Hybrid Professional Master's Degree
Primary Care Emergencies

tech technological university

Hybrid Professional Master's Degree
Primary Care Emergencies

- » Modality: **online**
- » Duration: **12 months**
- » Certificate: **TECH Technological University**
- » Dedication: **16h/week**
- » Schedule: **at your own pace**
- » Exams: **online**

Website: **www.techtitute.com/us/medicine/hybrid-professional-master-degree/hybrid-professional-master-degree-primary-care-emergencies-medicine**

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01
Introduction

Primary Care has proven to be one of the fundamental bases of healthcare worldwide. Not only does it deal with the challenges of daily consultations, a task of enormous complexity due to the recent pandemic situation, but it often has to deal with emergencies of various specialties. Therefore, the physician needs to have the most innovative tools in this field, and that is what this program will provide: a complete update in the approach to the Primary Care Emergencies. In addition, as a complement to the learning process, the professional will be able to carry out an on-site internship in a prestigious clinical center where they will be able to put into practice the innovative techniques acquired throughout the degree program.

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The latest advances in the approach to Primary Care Emergencies are here, provided through online learning complemented by an on-site internship at a renowned clinical center"

The growing importance of Primary Care has led to the incorporation of numerous new procedures into the discipline. Therefore, the objective is to respond to the daily challenges of this field, which has been transformed by the recent pandemic situation. This situation has been accentuated in the field of emergencies, since primary care has had to deal with this type of pathology with greater frequency in recent years.

This Hybrid Professional Master's Degree has been designed, therefore, with the aim of providing the professional with the most recent advances in this field, so that it has included in its syllabus the most innovative techniques and procedures with which to respond to all types of emergencies in Primary Care.

The physician will find in this program the latest news on issues such as advanced cardiovascular support and invasive techniques in the emergency department, acute chronic obstructive pulmonary disease, new scientific evidence on the pathogenesis and pathophysiology of coronavirus infections or the main pathologies of specialties such as gynecology or dermatology.

All of this is based on an online teaching methodology that will later give way to an on-site internship in a clinical center. The online stage is characterized by its multimedia didactic resources and by a teaching staff composed of active specialists, who will accompany the professional throughout this phase. Later on, they will be able to put into practice the new knowledge acquired in an internship where they will come into contact with real patients while being guided by physicians from the clinic itself.

This **Hybrid Professional Master's Degree in Primary Care Emergencies** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Development of more than 100 clinical cases presented by medical professionals who are experts in emergency medicine in the field of primary care

- 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

- The best methods of patient assessment and monitoring in primary care emergencies

- Comprehensive systematized action plans for the main pathologies in primary care emergencies

- Presentation of practical workshops on diagnostic and therapeutic techniques for emergency patients

- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course

- Practical clinical guides on approaching different pathologies

- With a special emphasis on evidence-based medicine and research methodologies in emergencies

- 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

- Furthermore, you will be able to carry out a clinical internship in one of the best hospitals

"*Incorporate into your daily practice the latest diagnostic techniques and treatments thanks to the on-site internship that you will be able to carry out thanks to this Hybrid Professional Master's Degree*"

The recent healthcare situation has brought about enormous changes in Primary Care Emergencies and with this program you will be able to get up-to-date with them.

The online phase of this program will allow you to study when and where you want, as it is fully adaptable to your professional circumstances.

This Hybrid Professional Master's Degree program, of a professionalizing nature and hybrid learning modality, is aimed at updating medical professionals who work in Primary Care. The contents are based on the latest scientific evidence, and oriented in a educational way to integrate theoretical knowledge in the medical practice, and the theoretical-practical elements will facilitate the updating of knowledge and allow decision-making in patient management.

Thanks to the multimedia content, developed with the latest educational technology, medical professionals will benefit from situated and contextual learning, i.e., a simulated environment that will provide immersive learning programmed to train 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 this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

02
Why Study this Hybrid Professional Master's Degree?

This Hybrid Professional Master's Degree is differential in the work of updating the emergency specialist, as it offers both a theoretical and practical vision of the latest scientific postulates in the field. Therefore, it presents a unique academic opportunity in the market, with all the guarantees to access both the latest technology and capabilities in Primary Care Emergencies as well as the privileged knowledge of the leading experts in the area.

