Postgraduate Diploma High Consequence Infectious Diseases (HCID) and Advanced Life Support





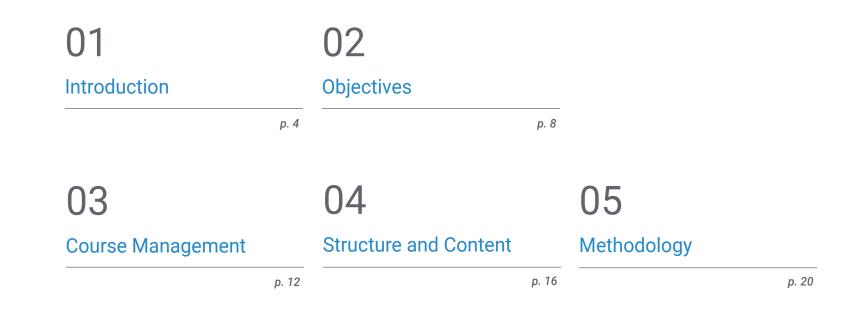
## Postgraduate Diploma

High Consequence Infectious Diseases (HCID) and Advanced Life Support

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

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-high-consequence-infectious-diseases-hcid-advanced-life-support

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# 01 Introduction

Basic and advanced life support and the risks from High Consequence Infectious Diseases (HCID) are priority fields in urgent care and emergency medicine. Both are critical areas for emergency physicians who must always be looking to keep up to date in order to keep abreast of new methods of work in this area and respond successfully to various situations. That is why TECH professionals have designed this program, which aims to specialize emergency professionals in the latest national and international procedures in life support and resuscitation. Similarly, it will also delve into the risks of HCID, pandemic threats and the management of imported pathologies to avoid health catastrophes.



Start today the path to update your knowledge as an emergency physician and grow in a profession that increasingly demands more specialized professionals"

## tech 06 | Introduction

The work performed by emergency specialists is, without a doubt, diverse and hardly monotonous. In a single day, professionals may be faced with critical cases, where patient lives are at stake, as well as cases of highly infectious pathologies that put the health of others at risk. This requires an extremely delicate handling of the available equipment, as well as a detailed and rigorous knowledge of the potential high risk hazards involved.

For this reason, knowing the volatility of the profession, TECH has designed this Postgraduate Diploma, which aims to update emergency medicine professionals in two critical aspects within the field: High Consequence Infectious Diseases and Basic and Advanced Life Support.

Throughout the program, the main challenges when managing an emergency department will be reviewed, especially after the recent pandemic, where clinical safety and quality of care have acquired a predominant role. Specialists will also delve into the ethical and legal aspects and protocols involved in Advanced Life Support in both adult and pediatric patients, as well as the management of High Consequence Infectious Diseases in different situations and contexts.

It should be noted that this is an online Postgraduate Diploma, so students do not have to commute or adhere to fixed schedules. On the contrary, the program is totally flexible, so students only need a computer or mobile device with an Internet connection to be able to take this Postgraduate Diploma at their own accord, so they can satisfactorily balance it with the rest of their daily obligations. This **Postgraduate Diploma in High Consequence Infectious Diseases (HCID) and Advanced Life Support** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Numerous practical cases presented in form of In Focus videos and clinical videos made by experts in Emergency Medicine
- 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 activity presentations on procedures and techniques
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- Action protocols and clinical practice guidelines which cover the most important latest developments in this specialist area
- All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Its special emphasis on evidence-based medicine and research methodologies in dealing with patients requiring Emergency services
- Content that is accessible from any fixed or portable device with an Internet connection

To follow this high level program, you only need a device with an Internet connection and an infinite desire to learn. The rest is provided by TECH"

## Introduction | 07 tech

Start today to prepare yourself for pandemics and high risk emergency situations and become a high level professional"

The program's teaching staff includes medical professionals, who bring their experience to this program, as well as renowned specialists from leading scientific communities 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 specialization programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. For that purpose, students will be assisted by an innovative, interactive video system created by renowned and extensively experienced experts in nutritional counseling in the healthy population.

