**Postgraduate Diploma** Advances in the Diagnosis, Treatment and Monitoring of Prostate Cancer





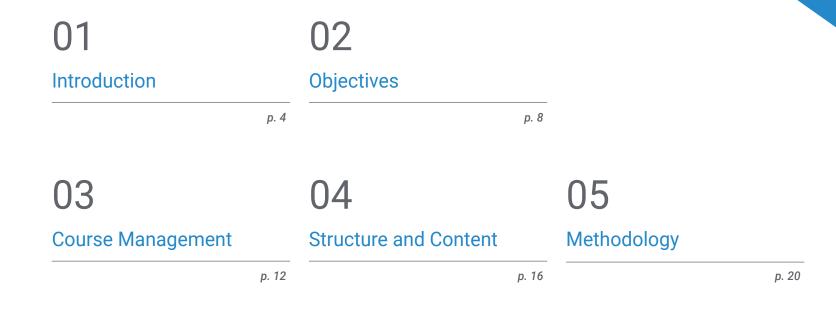
**Postgraduate Diploma** Advances in the Diagnosis, Treatment and Monitoring

of Prostate Cancer

- » 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-advances-diagnosis-treatment-monitoring-prostate-cancer

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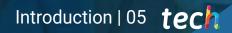
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Certificate

р. 28

## 01 Introduction

Medical specialties have evolved throughout history to where they are today, but by looking at their own history we are fully aware that they will undergo further reforms and changes in the future. When we talk specifically about urology and its oncological treatment, it is enough to review the last 30 years to realize what the immediate future holds.



The Postgraduate Diploma in Advances in the Diagnosis, Treatment, and Monitoring of Prostate Cancer contains the most complete and up-to-date scientific program on the market"

## tech 06 | Introduction

The evolution of scientific knowledge in the field of oncology in general, and urological oncology in particular, allows us to offer systemic treatments directed at the same time to specific therapeutic targets. This reality is, if possible, even more evident in the field of Uro-Oncology.

Modern medicine leads its professionals to an ever-increasing and demanding superspecialization, which translates into the well-known oncology or multidisciplinary committees. We are convinced that the present challenges and those in the immediate future in the field of Uro-Oncology require a specific specialization that is only partially covered by the separate specializations, requiring an Expert of these characteristics to cover a real and growing need in modern Medicine.

The existence now of new molecules in the treatment of prostate cancer opens up a completely new scenario for our patients. Any professional who wants to treat these patients properly, urgently needs to acquire new knowledge in an easy and effective way, as the advent of so much new information will unequivocally overwhelm us. Only those physicians adequately specialized in uro-oncology will have the capacity to properly care for their patients, thus enabling them to continue aboard this already unstoppable train.

The Postgraduate Diploma in Advances in the Diagnosis, Treatment, and Monitoring of Prostate Cancer contains the most complete and up-to-date scientific program on the market. The most important features of the program include:

- Clinical cases presented by experts in the different specialties. 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.
- News on the diagnosis and treatment of prostate cancer.
- Algorithm-based interactive learning system for decision-making in the presented clinical situations.
- With special emphasis on evidence-based medicine and research methodologies in Urologic Oncology.
- All of this will be complemented by 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.

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Don't miss the opportunity to update your knowledge on the advances in the diagnosis and treatment of prostate cancer to improve patient care"

### Introduction | 07 tech



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 of the diagnosis and treatment of prostate cancer, you will obtain a Postgraduate Diploma from TECH Technological University"

Forming part of the teaching staff is a group of professionals in the world of Urologic Oncology, who bring to this course their work experience, as well as a group of renowned specialists, recognised by esteemed scientific communities.

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 physician must try to solve the different professional practice situations that arise during the course. For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of uro-oncology who also have extensive teaching experience. Increase your decision-making confidence by updating your knowledge with this Postgraduate Diploma in Advances in the Diagnosis, Treatment and Monitoring of Prostate Cancer.

This program offers training in simulated environments, which provides an immersive learning experience designed to train for real-life situations.

# 02 **Objectives**

The main objective of the program is the development of theoretical and practical learning, so that the urologist can rigorously and practically master the diagnosis, treatment and monitoring of prostate cancer.