The professional will enjoy a 100% online study period where they will review the current methods, the most up-to-date scientific postulates and all the content developed by great experts in the field. However, you will also live a 100% practical experience alongside a multidisciplinary team and a designated tutor, who will accompany you during the execution of your procedures, in a state-of-the-art clinical space with real patients.
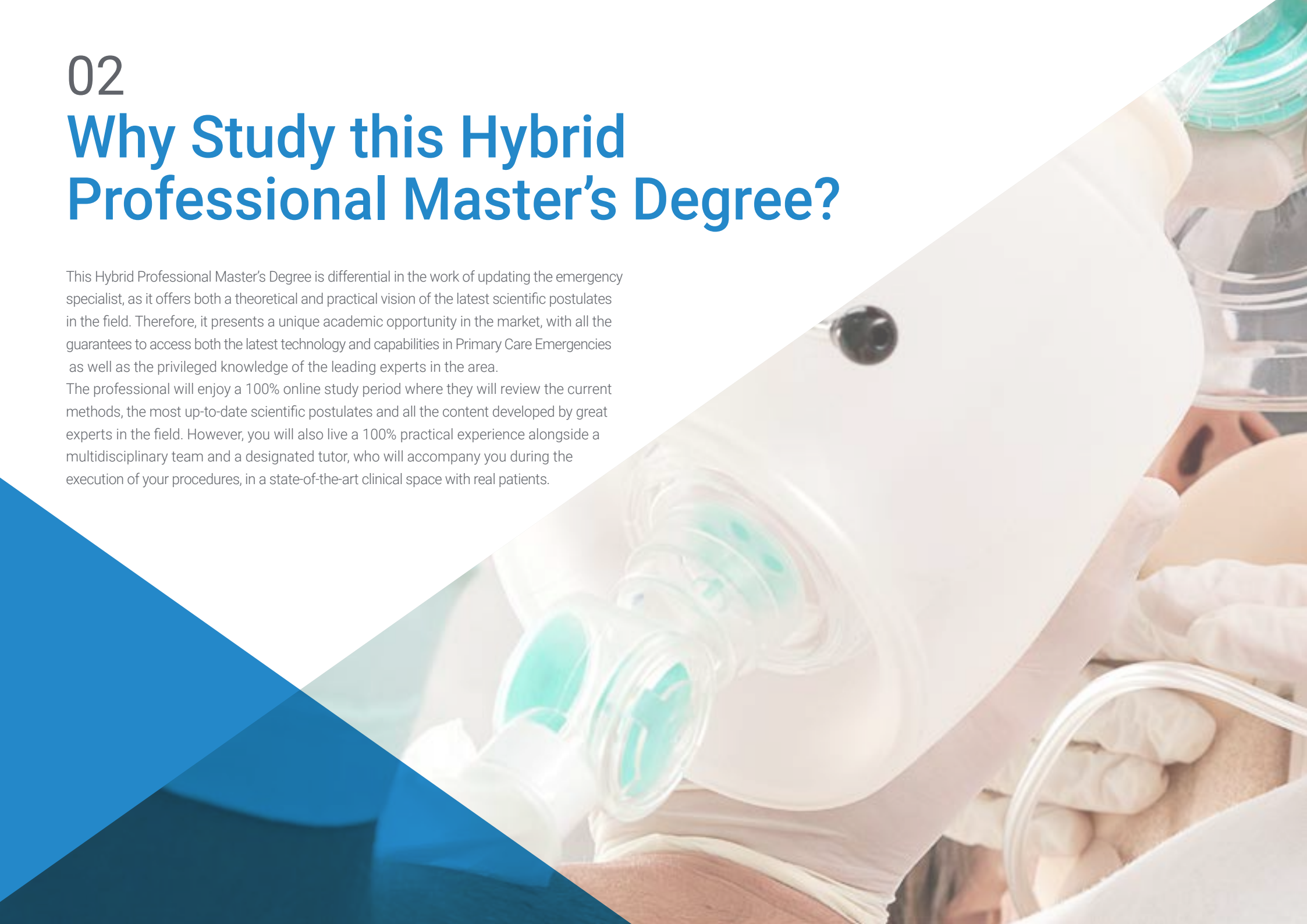
This program will allow you to access both the most current scientific postulates on Emergency Medicine and their practical application in real environments of high prestige"

1. Updating from the latest technology available

Every physician in Primary Care Emergencies must be up to date with the technologies that facilitate diagnoses and approaches to patients with various clinical conditions. This program is the perfect opportunity to be up-to-date in the most rigorous clinical methodology currently in use.

2. Gaining In-Depth Knowledge from the Experience of Top Specialists

Thanks to TECH's commitment to provide high-value education for professionals, in this program it has teamed up with experienced teachers who provide students with all their practical experience. They also incorporate their own work methodology, advances, organization and efficient management in a Primary Care Emergency Unit. Therefore, the specialist will acquire the knowledge they need to update their curricular profile.

3. Entering First-Class Clinical Environments

Given that the clinical centers selected by TECH for this Hybrid Professional Master's Degree meet the highest quality standards, the specialist is guaranteed a particularly advantageous face-to-face immersion. They will be able to be part of the demanding daily routine of a busy Emergency Unit, where they will be able to treat different cases and incidents received, always adapting to the requirements of the circumstances.

4. Combining the Best Theory with State-of-the-Art Practice

During this program, the specialist will have a privileged opportunity to delve deeper into Primary Care Emergencies. From both a practical and theoretical perspective, they will be updated in an effective and efficient way, surrounded at all times by leading experts in the area.

5. Expanding the Boundaries of Knowledge

In order to facilitate the specialist's education, TECH offers the possibility of completing this program from wherever they are, since its study system is 100% online. In addition, the Clinical Internship can not only be carried out in national but also international centers, which will allow you to live an international academic experience.

You will have full practical immersion at the center of your choice"

03
Objectives

The main objective of this Hybrid Professional Master's Degree in Primary Care Emergencies is to provide the professional with the latest advances in these health areas. Therefore, a program has been designed that contemplates two learning stages, first online and then on-site, to ensure that the specialist is updated in the most effective way, with an eminently practical approach.

"

You will achieve your main objective: to update and work with the latest techniques and procedures in primary care emergencies"

General Objective

• In this program the physician will be able to achieve their fundamental objective: to get up-to-date with the latest procedures and protocols in the field of Primary Care Emergencies. Therefore, this degree is completely oriented to meet that goal, and upon completion the professional will have obtained the update they are looking for, being able to apply their new skills in their work immediately

Know, from the most effective teaching methodology, the new emergency techniques in areas such as cardiology or otorhinolaryngology"

Specific Objectives

Module 1. Organizational Aspects of the Emergency Department

- Define the structure and organization of emergency services in primary care

Module 2. Cardiac Emergencies

- Interpret the main signs in order to properly analyze an electrocardiogram in urgent and emergency situations in Primary Care
- Define the different conditions that cause chest pain and apply the appropriate protocols in each case
- Recognize the different signs and symptoms typical of ischemic heart disease

Module 3. Advanced Cardiovascular Support and Invasive Techniques in the Emergency Room

- Adequate use of the comprehensive action plan with regard to The Heart Attack Code
- Apply the specific procedures in acute coronary syndrome and assess the possibility prehospital fibrinolysis
- Get up-to-date on the therapeutic model in atrial fibrillation according to the latest scientific evidence
- Identify the signs and symptoms of patients who come to the primary care center with pericarditis
- Resolve a hypertensive emergency situation using the updated procedure of care Primary
- Incorporate advances in the appropriate management of patients with Congestive Heart Failure and Acute Pulmonary Edema

Module 4. Pneumological Emergencies

- Review the basic concepts of non-invasive mechanical ventilation management
- Correct use of non-invasive mechanical ventilation through the Boussignac CPAP System