TECH offers you the most complete and up to date syllabus available to help you grow and excel to your highest potential.

This Postgraduate Diploma will undoubtedly put the seal of excellence on your resume, not only due to the great education you will receive, but also on account of entities that endorse it.

# 02 **Objectives**

TECH has one goal: to train the most competent professionals in the field of emergency medicine and, therefore, the most sought after. To this end, it makes use of a very complete content bank designed in multimedia formats and adapted to current student needs. Likewise, TECH assures students that, by studying here, they will have access to the most reputable professionals in the field, who pour their years of practical experience into this training program. In short, the perfect union of professionals, syllabus and content, make it possible for this University to optimally teach the best physicians in the area.

Objectives | 09 tech

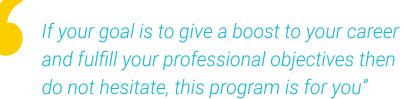
TECH's objectives are very clear: To bring out the best version of you and turn you into a prestigious professional"

# tech 10 | Objectives



## **General Objective**

• In depth preparation of Emergency Medicine professionals in the correct action protocols for two types of critical situations: the emergence of highly contagious diseases and the implementation of basic and advanced life support services





# Specific Objectives

#### Module 1. Current Challenges in Modern Emergency Department Management

- Understand the general aspects of emergency department management and its evolution as a response to health care needs
- Develop specific aspects of emergency department organization in pandemic situations
- Acquire tools for the development of fundamental aspects of an emergency department: assistance, research and teaching
- Define general aspects of the inter-service relationship in emergency patient care and integrating the emergency department with the rest of the hospital
- Define and recognize the importance of quality of care in the emergency department, , its objectives and indicators
- Define and recognize the importance of patient safety as a guide for all healthcare actions and develop guiding protocols Acquire knowledge for the development of multidisciplinary groups in patient safety in the emergency department
- Understand the humanization of health processes in the emergency department
- Gain deeper knowledge of the protocols and attention given in gender violence cases
- Deepen general knowledge and practical tools in biosafety

#### Module 2. Advanced Life Support

- Acquire the ability to develop action protocols for CPR in risk situations
- Know the requirements of advanced life support protocols
- Review the strengths of the European and American advanced life support guidelines
- Delve deeper into the dissemination mechanisms in advanced life support guidelines and protocols among healthcare personnel
- Acquire the tools to evaluate the implementation of protocols
- Apply advanced life support in adult and pediatric patients in special situations

#### Module 3. High Risk Infectious Diseases

- Review the PPE (Personal Protective Equipment) required to treat these pathologies
- Develop diversified circuits in the Emergency Department
- Acquire training tools for healthcare personnel through the practice of emergency simulations
- Gain theoretical knowledge and tools to implement protocols for high risk respiratory pathology
- Internalize the theoretical knowledge and tools to implement protocols for hemorrhagic fevers management
- Review current threats and infectious diseases with high pandemic potential
- Check recommendations for future threats: how we prepare

# 03 Course Management

The design and creation of the theoretical and multimedia materials has been carried out by a team of leading professionals in the area of emergency medicine, who carry out their professional activity in the main hospitals in the country. They will be in charge of delivering the program, transferring all their practical experience, so students can correctly respond to HCID in the Emergency department and, therefore, turn them into much more competent physicians.

TECH provides you with a world class teaching staff that will catapult your career to the next level"

## tech 14 | Course Management

## **International Guest Director**

Dr. Ugo Ezenkwele is an eminent expert in the field of emergency medicine and managerial leadership in healthcare. His extensive experience in healthcare is coupled with his clinical and academic management skills. In this regard, his deep medical knowledge has led him to become **Head of Emergency Medicine at Mount Sinai Queens**. With his arrival in the position, innovative programs such as the ED Observation Unit, ED Geriatric Certification, Telemedicine, Emergency Management and Disaster Preparedness were launched to improve performance and patient experience.

In 2021, Dr. Ezenkwele received recognition for his outstanding work with the Crains New York award for Notable Black Leader and Executive. He has also earned numerous prestigious recognitions such as the **Vituity Award in Executive Leadership**, the National Medical Association's Service Excellence Award and the Visionary Educator Award from the Academic Society of Emergency Medicine.