This refresher program will generate a sense of confidence in the urologist when practising, which will help them grow both personally and professionally"

## tech 10 | Objectives



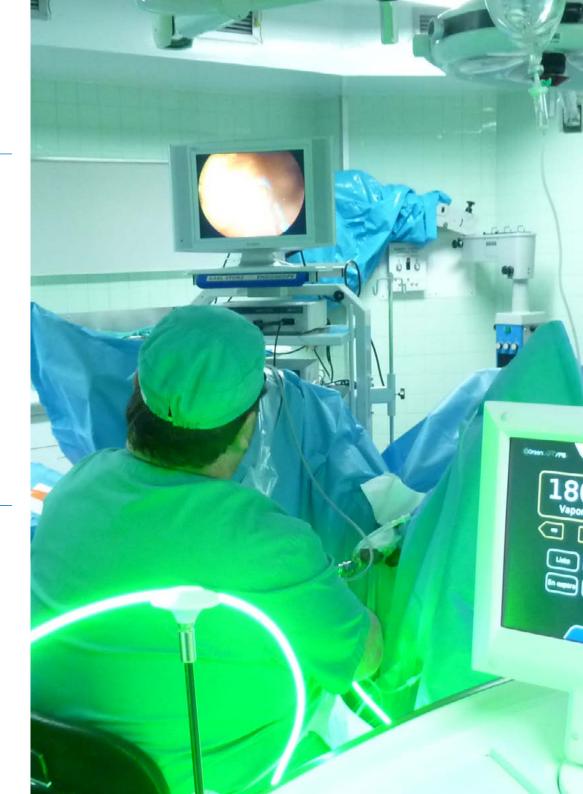
### **General Objective**

- Provide students with the necessary tools to lead multidisciplinary uro-oncology groups.
- Explain the molecular basis of oncogenesis to be able to incorporate new molecules directed to specific targets already available, as well as to be able to collaborate on research projects and in clinical trials of new molecules that are about to arrive in the short and medium term.
- Describe current lines of research in prostate cancer.
- Disseminate the most recent results (even if only partially published at the time) of the findings of clinical trials of new molecules to be presented in the near future.
- Explain the new diagnostic and therapeutic techniques in prostate cancer.



#### **Specific Objectives**

- Describe the molecular biology of cancer in urologic oncology and specifically in the different urological tumors.
- Explain the prognostic factors related to the occurrence of urologic cancer.
- Explain the use of different tumor markers and their diagnostic implications in urooncology. Acquire in-depth knowledge of the future of tumor markers in urology.
- Describe the different paraneoplastic syndromes related to urologic oncologic pathology.



- List oncological principles in urology such as etiology, susceptibility, epidemiology, etc.
- Describe the principles of oncologic surgery in urology.
- Explain the relationship and importance of the clinical trial in the urological oncology patient.
- Describe existing tumor markers and their current applicability.
- Acquire knowledge of the new diagnostic tools available and their clinical applicability.
- Explain the histology and staging methods of prostate carcinoma.
- Apply the adequate and guaranteed approach to active surveillance.
- Identify treatment options that are intended to be curative.
- Acquire the knowledge and criteria for Focal Therapy and its different energy sources.
- Explain prostate cancer pathophysiology
- Describe the mechanism of action of new molecules for the treatment of prostate cancer.
- Explain the diagnosis and treatment of castration-resistant prostate carcinoma (CRPC).
- Describe the adequate management of metastatic patients in all its implications.



## 03 Course Management

This program includes highly regarded health professionals in the field of uro-oncology in its teaching staff, who bring the experience of their work to this specialization.

Also involved in designing and preparing the program are renowned specialists who are members of prestigious national and international scientific communities.

Learn from leading professionals the latest advances in Diagnosis, Treatment and Monitoring of Prostate Cancer"

### tech 14 | Dirección del curso

#### **International Guest Director**

Kai Tsao, M.D., is the Medical Director of the Ruttenberg Treatment Center at the Tisch Cancer Institute at Mount Sinai Hospital. His mission in this position is to lead the multidisciplinary treatment center to provide the highest quality of patient-centered care for those affected by cancer and blood disorders.