Module 5. Neurological Emergencies

- Define proper use of pulse oximetry and capnography devices
- Get up-to-date on treatment to resolve an acute decompensation in a dyspneic patient
- Recognize the differential diagnosis between the asthmatic patient, bronchospasm, and exacerbation of chronic obstructive pulmonary disease
- Review the pathophysiology involved in an asthmatic crisis
- Use pharmacological treatment measures in Pneumonia
- Identify the main clinical signs and symptoms of Pneumothorax
- Identify the signs and symptoms of massive Pulmonary Embolism
- Differentiate the different levels of health care in a patient with Hemoptysis and assess the criteria for hospital referral

Module 6. Digestive Emergencies

- Identify the signs and symptoms of the main gastrointestinal tract conditions and their repercussions
- Differentiate the main causes of Acute Abdomen and manage acute abdominal pain in Primary Care
- Review the pathophysiology of an Intestinal Obstruction process
- Use the different complementary tests to diagnose an ingested foreign body

Module 7. Nephrological and Urologic Emergencies

- Define the diagnostic criteria for Acute Renal Failure
- Use appropriate treatment for acute renal colic
- Resolving an acute urinary retention situation in the Primary Health Care setting
- Assess the criteria for referring a patient with a urinary tract infection

Module 8. Endocrine Emergencies

- Interpret the fundamental alterations of glycemic metabolism
- Apply appropriate measures to reverse a diabetic ketoacidosis situation
- Recognize the semiology of an Addisonian crisis

Module 9. Ophthalmologic Emergencies

- Explain the main acute ENT and ophthalmologic diseases
- Indicate the appropriate treatment for pink eye
- Use appropriate complementary tests to detect acute vision loss

Module 10. Otolaryngologic Emergencies

- Treat otorhinolaryngological emergencies according to the specificity of each case, based on the latest scientific evidence

Module 11. Trauma and Neurosurgical Emergencies

- Analyze the different traumatologic conditions in Primary Care emergencies
- Recognize the general guidelines for action in case of upper and lower limb trauma
- Adequate use of the integral plan of action in accordance with the Polytrauma Code
- Differentiate the severity of different spinal injuries

Module 12. Vascular Emergencies

- Apply up-to-date basic and advanced CPR techniques for all ages
- Identify the different vital rhythms to apply the appropriate algorithm for Advanced Cardiopulmonary Resuscitation, according to the latest scientific evidence on advanced cardiovascular support

Module 13. Pediatric Emergencies

- Identify the different urgencies and emergencies in pediatrics
- Apply treatment for a child having a seizure
- Resolve abdominal pain, vomiting, and diarrhea in children
- Distinguish between the different respiratory tract diseases in children
- Interpret the possible severity of Cranioencephalic Trauma in a child
- Identify the criteria for hospital referral in case of limping in children
- Recognize the medical-legal documents and attitudes in situations of child abuse

Module 14. Gynecological Emergencies

- Identify the most frequent gynecological-obstetric conditions in primary health care and state the precise guidelines in each case to correctly resolve them
- Review the main aspects of childbirth care, previous care, basic techniques of assistance, types of presentations, and dilatation, expulsion and delivery times in the out-of-hospital setting of Primary Care

Module 15. Psychiatric Emergencies

- Define the clinical symptomatology of psychopathologies
- Recognize the clinical symptomatology of an anxiety attack and differentiate it from other pathologies

Module 16. Environmental Emergencies
- Manage intoxicated patients and injuries caused by environmental agents

Module 17. Skin Emergencies
- Know the most common dermatological pathologies in the emergency department and the most up-to-date treatments and approaches for each one of them

Module 18. Skin Emergencies
- Correctly apply Hemotherapy in patients with hematological conditions
- Distinguish between the different anticoagulant treatments

Module 19. Infectious Emergencies
- Recognize the most frequent infectious, inflammatory, autoimmune, and tumor diseases in primary care

Module 20. Oncologic Emergencies
- Use therapeutic measures for oncology patients with Neutropenia

Module 21. Toxicology Emergencies
- Effectively apply initial measures to different types of acute intoxication
- Recognize the manifestations of intoxications by psychotropic drugs, NSAIDs, and digitalis
- Discover the effects of intoxication from drugs and organophosphates

Module 22. Geriatric Emergencies
- Differentiate the pathophysiological characteristics of elderly patients

Module 23. Pharmacology in Emergencies
- Handle drugs frequently used in emergency medicine

Module 24. Evidence-Based Medicine
- Act in each case in the most effective way according to the data obtained

Module 25. Latest Information on Coronavirus Infections
- Identify the main risk groups and mechanisms of Coronaviruses
- Know the microbiological characteristics of Coronaviruses
- Know how to assess the morbidity and mortality of Coronavirus infections
- Be able to perform the necessary tests for diagnosing Coronavirus

Know, from the most effective teaching methodology, the new emergency techniques in areas such as cardiology or otorhinolaryngology"

