clinical specialties regardless of surgical load. Our educational methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

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



This program offers the best educational material, prepared with professionals in mind:



Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then adapted in 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 assess and re-assess students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



Classes

There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.



06 Certificate

The Postgraduate Certificate in Study of the Male Factor guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”

This program will allow you to obtain your **Postgraduate Certificate in Study of the Male Factor** 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.

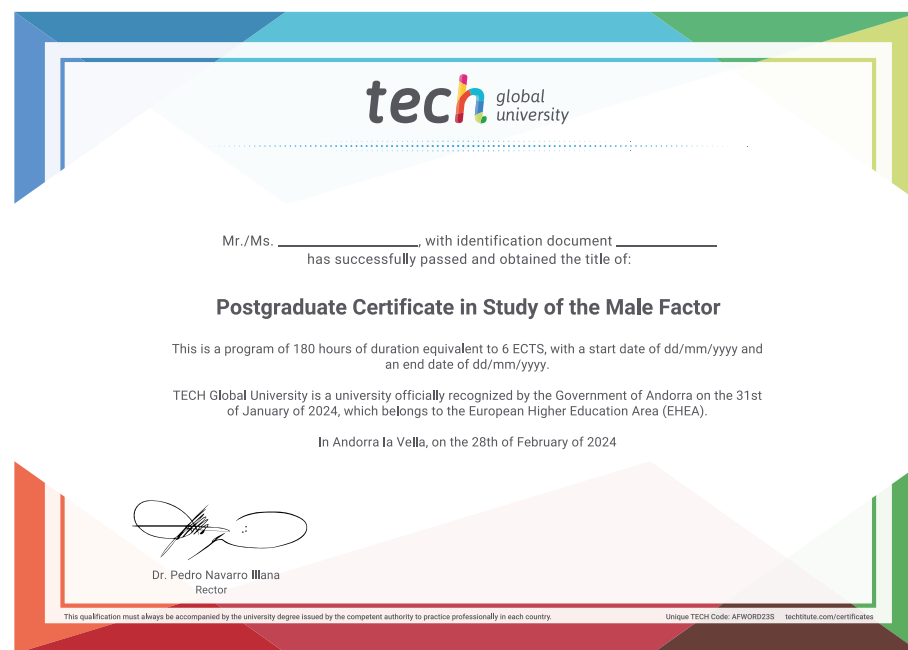
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Study of the Male Factor**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



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



Postgraduate Certificate Study of the Male Factor

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

Postgraduate Certificate Study of the Male Factor

Endorsed by:



Testosterone

Result

3.45