He is an Associate Professor of Medicine, Hematology and Medical Oncology at the Icahn School of Medicine at Mount Sinai and is on staff at the Tisch Cancer Institute at Mount Sinai Hospital and the Mount Sinai Queens Infusion Center.

Dr. Tsao is board certified in Internal Medicine, Hematology and Medical Oncology. He is actively involved in research on the development of new therapies in the treatment of genitourinary cancers. He has received several merit awards from the American Society of Clinical Oncology. **His main objective is to define the clinical and molecular phenotype of prostate, kidney and bladder cancers, as well as new therapies in these disease states**. He is principal investigator in several ongoing clinical trials and has authored more than 40 peer-reviewed publications.



### Dr. Tsao, Kai

- Medical Director Ruttenberg Treatment Center Tisch Cancer Institute Mount Sinai Hospital Mount Sinai New York
- Medical Director of the Ruttenberg Treatment Center
- Principal investigator in several clinical trials
- Participant in research on the development of new therapies for the treatment of genitourinary cancers
- Lecturer at the Mount Sinai Icahn School of Medicine
- Author of more than 40 scientific publications
- Recipient of several merit awards given by the American Society of Clinical Oncology
- Member of: American Society of Clinical Oncology, American Association for Cancer Research, American Society of Hematology

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

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## 04 Structure and Content

The structure of the contents has been designed by a team of professionals knowledgeable about the implications of specialization in daily medical practice, aware of the current relevance of specialization to be able to act before a patient with uro-oncological pathology, and committed to quality teaching through new educational technologies.

The Postgraduate Diploma in Advances in the Diagnosis, Treatment, and Monitoring of Prostate Cancer contains the most complete and up-to-date scientific program on the market"

### tech 18 | Structure and Content

## **Module 1.** Update Oncological Principles, Functional Sequelae and Support Treatments of Patients with Urological Tumors

- 1.1. Molecular Biology of Cancer.
- 1.2. Prognostic Factors, Tumor Markers, and Paraneoplastic Syndromes in Urologic Oncologic Pathology.
- 1.3. Tumor Genetics.
- 1.4. Oncologic Emergencies in Urology.
- 1.5. Oncological Principles: Etiology, Susceptibility, and Epidemiology.
- 1.6. Principles of Urologic Surgical Oncology.
- 1.7. Clinical Trials in Urologic Oncology Patients.
- 1.8. Supportive Care of the Oncologic Patient in Urology.
- Genitourinary Functional Sequelae of Oncologic Treatments in Urology.
  1.9.1. Surgical Andrology.
  - 1.9.2. Reconstructive Surgery.
- 1.10. Nuclear Medicine and Molecular Imaging in Oncologic Tumor Pathology.
  - 1.10.1. Scientific Evidence in Uro-oncology.
  - 1.10.2. New Tracers.

## **Module 2.** Advances in the Diagnosis, Treatment and Monitoring of Prostate Cancer

- 2.1. Epidemiology and Risk Factors.
- 2.2. Diagnosis.
  - 2.2.1. TR.
  - 2.2.2. PSA: Density, Kinetics, Ratio, PHI, etc.
  - 2.2.3. Other Markers: Genetic, PCA3, 4K, etc.
  - 2.2.4. Prostate Biopsy.
- 2.3. Screening vs. Early Diagnosis.
- 2.4. Diagnostic Imaging.
  - 2.4.1. Ultrasonography: Sonoelastography, Contrast, Histoscanning, etc.2.4.2. Bone Scan.2.4.3. CT:
  - 2.4.4. MRI.
  - 2.4.5. PET-CAT.
  - 2.4.6. mpMRI: Technical Aspects.