04
Skills

This program focuses on the acquisition of new competencies for the approach and management of various pathologies and emergency patients in the area of primary care. Therefore, and thanks to the clinical internship offered by TECH to its students, the physician will be in a position to incorporate into their work a whole series of skills that will allow them to perform more effectively in all types of emergencies.
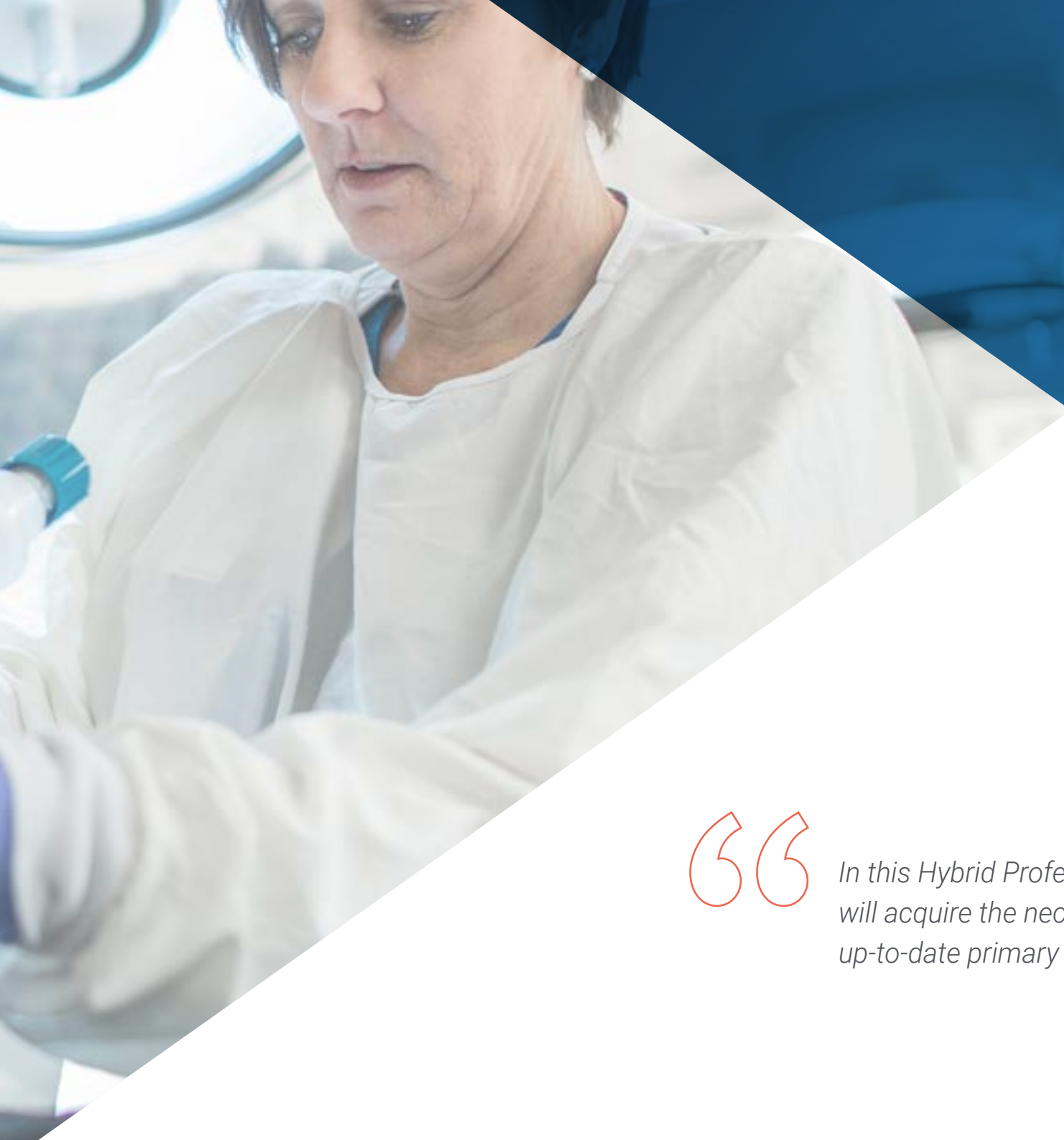
In this Hybrid Professional Master's Degree you will acquire the necessary skills to become a fully up-to-date primary care physician"

General Skills

- Possess and understand knowledge that allows originality in the development and/or application of ideas, often in a research context

- Know how to apply acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to the field of study

- Integrate knowledge and face the complexity of making judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities related to the application of their knowledge and judgments

- Know how to communicate their conclusions, knowledge and reasons to specialized and non-specialized audiences in a clear and unambiguous way

- Acquire study skills that will enable further study in a largely self-directed or autonomous manner
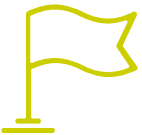
Specific Skills

- Develop within the Profession in terms of working with other Health Professionals, acquiring skills to work as a team

- Recognize the need to maintain your professional skills and keep them up to date, with special emphasis on autonomous and continuous learning of new information

- Develop the capacity for critical analysis and research in the field of their profession

- Use theoretical concepts and medical knowledge for problem solving and decision-making in patient care in critical and emergency situations in Primary Care

- Relate the main aspects of research for comprehensive patient care in emergency and urgent care

- Understand the concept of continuity of care, the devices and protocols established to guarantee it

- Understand the basic functioning of the Health System, in order to be able to refer and transfer a patient to other areas of specialization according to suitability criteria. Recognize vital emergencies and apply measures to solve them in Primary Care

- Skillfully use the most commonly used treatment and diagnostic techniques in out-of-hospital emergencies

- Assume duties in the field of critical and emergency care in Primary Care

- Adapt their decision-making to the current situation, environment, time, and available resources

- Work with patients that have been diagnosed or present symptoms of Coronavirus, complying with all safety measures

- Perform diagnostic tests to detect possible cases of Coronavirus

After completing this Hybrid Professional Master's Degree, you will be up to date with the most advanced therapeutic methods for Primary Care of emergency patients"

05

Course Management

In order to enhance even more the excellent qualities of this program, TECH has been responsible for bringing together a teaching staff of great prestige in the field of primary care emergencies. Therefore, the professional who completes this program will have been able to be updated by the best specialists in the current health panorama, who will directly provide all the keys and the latest procedures in the management of all types of emergency situations and pathologies.

"

The most complete contents in Primary Care Emergencies are found in this program, designed to provide the professional with a complete update in this complex health area"

International Guest Director

As National Director of Clinical Innovation at US Acute Care Solutions, Jesse M. Pines, M.D., is one of the most recognized figures in the Emergency Medicine and Healthcare Services field. In fact, his accomplishments include the creation and execution of the first governmental alternative payment model (ED EQUIP, in Maryland) to reduce the total cost of care. In addition, he leads the development and implementation of Telemedicine programs covering a wide range of specialties, including Emergency Medicine, Psychiatry and Intensive Care Units, among others.

His extensive experience in medical leadership, large database study design and Big Data research has led him to publish more than 350 peer-reviewed articles and writing seven books in these areas. His work has been recognized internationally in various renowned media including TIME Magazine, the Wall Street Journal and Slate Magazine.

His more than two decades of experience have earned him several leadership positions at George Washington University. Among them, he is the Director of the Center for Healthcare Innovation and Research, leading also the Research Fellowship program and the Center for Healthcare Quality.

In this way, throughout his career, Dr. Jesse M. Pines has received multiple awards, given both for the articles he has published and for his own work and contribution to the field of Emergency Medicine. He is also the President of the working group on New Models of Professional Practice of the American College of Emergency Physicians (ACEP), holding various positions in the ACEP itself as well as in the Society for Academic Emergency Medicine and the American Academy of Emergency Medicine.