His excellent management skills have led him to assume leadership roles in major medical organizations, serving as **president of the National Medical Association's Section of Emergency Medicine and vice president of the Society for Academic Emergency Medicine's Academy of Diversity and Inclusion in Emergency Medicine**. In both positions, he worked to implement policy changes with the goal of positively impacting the next generation of physician leaders and the communities they serve. In addition, he is an advisor to the American College of Emergency Physicians (ACEP) and an oral examiner for the American Board of Emergency Medicine (ABEM), responsibilities that demonstrate his commitment to continuous improvement in medical practice and his dedication to training skilled physicians.



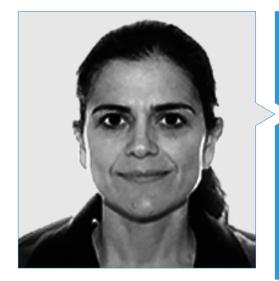
## Dr. Ezenkwele, Ugo

- Head of the Department of Emergency Medicine at Mount Sinai Queens, Astoria
- Attending Physician at Woodhull Medical and Mental Health Center an NYU Langone
  Affiliate Hospital
- Vice Chair of Emergency Medicine at Woodhull Medical and Mental Health Center an NYU Langone Affiliate Hospital
- Physician Liaison for Clinical Faculty Recruitment NYULMC Clinical Affairs Department
- M.D. from Johns Hopkins University
- MPH International Health Johns Hopkins University
- BS in Biology Johns Hopkins University
- Vituity Wes Curry Award for Executive Leadership
- Crains New York Business Notable Black Leader & Health Executive
- Excellence in Leadership Woodhull Medical and Mental Health Center
- National Medical Association's Emergency Medicine Section Leadership Award
- National Medical Association Excellence in Service Award (2013 and 2014)
- President of the American College of Emergency Physicians (ACEP) Diversity, Equity and Inclusion Committee
- ABEM Oral Board Examiner



# tech 14 | Course Management

#### Management



### Dr. Torres Santos-Olmo, Rosario María

- Degree in Medicine and Surgery
- Doctor of Medicine and Surgery
- Specialist in Family and Community Medicine
- Master's Degree in Palliative Care and Supportive Neoplastic Patients Care
- Life Support Instructor (BLS, ALS, ILS, ATLS)
- Master's Degree in Palliative Care and Supportive Neoplastic Patient Care
- Master's Degree in Patient Safety and Health Risk Management
- Clinical Collaborator at the Autonomous University of Madrid
- Area Specialist in the Adult Emergency Department at La Paz Hospital, Madrid



### Dr. Rivera Núñez, María Angélica

- Surgeon at Universidad de Chile, Santiago de Chile
- Specialist in Internal Medicine from the Catholic Pontificia University, Chile
- PhD Cum Laude in Medicine and Surgery from the Autonomous University of Madrid
- Certificate in Emergency Medicine
- Assistant Coordinator in the Emergency Department at La Paz University Hospital, Madrid
- Specialist Physician in Emergency Medicine at La Paz University Hospital, Madrid

## Course Management | 15 tech

## Professors

#### Dr. Cancelliere, Nataly

- HULP Emergency Department Specialist
- Doctorate in Medicine from the Autonomous University Madrid
- Specialist in Ophthalmology at University Hospital La Paz
- Master's Degree in Emergency Medicine, SEMES

#### Dr. Calvin García, Elena

- Degree in Medicine
- Specialist in Family and Community Medicine
- Master's Degree in Emergency Medicine, Complutense University, Madrid
- HULP Emergency Department Attending Physician
- Clinical Reference in Emergency Services HULP

#### Dr. González Viñolis, Manuel

- Degree in Medicine and Surgery from La Laguna University
- Master's Degree in Clinical Unit Management from the University of Murcia
- HULP Emergency Department Attendant

### Dr. Mayayo Alvira, Rosa

- Degree in Medicine from Rovira i Virgili University
- HULP Emergency Department Attending Physician
- Head of the Toxicology Unit in the HULP Emergency Department