- 2.5. Pathologic Anatomy.2.5.1. Biopsies:2.5.2. RP Piece.
- 2.6. Clinical and Pathologic Staging.
- 2.7. Deferred Treatment.
  - 2.7.1. Localized Prostate Cancer: VA vs. WW. 2.7.2. Locally Advanced.
  - 2.7.3. Metastatic.
- 2.8. Localized Prostate Cancer.
  - 2.8.1. RT: General Information.
    - 2.8.1.1. IMRT/IGRT..
    - 2.8.1.2. Dose Escalation.
    - 2.8.1.3. Hormone Therapy.
    - 2.8.1.4. RxT + CT.
    - 2.8.1.5. Dose Escalation + Hormone Therapy.
  - 2.8.2. General Aspects.
    - 2.8.2.1. Surgical Technique: Open-Laparoscopic-Robotic.
    - 2.8.2.2. Conservation of Neurovascular Bundles.
  - 2.8.3. Focal Therapy
- 2.9. Radical Prostatectomy.
  - 2.9.1. Low Risk.
  - 2.9.2. Medium Risk.
  - 2.9.3. High Risk and Locally Advanced.
  - 2.9.4. Lymphadenectomy and Lymph Node Involvement.
  - 2.9.5. Adjuvant and Neoadjuvant Hormone Therapy.
  - 2.9.6. Conservation of Neurovascular Bundles: Indications and Results.
- 2.10. Radiotherapy.
  - 2.10.1. Low Risk.
  - 2.10.2. Medium Risk.
  - 2.10.3. High Risk.
  - 2.10.4. Locally Advanced: MRC P23/PR07; TAP 32; SPCG-7/SFUO-3.
  - 2.10.5. Ganglion Chains: RTOG 85-31; UK-STAMPEDE.
  - 2.10.6. Proton Therapy.
  - 2.10.7. Low Dose Rate Brachytherapy.

### Structure and Content | 19 tech

2.10.8. High Dose Rate Brachytherapy.2.10.9. RxT after RP: EORTC 22911; ARO; SWOG 8794.

- 2.10.10. Lymph Nodes +.
- 2.11. Cryosurgery.
- 2.12. HIFU.
- 2.13. Focal Therapy.
  - 2.13.1. Negative Biopsy + Elevated PSA.
  - 2.13. 2. mpMRI.
  - 2.13.3. Biomarkers.
  - 2.13.4. Future.
  - 2.13.5. PI-RADS Scientific Evidence.
  - 2.13.6. Ultrasound-Guided Prostate Biopsy +MRNR.
  - 2.13.6.1. Advances in Ultrasound-Guided Prostate Biopsy.
  - 2.13.6.2. Material.
  - 2.13.6.3. Technique: Transrectal/Transperineal.
  - 2.13.7. Fusion Biopsy.
  - 2.13.8. Cognitive Biopsy.
  - 2.13.9. Scientific Evidence.
  - 2.13.10. Cost-Effectiveness of MRI in the Detection of Prostate Cancer.
  - 2.13.11. Focal Therapy: Index Lesion; Clonal Theory.
  - 2.13.12. Selection Criteria. Risk Stratification.
  - 2.13.13. Energy Sources: HIFU, Cryotherapy, Brachytherapy, Electroporation, Photodynamic Therapy, Cyberknife.
  - 2.13.14. Monitoring and Recurrence.
- 2.14. Metastatic Prostate Cancer.
  - 2.14.1. Standard Treatment: Hormone Therapy.
  - 2.14.2. SWOG: Risk Groups.
  - 2.14.3. Intermittent Blocking.
- 2.15. Castration Resistance: Etiology.
- 2.16. CRPC Definition. New Criteria.
- 2.17. Clinicopathological Prognostic Factors in CRPC. Androgen Deprivation in mCPRC. Response Markers.
- 2.18. Non-Metastatic CRPC (CRPC-M0). Clinical Management. Monitoring Criteria.
- 2.19. Hormonal Maneuvers in CRPC. Scientific Evidence.

- 2.20. 1st Line Chemotherapy Treatment: Docetaxel.2.20.1. mCRPC.2.20.2. CRPC.
- 2.21. Non-1st Line Chemotherapy Treatment: Cabazitaxel. Other Drugs.
- 2.22. Hormone Treatment in CRPC: Abiraterone.2.22.1. mCRPC.2.22.2. CRPC.
- 2.23. Hormone Treatment in CRPC Enzalutamide.2.23.1 mCRPC.2.23. 2 CPRC.
- 2.24. Treatment with Bone-Targeted Agents.2.24.1. Bisphosphonates.
  - 2.24. 2 Denosumab.
  - 2.24. 3 Radio 223.
- 2.25. Immunotherapy in mCRPC.
- 2.26. Symptomatic Treatment of Patients with CRPC.
- 2.27. Treatment Algorithm in CRPC: Positioning and Sequencing.
- 2.28. Mechanisms of Resistance to Hormonal Treatment in CRPC: AR-V7 and Other Related Factors.
- 2.29. Molecular Biology of CRPC: BRCA and Related Genes.
- 2.30. Molecular Biology of CRPC: Epigenetic. Angiogenesis.
- 2.31. Molecular Biology of CRPC: Other Molecular Pathways Involved.
- 2.32. Main Ongoing Clinical Trials in CRPC.
- 2.33. Future Outlook of CRPC.