Dr. M. Pines, Jesse

- National Director of Clinical Innovation, US Acute Care Solutions, USA
- Emergency Physician at Allegheny Health Network
- Professor of Emergency Medicine at The George Washington University
- Professor of Emergency Medicine at Drexel University
- Director of the Medical Research Fellowship Program at the George Washington University
- Director of the George Washington University Center for Health Innovation and Research
- Doctor of Medicine from Georgetown University
- Master's Degree of Business Administration from Georgetown University
- Master's Degree in Clinical Epidemiology from the University of Pennsylvania

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

Management

Dr. Roig D´Cunha-Kamath, Francisco Vicente
- Hospital Emergency Physician at the University Clinical Hospital of Valencia
- Assistant Physician of the Emergency Medicine Department at University Clinical Hospital of Valencia
- Physician at the CIBE of Valencia of the Health and Community Foundation
- Professor of Human Anatomy at the European University of Valencia
- Doctor for the ASCIRES group
- Degree in Medicine from the University of Valencia
- Specialist via MIR in Family and Community Medicine

Professors

Dr. Brasó Aznar, José Vicente
- Head of Section of the Emergency Medicine Department at La Ribera University Hospital
- Hospital Emergency Physician
- Associate Professor of Emergency Medicine at the Faculty of Medicine of the University of Valencia

06
Educational Plan

This Hybrid Professional Master's Degree in Primary Care Emergencies is structured in 25 specialized modules, through which the professional will be able to delve into issues such as infusion routes and drugs, diagnosis and treatment of Arrhythmias, Acute Digestive Hemorrhage, initial care of the polytraumatized child, risk exposure and exposure to potentially contaminating material or the most relevant research methods for evidence-based medicine.

" *The Clinical Internship will help you to update your clinical practice when dealing with patients in critical situations"*

Module 1. Organizational Aspects of the Emergency Department

1.1.   Organization of the Emergency Department in Primary Care. Adequate Stocking of First Aid Kits
1.2.   Role of the Healthcare Professional in Primary Care Emergencies
1.3.   Medicolegal Management Issues in Primary Care Emergency Departments

Module 2. Cardiac Emergencies

2.1.   Workshop: Reading and Interpreting an Electrocardiogram
2.2.   Syncope
2.3.   Acute Chest Pain
2.4.   Acute Coronary Syndrome
   2.4.1.   Non-ST-Elevation Acute Coronary Syndrome (NSTEACS)
   2.4.2.   ST-Elevation Acute Coronary Syndrome (STEACS)
   2.4.3.   The Heart Attack Code
2.5.   Atrial Fibrillation
2.6.   Pericarditis
2.7.   Hypertensive Crisis
2.8.   Acute Heart Failure
2.9.   Acute Pulmonary Edema
2.10.   Shock
2.11.   Positive Ventilation Workshop: Boussignac CPAP

Module 3. Advanced Cardiovascular Support and Invasive Techniques in the Emergency Room

3.1.   Basic Vital Support
   3.1.1.   Basic Life Support with Automatic External Defibrillator
   3.1.2.   Foreign Object Airway Obstruction
3.2.   Action in Case of Bradyarrhythmia
3.3.   Action in Response to Tachyarrhythmias

3.4.   Advanced Vital Support
   3.4.1.   Advanced Airway Management
   3.4.2.   Arrhythmia Treatment
   3.4.3.   Infusion Routes and Drugs
   3.4.4.   Rapid Intubation Sequence Workshop
3.5.   Invasive Procedures and Techniques in the Emergency Department
   3.5.1.   External Pacemaker
   3.5.2.   Electrical Cardioversion
   3.5.3.   Defibrillation in Emergencies
3.6.   Workshop: Echoscopy Management in the Emergency Department
3.7.   Basic and Advanced Pediatric Life Support
   3.7.1.   Basic Pediatric Life Support
   3.7.2.   Airway and Ventilation in Pediatrics
   3.7.3.   Infusion Routes and Drugs, Diagnosis and Treatment of Arrhythmias
   3.7.4.   Neonatal Resuscitation

Module 4. Pneumological Emergencies

4.1.   Acute Dyspnea
4.2.   Acute Chronic Obstructive Pulmonary Disease (ACOPD)
4.3.   Acute Bronchial Asthma
4.4.   Pneumonia
4.5.   Pneumothorax
4.6.   Pulmonary Thromboembolism (PTE)
4.7.   Hemoptysis
4.8.   Workshop: Non-Invasive Mechanical Ventilation BIPAP

Module 5. Neurological Emergencies

5.1.   Acute Confusional Syndrome
5.2.   Stroke
5.3.   Seizures
5.4.   Headaches
5.5.   Central Nervous System (CNS) Infections
5.6.   Coma

Module 6. Digestive Emergencies

6.1.   Acute Abdominal Pain
6.2.   Intestinal Obstruction
6.3.   Acute Gastroenteritis
6.4.   Acute Pancreatitis
6.5.   Acute Biliary Disease
6.6.   Acute Gastrointestinal Bleeding
6.7.   Proctology Emergencies

Module 7. Nephrological and Urologic Emergencies

7.1.   Acute Kidney Failure
7.2.   Acute Urinary Retention
7.3.   Renal Colic
7.4.   Acute Scrotum
7.5.   Rhabdomyolysis

Module 8. Endocrine Emergencies

8.1.   Hyperglycemia
    8.1.1.   Diabetic ketoacidosis
    8.1.2.   Hyperosmolar Nonketotic Coma
8.2.   Hypoglycemia
8.3.   Addisonian Crisis
8.4.   Other Endocrine Emergencies

Module 9. Ophthalmologic Emergencies

9.1.   Eyelid and Lacrimal System Diseases
9.2.   Pink Eye
9.3.   Sudden Loss of Vision
9.4.   Eye Injuries

Module 10. Otolaryngologic Emergencies

10.1.   Infectious Processes in ENT
10.2.   Foreign Objects in ENT
10.3.   Epistaxis
10.4.   Vertigo
10.5.   Sudden Loss of Hearing