### Dr. Martínez Zarza, Ana María

- Graduate in Medicine and Surgery from the University of Valladolid
- PhD in Medicine and Surgery from the Autonomous University of Madrid
- Master's Degree in Medical and Clinical Management from the National University of Distance Education, Spain
- Medical Surgical Emergencies Expert
- HULP Emergency Department Attending Physician
- Quality and Teaching Coordinator in the HULP Emergency Department

### Dr. Maroun Eid, Charbel

- Degree in Medicine and Surgery from Gallegos Rómulo University
- Master's Degree in Cardiovascular Risk Prevention from Alcalá University
- Attending Emergency Physician at HULP

### Dr. Martín Quirós, Alejandro

- Degree in Medicine and Surgery from the University of Cadiz
- PhD from Universidad Autónoma de Madrid within the Program in Medicine
- HULP Emergency Department Attending Physician

### Rubio Bolivar, Javier

- CEASEC Simulation Technician
- HULP Simulation Technician

# 04 Structure and Content

The structure of the curriculum has been designed by a team of medical professionals that are fully aware of the importance of university studies in hospital and out of hospital emergencies, especially in the area of High Consequence Infectious Diseases and Advanced Life Support. This team, aware of the relevance and timeliness of specialization programs, and committed to quality teaching through the use of innovative formats, has created this program specially designed for physicians to learn how to successfully manage cases that require using life support.

A comprehensive syllabus focused on acquiring knowledge and converting it into real skills, created to propel you to excellence"

## tech 18 | Structure and Content

#### Module 1. Current Challenges in Modern Emergency Department Management

- 1.1. Basic Advanced Concepts in Emergency Medicine
  - 1.1.1. Management Challenges in Times of Pandemics
  - 1.1.2. Quality Challenges in the Emergency Department
  - 1.1.3. Quality Care in the Emergency Department Indicators
  - 1.1.4. Patient Safety Challenges in the Emergency Department
  - 1.1.5. Clinical Safety in the Emergency Department Indicators
  - 1.1.6. Biosafety in Urgent Care and Emergency Medicine
  - 1.1.7. Integrating the Emergency Department into the Rest of the Hospital
  - 1.1.8. Urgent Care Services and the Problem of Gender Violence
  - 1.1.9. Clinical Research in the Emergency Department: Is It Possible?
  - 1.1.10. Teaching in the Emergency Department: Beyond Assistance
  - 1.1.11. Humanization of Management in Emergency Departments

#### Module 2. Advanced Life Support

- 2.1. Update on Advanced Life Support in Adults
  - 2.1.1. New AHA and ERC Protocols Similarities and Differences
  - 2.1.2. Advanced Life Support in Pandemic Situations
  - 2.1.3. Advanced Adult Life Support in Special Situations
  - 2.1.4. New Challenges in Advanced Life Support
  - 2.1.7. Update on Advanced Pediatric Life Support
  - 2.1.8. Advanced Pediatric Life Support in Special Situations





# Structure and Content | 19 tech

#### Module 3. HCID: High Consequence Infectious Diseases

- 3.1. Introduction
  - 3.1.1. PPE (Personal Protective Equipment)
  - 3.1.2. Emergency Services Diversification. Emergency Circuits
  - 3.1.3. Health Personnel Training
  - 3.1.4. Emergency Department Drills
  - 3.1.5. Patient Transfer and Transport to High Isolation Units
  - 3.1.6. One Health
  - 3.1.7. Respiratory Pathology Action Protocols
  - 3.1.8. Hemorrhagic Fever Action Protocols
  - 3.1.9. Future Threats: How to Prepare



Welcome to TECH, today you will take your career to the next level"

# 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 High Consequence Infectious Diseases (HCID) and Advanced Life Support 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 university qualification without having to travel or fill out laborious paperwork"

## tech 30 | Certificate

This **Postgraduate Diploma in High Consequence Infectious Diseases (HCID) and Advanced Life Support** 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 diploma 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 High Consequence Infectious Diseases (HCID) and Advanced Life Support

Official Nº of hours: 450 h.



\*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.

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