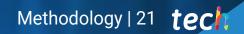


## A unique, key, and decisive Postgraduate Diploma experience to boost your professional development"

## 05 **Methodology**

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

This teaching system is used 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 Re-learning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

## tech 22 | Methodology

#### At TECH we use the Case Method

In a given 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. Specialists learn better, faster, and more sustainably over time.

With TECH you can 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 potential 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 professional medical 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:

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- 1. Students 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 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 24 | Methodology

#### **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 physician will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-ofthe-art software to facilitate immersive learning.



## Methodology | 25 tech

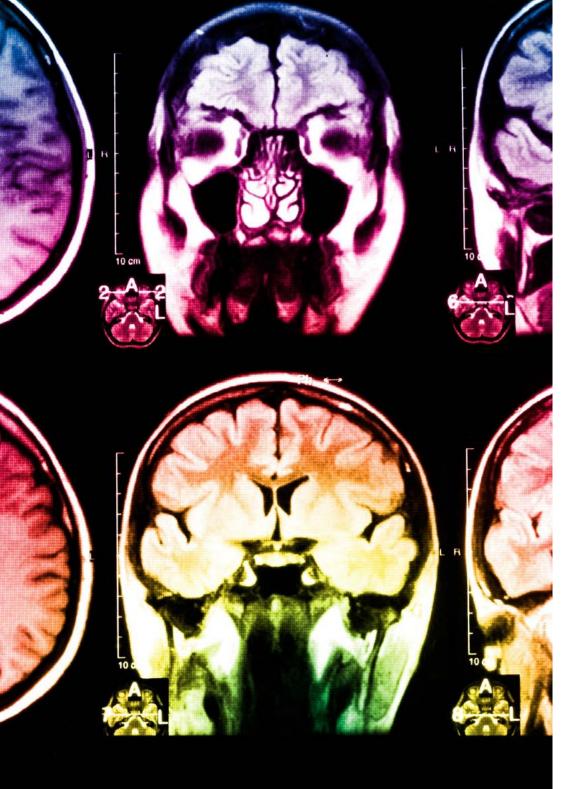
At the forefront of world teaching, the Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

With this methodology we have trained more than 250,000 physicians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socioeconomic 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.



## tech 26 | Methodology

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 highly specific and precise.

20%

15%

3%

15%

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.



#### Latest Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All of this, first hand, 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.

## Methodology | 27 tech



#### **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 focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

20%

7%

3%

17%



#### **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.

Learning from an expert strengthens knowledge and memory, and generates confidence in our future difficult decisions.



#### 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.

## 06 **Certificate**

The **Postgraduate Diploma in Advances in the Diagnosis, Treatment and Monitoring of Prostate Cancer** guarantees, in addition to the most rigorous and updated specialization, access to a university degree issued by **TECH Technological University**.



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

## tech 30 | Certificate

The **Postgraduate Diploma in Advances in the Diagnosis, Treatment and Monitoring of Prostate Cancer** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their **Postgraduate Diploma** issued by **TECH Technological University by tracked delivery.** 

The certificate issued by **TECH Technological University** will specify 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 Advances in the Diagnosis, Treatment and Monitoring of Prostate Cancer

Official Number of Hours: 500



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

technological university Postgraduate Diploma Advances in the Diagnosis, Treatment and Monitoring of Prostate Cancer » Modality: online » Duration: 6 months » Certificate: TECH Technological University » Dedication: 16h/week

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## **Postgraduate Diploma** Advances in the Diagnosis, Treatment and Monitoring of Prostate Cancer