Module 11. Trauma and Neurosurgical Emergencies

11.1.   Lower Back Pain and Lumbosciatica
11.2.   Trauma. General Aspects
11.3.   Lower Extremity Trauma
11.4.   Upper Extremity Trauma
11.5.   Body and Head Trauma
11.6.   Cranioencephalic Trauma. Skull Fractures and Contusions
11.7.   Thoracic Trauma. Rib Fractures and Contusions
11.8.   Vertebral Fractures and Contusions
11.9.   Cerebral Hemorrhage
11.10.   Spinal Cord Injury
11.11.   Out-of-Hospital Major Trauma Care. Polytrauma Code
11.12.   Injuries and Burns
11.13.   Workshop on Mobilization and Immobilization of Trauma Patients
11.14.   Workshop on Functional Bandages
11.15.   Plaster Workshop
11.16.   Acute and Chronic Wound Care Workshop
11.17.   Suture Workshop

Module 12. Vascular Emergencies

12.1.   Acute Limb Ischemia
12.2.   Deep Vein Thrombosis
12.3.   Venous Insufficiency
12.4.   Aneurysmal Disease

Module 13. Pediatric Emergencies

13.1.   Acute Febrile Episode
13.2.   Febrile Seizures
13.3.   Abdominal Pain
13.4.   Gastrointestinal Disorders
13.5.   Airway Diseases
13.6.   Acute Headache
13.7.   Child Abuse
13.8.   Limping
13.9.   Initial Care for Pediatric Polytrauma Patients

Module 14. Gynecological Emergencies

14.1.   Gynecological Emergencies
    14.1.1.   Gynecological Abdominal Pain
    14.1.2.   Vulvovaginal Infectious Disease
14.2.   Pregnancy and Postpartum Emergencies
    14.2.1.   Genital Bleeding
    14.2.2.   Hypertensive Emergencies in Pregnancy
    14.2.3.   Drugs in Pregnancy and Lactation
14.3.   Protocol for Rape Victim Care
14.4.   Labor

Module 15. Psychiatric Emergencies

15.1. Psychotic Symptomatology. Hallucinations
15.2. Suicidal Crisis Intervention
15.3. Behavioral Disorders. Psychomotor Agitation
15.4. Alcohol Withdrawal Syndrome
15.5. Neuroleptic Malignant Syndrome
15.6. Anxiety Attack. Panic Attack
15.7. Workshop: Mechanical Restraint of an Agitated Patient

Module 16. Environmental Emergencies

16.1. Heat Illness
16.2. Bites and Stings
16.3. Anaphylaxis
16.4. Electrocution
16.5. Dysbarism

Module 17. Skin Emergencies

17.1. Hypersensitivity Lesions
17.2. Skin Infections
17.3. Skin Emergencies

Module 18. Skin Emergencies

18.1. Anemic Syndrome in the Emergency Department
18.2. Hemotherapy
18.3. Thrombopenia. Hemostasis Disorders
18.4. Anticoagulation and Thromboprophylaxis

Module 19. Infectious Emergencies

19.1. Risk Exposure and Exposure to Potentially Contaminating Material EVE Code
19.2. Fever in H.I.V. Infected Patients
19.3. Fever of Unknown Origin
19.4. Urinary Tract Infections
19.5. Fever and Rash

Module 20. Oncologic Emergencies

20.1. Basic Management of Patients with Oncologic Emergencies
20.2. Febrile Syndrome in Oncologic Patients (Special Attention to Febrile Neutropenia)
20.3. Pain and Terminal Sedation
    20.3.1. Types of Pain
    20.3.2. Pain Treatment
    20.3.3. Terminal Sedation
20.4. Acute Complications of Chemotherapy Treatment
    20.4.1. Mucositis
    20.4.2. Acneiform Rash
    20.4.3. Nausea and Vomiting
    20.4.4. Diarrhea
    20.4.5. Cachexia-Anorexia-Asthenia Syndrome

Module 21. Toxicology Emergencies

21.1. General Management of Acute Poisoning
21.2. Alcohol Poisoning
21.3. Drug Poisoning
    21.3.1. Analgesic Poisoning
    21.3.2. Digitalis Poisoning
    21.3.3. Other Poisoning (Lithium, Ethylene Glycol, Methanol, Beta-Blockers)
    21.3.4. Psychotropic Drug Poisoning
21.4. Drug Poisoning
21.5. Caustic Poisoning
21.6. Carbon Monoxide Poisoning
21.7. Poisoning from Organophosphate, Carbamate and Organochlorine Insecticides

Module 22. Geriatric Emergencies

22.1. Geriatric Emergencies I
22.2. Geriatric Emergencies II

Module 23. Pharmacology in Emergencies

23.1. Pain Management
23.2. Sedoanalgesia in Emergencies
23.3. Adverse Effects to Medications

Module 24. Evidence-Based Medicine

24.1. Recovery of Quality Information Specializing in Health Sciences
    24.1.1. Knowledge of Different Information Sources: General Search Engines (UpToDate), Databases (PubMed CINAHL) and *Clearinghouse* of Clinical Practice Guidelines
    24.1.2. Design of Search Strategies with Subject Headings (MeSH), Free Language Terms and Boolean Operator Algebra. PICO Questions (Patient, Intervention, Comparison, Outcome)
    24.1.3. Refinement of Search Results: Methodological Filters
    24.1.4. Creating Bibliographic Alerts
24.2. Bibliographic Reference Management
    24.2.1. Importance References Directly from Databases (PubMed, Cinahl)
    24.2.2. PDF Metadata Extraction
    24.2.3. Use of Tags or Metatags to Classify the Bibliography
    24.2.4. Including References in the Text (Word). Vancouver Style
    24.2.5. Cloud Search Salvage
24.3. Critical Reading on Outcomes Research
    24.3.1. Quantitative Research Designs (Oservational, Quasi-Experimental, Experimental) Data Interpretation and Techniques for Controlling Reliability, Validity, and Scientific Accuracy
    24.3.2. Qualitative Research Designs and Identification of the Social and Cultural Components of Health and Illness. Individual Results and Populations. Clinical, Economic, and Satisfaction Results
    24.3.3. Instruments for Critical Reading: AGREE Instrument

