

# Professional Master's Degree Emergencies in Primary Care





## Professional Master's Degree Emergencies in Primary Care

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/professional-master-degree/master-emergencies-primary-care](http://www.techtute.com/us/medicine/professional-master-degree/master-emergencies-primary-care)

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# 01

# Introduction

The role of the family physician is key in emergency care services, and this program is designed to help professionals update their knowledge of Emergencies in Primary Care. In addition, it includes systematized action plans for the most frequent emergencies, helping them to make swift and accurate decisions when managing patients with urgent conditions.



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*Specializing in the main developments in COVID-19 saves lives. We offer you the most updated specialization on the subject so that you can perform your activity with total security”*

Emergency health care is an essential element in a health system, in which quality and ongoing care for individuals must be guaranteed. Primary care is the gateway to the health system, often receiving patients with potentially serious conditions that require immediate and complex treatment, often accompanied by minimal resources.

Taking into account the large number of hours a day that Primary Care (PC) doctors are available to attend to emergencies; the importance of these, the current demands of patients and of professionals themselves to perform higher quality work, more than justifies the fact that PC doctors today can and should intervene in all emergencies that may arise, regardless of the level of severity. For this reason, the role of the primary care emergency physician is key.

This Professional Master's Degree includes the rules of action for the main urgent conditions that can be found in the treatment room on a regular basis and will be able to help doctors make swift and accurate decisions.

In addition, the program features the participation of one of the most important international figures in the field of Primary Care Emergency Medicine. As International Guest Director, Dr. Jesse M. Pines will bring his extensive experience to the program through a series of exclusive *Masterclasses* detailing the main innovations and developments in the field.

All knowledge is presented through high-quality multimedia content, analysis of clinical cases prepared by experts, classes, and video techniques that allow the exchange of knowledge and experience, maintain and update the format level of its members, create protocols for action and disseminate the most important developments in emergencies in primary care.

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

- ♦ Practical cases presented by experts in emergencies in 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 latest developments in Emergencies in Primary Care
- ♦ Practical exercises where the process of self-assessment can be used to improve learning
- ♦ Emphasis on innovative methodologies in Emergencies in Primary Care
- ♦ 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



*Take advantage of this unique opportunity to delve into the field of Emergencies in Primary Care with one of the most internationally recognized experts"*

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*This Professional Master's Degree is the best investment you can make in the selection of a refresher program to update your knowledge in Emergencies in Primary Care"*

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

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education 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 during the academic year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*We have the best teaching material, an innovative methodology and 100% online learning, which will facilitate your study.*

*If you are looking for success in your profession, we can help you achieve it. We offer you the most complete specialization in Emergencies in Primary Care.*



# 02 Objectives

The main objective of the program is the development of theoretical and practical learning, so that the physician can master in a practical and rigorous way in Emergencies in Primary Care



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*This Professional Master's Degree will allow you to update your knowledge in Emergencies in Primary Care with the use of the latest educational technology, to contribute with quality and safety to decision making"*



## General Objective

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- ♦ Get up-to-date in the diagnostic and therapeutic procedures for the most frequent urgent and emergency situations that doctors usually deal with in Primary Care

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*Take the step to get up-to-date on the latest developments in Emergencies in Primary Care”*





## Specific Objectives

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### Module 1. Organizational Aspects of the Emergency Department

- ♦ Define the structure and organization of emergency services in primary care
- ♦ Understand the importance of medical records in the emergency department and understand the most relevant legal and ethical aspects of health care in emergencies in primary care
- ♦ Understand the role of healthcare professionals in Emergencies in Primary Care

### Module 2. Cardiac Emergencies

- ♦ Identify the symptoms of the different types of high-risk syncope
- ♦ 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
- ♦ 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 of prehospital fibrinolysis
- ♦ 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
- ♦ Recognize the different signs and symptoms typical of ischemic heart disease

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

- ♦ Interpret the main signs in order to properly analyze an electrocardiogram in urgent and emergency situations in Primary Care
- ♦ Use general procedures and techniques applied to critical patients in emergency situations
- ♦ Get up-to-date on the therapeutic model in atrial fibrillation according to the latest scientific evidence
- ♦ Apply up-to-date basic and advanced CPR techniques for all ages
- ♦ Demonstrate the correct sequence of transcutaneous pacemaker application
- ♦ Define proper use of pulse oximetry and capnography devices