24.4. Writing Articles with Scientific Structure and Publishing Results in High Impact Journals

24.4.1. Standardized Structure of a Scientific Article

24.4.2. Open Access Policy and Protocol for Publishing an Article

24.4.3. Digital Autonomy in Public Participation (Blogs and Social Networks) Digital Identity and Privacy on the Web

24.4.4. Intellectual Property: Licenses and Symbols that Reflect the Attribution and Recognition of the Authorship of Works in Different Media: text, images and videos

Module 25. Latest Information on Coronavirus Infections

25.1. Discovery and Evolution of Coronaviruses

25.1.1. Discovery of Coronaviruses

25.1.2. Global Trends in Coronavirus Infections

25.2. Main Microbiological Characteristics and Members of the Coronavirus Family

25.2.1. General Microbiological Characteristics of Coronaviruses

25.2.2. Viral Genome

25.2.3. Principal Virulence Factors

25.3. Epidemiological Changes in Coronavirus Infections since its Discovery to Present Day

25.3.1. Morbidity and Mortality of Coronavirus Infections from their Emergence to the Present

25.4. The Immune System and Coronavirus Infections

25.4.1. Immunological Mechanisms Involved in the Immune Response to Coronaviruses

25.4.2. Cytokine Storm in Coronavirus Infections and Immunopathology

25.4.3. Modulation of the Immune System in Coronavirus Infections

25.5. Pathogenesis and Pathophysiology of Coronavirus Infections

25.5.1. Pathophysiological and Pathogenic Alterations in Coronavirus Infections

25.5.2. Clinical Implications of the Main Pathophysiological Alterations

25.6. Risk Groups and Transmission Mechanisms of Coronaviruses

25.6.1. Main Sociodemographic and Epidemiological Characteristics of Risk Groups Affected by Coronavirus

25.6.2. Coronavirus Mechanisms of Transmission

25.7. Natural History of Coronavirus Infections

25.7.1. Stages of Coronavirus Infection

25.8. Updated Microbiological Diagnosis of Coronavirus Infections

25.8.1. Sample Collection and Shipment

25.8.2. PCR and Sequencing

25.8.3. Serology Testing

25.8.4. Virus Isolation

25.9. Current Biosafety Measures in Microbiology Laboratories for Coronavirus Sample Handling

25.9.1. Biosafety Measures for Coronavirus Sample Handling

25.10. Up-to-Date Management of Coronavirus Infections

25.10.1. Prevention Measures

25.10.2. Symptomatic Treatment

25.10.3. Antiviral and Antimicrobial Treatment in Coronavirus Infections

25.10.4. Treatment of Severe Clinical Forms

25.11. Future Challenges in the Prevention, Diagnosis and Treatment of Coronavirus

25.11.1. Global Challenges for the Development of Prevention, Diagnostic, and Treatment Strategies for Coronavirus Infections

07

Clinical Internship

This Hybrid Professional Master's Degree in Primary Care Emergencies contains a 3-week internship that can be performed once the online learning phase has been completed. Therefore, upon completion of this period, they will be able to put into practice the new procedures acquired, being able to come into contact with real patients, always under the guidance of renowned specialists from the health center itself.

"

You will have the opportunity to carry out an internship in a prestigious center where you will be able to put into practice the most advanced procedures in the field of primary care emergencies"

This internship consists of a 3-week stay in a clinic, from Monday to Friday, with 8 consecutive hours of active learning with a specialist from the health center. Therefore, the physician will have access to real patients, always accompanied by a renowned professional, who will transmit the most modern and effective approaches in each case.

The student will actively participate by performing activities and procedures related to each area of competence (learning to learn and learning to do), with the support and guidance of the teachers and other classmates to facilitate teamwork and multidisciplinary integration as transversal competencies for the practice of primary care medicine (learning to be and learning to relate to others).

Meet patients with all types of pathologies in a real healthcare environment and update your knowledge with the accompaniment of professionals from the clinical center itself"

The procedures described below will be the basis of the practical part of the training, and their implementation will be subject to the center's own availability and workload, the proposed activities being the following:

Module	Practical Activity
Organization and Control of the Emergency Department	Collaborate with the services and means available in the health care of emergency patients
	Perform assessments of emergencies such as syncope, hypertensive crises or acute heart failure
	Take action on possible bradyarrhythmias or tachyarrhythmias
	Participate in the organization of patient transfers to other areas or centers
Cardiac, Pneumological and Neurological Emergencies	Assess the application of noninvasive mechanical ventilation BIPAP
	Assess emergencies such as pneumonia and pulmonary thromboembolism
	Manage the use of ultrasound in those cases that require it
	Analyze the use of invasive techniques in the emergency department
	Interpret electrocardiograms to detect possible pathologies
Surgical Emergencies and Pharmacology	Apply the appropriate procedures for patient pain management
	Support the specialist in the application of sedoanalgesia
	Prescribe, under the supervision of the specialist, the most appropriate pharmacology in each case in each case
	Refer to surgery those patients who require critical interventions
	Manage the current surgical services in the Emergency Department
Traumatology, Neurosurgery and Neurological Emergencies	Assess the arrival of patients with stroke, seizures, headaches or coma
	Manage patients with trauma, cerebral hemorrhages or burns
	Dictate the use of bandages, casts, sutures and dressings to be performed
Geriatric and Pediatric Emergencies	Assess the emergencies of the elderly
	Treat common pediatric emergencies such as headaches, febrile episodes or abdominal pains or abdominal pain
	Address the communicative psychology with family members of pediatric and elderly patients

Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.

General Conditions of the Internship Program

The general terms and conditions of the internship program agreement shall be as follows:

1. TUTOR: During the Hybrid Professional Master's Degree, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

2. DURATION: The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

3. ABSENCE: If the students does not show up on the start date of the Hybrid Professional Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

4. CERTIFICATION: Professionals who pass the Hybrid Professional Master's Degree will receive a certificate accrediting their stay at the center.

5. EMPLOYMENT RELATIONSHIP: the Hybrid Professional Master's Degree shall not constitute an employment relationship of any kind.

6. PRIOR EDUCATION: Some centers may require a certificate of prior education for the Hybrid Professional Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

7. DOES NOT INCLUDE: The Hybrid Professional Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed.

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

Where Can I Do the Clinical Internship?

This Hybrid Professional Master's Degree in Primary Care Emergencies will allow the professional to carry out the 3 weeks of intensive internship in a center of recognized international prestige. In it, they will not only learn about real cases and patients with various pathologies, but will also have access to numerous materials and technologies related to the diagnosis and monitoring of diseases of all kinds.

This program will give you access to the best healthcare centers to carry out a profitable internship that will bring you up-to-date in the field of Primary Care Emergencies"

The student will be able to complete the internship of this Hybrid Professional Master's Degree at the following centers:

Medicine.

Hospital Recoletas Campo Grande

Country	City
Spain	Valladolid

Address: Pl. de Colón, s/n, 47007 Valladolid

Clinical center specialized in multidisciplinary healthcare

Related internship programs:
- Intensive Care Nursing
- Gynecologic Oncology

" *Take advantage of this opportunity to surround yourself with expert professionals and learn from their work methodology"*

09
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*"

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:

1. 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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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.

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.

20%

15%

15%

3%

20%

17%

7%

3%

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.

10
Certificate

The Hybrid Professional Master's Degree in Primary Care Emergencies guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid Professional Master's Degree diploma issued by TECH Technological University.

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

This **Hybrid Professional Master's Degree in Primary Care Emergencies** contains the most complete and up-to-date program on the professional and educational field.

After the student has passed the assessments, they will receive their corresponding Hybrid Professional Master's Degree diploma issued by TECH Technological University via tracked delivery*.

In addition to the diploma, students will be able to obtain an academic transcript, as well as a certificate outlining the contents of the program. In order to do so, students should contact their academic advisor, who will provide them with all the necessary information.
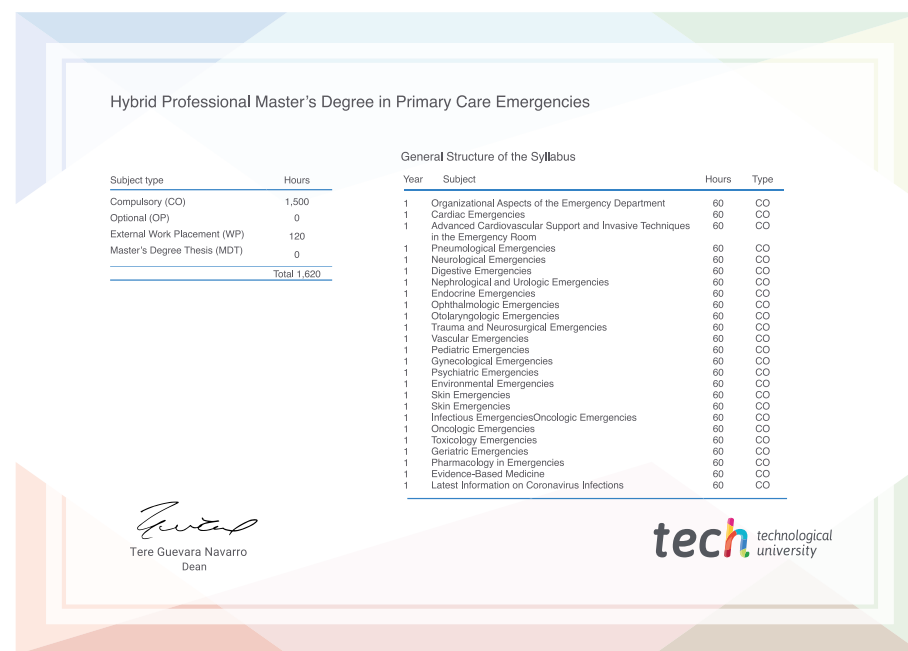
Program: **Hybrid Professional Master's Degree in Primary Care Emergencies**

Course Modality: **Hybrid (Online + Clinical Internship)**

Duration: **12 months.**

Certificate: **TECH Technological University**

Teaching Hours: **1,620 h.**

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tech technological university

Awards the following
DIPLOMA
to

Mr./Ms. _____, with identification number _____.
For having successfully passed and accredited the following program

HYBRID PROFESSIONAL MASTER'S DEGREE
in
Primary Care Emergencies

This is a qualification awarded by this University, with a duration of 1,620 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.   Unique TECH Code: AFWORD23S   techtitute.com/certificates

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Hybrid Professional Master's Degree in Primary Care Emergencies

Subject type	Hours
Compulsory (CO)	1,500
Optional (OP)	0
External Work Placement (WP)	120
Master's Degree Thesis (MDT)	0
Total	1,620

General Structure of the Syllabus

Year	Subject	Hours	Type
1	Organizational Aspects of the Emergency Department	60	CO
1	Cardiac Emergencies	60	CO
1	Advanced Cardiovascular Support and Invasive Techniques in the Emergency Room	60	CO
1	Pneumological Emergencies	60	CO
1	Neurological Emergencies	60	CO
1	Digestive Emergencies	60	CO
1	Nephrological and Urologic Emergencies	60	CO
1	Endocrine Emergencies	60	CO
1	Ophthalmologic Emergencies	60	CO
1	Otolaryngologic Emergencies	60	CO
1	Trauma and Neurosurgical Emergencies	60	CO
1	Vascular Emergencies	60	CO
1	Pediatric Emergencies	60	CO
1	Gynecological Emergencies	60	CO
1	Psychiatric Emergencies	60	CO
1	Environmental Emergencies	60	CO
1	Skin Emergencies	60	CO
1	Skin Emergencies	60	CO
1	Infectious EmergenciesOncologic Emergencies	60	CO
1	Oncologic Emergencies	60	CO
1	Toxicology Emergencies	60	CO
1	Geriatric Emergencies	60	CO
1	Pharmacology in Emergencies	60	CO
1	Evidence-Based Medicine	60	CO
1	Latest Information on Coronavirus Infections	60	CO

Tere Guevara Navarro
Dean

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*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.

Hybrid Professional Master's Degree
Primary Care Emergencies

- » Modality: **online**
- » Duration: **12 months**
- » Certificate: **TECH Technological University**
- » Dedication: **16h/week**
- » Schedule: **at your own pace**
- » Exams: **online**

Hybrid Professional Master's Degree
Primary Care Emergencies

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