### Module 4. Respiratory Emergencies

- ♦ Incorporate advances in the appropriate management of patients with Congestive Heart Failure and Acute Pulmonary Edema
- ♦ Review the basic concepts of non-invasive mechanical ventilation management
- ♦ Correct use of non-invasive mechanical ventilation through the Boussignac CPAP System
- ♦ Identify the different vital rhythms to apply the appropriate algorithm for advanced cardiopulmonary resuscitation, according to the latest scientific evidence on advanced cardiovascular support
- ♦ Adequately define the different parameters involved in invasive mechanical ventilation
- ♦ 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 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
- ♦ 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 5. Neurological Emergencies**

- ♦ Describe the initial management of the main neurological emergencies in out-of-hospital settings
- ♦ Adequate use of the comprehensive action plan for the Code Stroke
- ♦ Differentiate immediate and appropriate action in acute confusional syndrome, headache and seizures
- ♦ Recognize and resolve a seizure situation
- ♦ Describe the different types of headaches and the appropriate treatment in each case
- ♦ Recognize a coma situation without any doubt

#### **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
- ♦ Express the different manifestations resulting from biliary diseases
- ♦ Recognize the specific pathological picture of upper gastrointestinal bleeding
- ♦ 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
- ♦ Identify the signs and symptoms of a patient with rhabdomyolysis
- ♦ Assess the criteria for referring a patient with a urinary tract infection

#### **Module 8. Pediatric Emergencies**

- ♦ Master the procedure of pediatric and neonatal cardiopulmonary resuscitation in the primary care setting
- ♦ 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
- ♦ Apply the initial treatment measures for traumatized 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 9. 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
- ♦ Distinguish between hypoglycemia and hyperglycemia, and apply appropriate treatment
- ♦ Delve into non-ketotic hyperosmolar comas

**Module 10. 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
- ♦ Master treatment when an ocular aggression occurs

**Module 11. Otolaryngologic Emergencies**

- ♦ Compare the differences between anterior and posterior epistaxis
- ♦ Analyze the different treatments for vertigo
- ♦ Delve into sudden deafness and communication with patients

**Module 12. Trauma and Neurosurgical Emergencies**

- ♦ Analyze the different traumatological conditions in Emergencies in Primary Care
- ♦ 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 13. Vascular Emergencies**

- ♦ Identify acute arterial limb ischemia
- ♦ Apply treatment in case of deep vein thrombosis
- ♦ Interpret the potential severity of venous insufficiency
- ♦ Delve into aneurysmal disease and existing treatments

**Module 14. Gynecological Emergencies**

- ♦ Identify the most common 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

- ♦ Understand the care protocol for rape victims
- ♦ Identify the different drugs in pregnancy and lactation that do not put the patient's health at risk

**Module 15. Psychiatric Emergencies**

- ♦ Define the clinical symptomatology of psychopathologies
- ♦ Identify the main signs and analyze the risk of a self-harm attempt
- ♦ Adequately resolve a psychomotor agitation crisis
- ♦ Indicate the appropriate treatment for alcohol withdrawal syndrome
- ♦ Recognize the clinical symptomatology of an anxiety attack and differentiate it from other pathologies
- ♦ 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
- ♦ Discriminate between the different treatments to be applied in case of bites and stings
- ♦ Correctly apply treatment in case of electrocution
- ♦ Delve into heat stroke and how to act in case of emergency

**Module 17. Skin Emergencies**

- ♦ Differentiate between the different degrees of burns
- ♦ Calculate the amount of fluids needed to infuse a burn victim according to the extent and depth of the burn
- ♦ Distinguish between the various types of skin infections

**Module 18. Hematological Emergencies**

- ♦ Correctly apply hemotherapy in patients with hematological conditions
- ♦ Distinguish between the different anticoagulant treatments
- ♦ Delve into anemia and how to act in case of emergency
- ♦ Identify hemostasis disorders

**Module 19. Oncologic Emergencies**

- ♦ Recognize the most common infectious, inflammatory, autoimmune, and tumor diseases in primary care
- ♦ Use therapeutic measures for oncology patients with neutropenia
- ♦ Identify the different acute complications in chemotherapy treatment
- ♦ Master the types of pain and terminal sedation

**Module 20. Infectious Emergencies**

- ♦ Recognize the symptoms and signs of severity in case of acute febrile episode
- ♦ Distinguish the differential diagnosis of abdominal pain, vomiting, and diarrhea
- ♦ Identify patients with fever due to HIV infection
- ♦ Correctly diagnose urinary tract infections

**Module 21. Toxicology Emergencies**

- ♦ Identify the main immunological emergency pathologies and manage patients suffering from anaphylactic reactions
- ♦ Effectively implement initial measures in 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
- ◆ Identify the types of pathologies that can affect geriatric patients
- ◆ Master the drugs to be administered to geriatric patients according to their needs

#### **Module 23. Pharmacology in Emergencies**

- ◆ Manage frequently used medication in emergency medicine and urgent care
- ◆ Distinguish between the different types of fluid therapy
- ◆ Point out the different drugs used for sedation, pain relief, and relaxation in emergency medicine

#### **Module 24. Evidence-Based Medicine**

- ◆ Master writing scientifically structured articles and publishing results in high impact journals
- ◆ Delve into the retrieval of quality, specialized information in health sciences

#### **Module 25. Update on Coronavirus Infections**

- ◆ Know the microbiological characteristics of coronaviruses.
- ◆ Know how to assess the morbidity and mortality of coronavirus infections.
- ◆ Identify the main risk groups and mechanisms of coronaviruses.
- ◆ Be able to perform the necessary tests for diagnosing Coronavirus
- ◆ Know how to apply the necessary preventive measures, as well as the most accurate treatments according to the type of patient.

# 03 Skills

After passing the assessments on the Professional Master's Degree in Emergencies in Primary Care, the professional will have acquired the necessary professional skills for quality, up-to-date care based on the most recent scientific evidence.



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*Through this program you will learn about the most frequent emergency situations of patients in the primary care setting”*



## General Skills

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- ♦ Possess and understand knowledge that allows originality in the development and/or application of ideas, often in a research context
- ♦ Know how to apply the acquired knowledge and problem solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area 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

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- ♦ 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 and 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 with or present symptoms of Coronavirus, complying with all safety measures
- ♦ Perform diagnostic tests to detect possible cases of Coronavirus



*Take advantage of the opportunity and take the step to get up-to-date on the latest developments in the approach to primary health care”*

# 04

# Course Management

The program includes in its teaching staff renowned experts in Emergencies in Primary Care, who have contributed their work experience to this program. Additionally, other recognized experts participate in its design and preparation, completing the program in an interdisciplinary manner.



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*Leading professionals in the field have come together to teach you the latest advances  
Emergencies in Primary Care"*

## 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 variety of specialties, including the ER, 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 over 350 peer-reviewed articles and writing seven books in these areas. His work has been recognized internationally in various reputable media outlets, 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 was the Director of the Center for Health Innovation and Research, also leading the Research Fellowship program and the Center for Healthcare Quality.

Therefore, throughout his career, Dr. Jesse M. Pines has received multiple awards, both for the articles he has published and for his own work and contribution to the **field of Emergency Medicine**. He is also the Chairman of the American College of Emergency Physicians (ACEP) Task Force on New Models of Professional Practice, 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. Pines, Jesse M.

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- ♦ National Director of Clinical Innovation at US Acute Care Solutions, United States
- ♦ Emergency Physician at Allegheny Health Network
- ♦ Professor of Emergency Medicine at George Washington University
- ♦ Professor of Emergency Medicine at Drexel University
- ♦ Director of the Medical Research Fellowship Program, George Washington University
- ♦ Director of the George Washington University Center for Health Research and Innovation
- ♦ M.D., Georgetown University
- ♦ Master of Business Administration from Georgetown University
- ♦ M.S. in Clinical Epidemiology, University of Pennsylvania

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*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 Valencia University Clinical Hospital
- ◆ Assistant Physician in the Emergency Medicine Department at Valencia Clinical University Hospital
- ◆ Physician of the CIBE of Valencia Health and Community Foundation
- ◆ Professor of Human Anatomy in 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

- ◆ Section Chief of the Emergency Medicine Department of the La Ribera University Hospital
- ◆ Hospital Emergency Physician
- ◆ Associate Professor of Emergency Medicine in the Faculty of Medicine of the University of Valencia



05

# Structure and Content

The structure of the contents has been designed by a team of professionals from the best educational centers and universities in the country, aware of the current relevance of innovative education, and committed to quality teaching through new educational technologies.





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*A comprehensive teaching program, structured in well-developed teaching units, oriented towards efficient and swift learning. It includes the latest scientific evidence on Coronavirus”*

### 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 Emergencies in Primary Care
- 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 (NSTEMI)
  - 2.4.2. ST-Elevation Acute Coronary Syndrome (STEMI)
  - 2.4.3. The Heart Attack Code
- 2.5. Atrial Fibrillation
- 2.6. Hypertensive Crisis
- 2.7. Pericarditis
- 2.8. 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. General Aspects
- 3.2. Basic Life Support and AED in Adults
- 3.3. Advanced Life Support in Adults
  - 3.3.1. Advanced Airway Management
  - 3.3.2. Arrhythmia Treatment
    - 3.3.1. Infusion Routes and Drugs
    - 3.3.2. Rapid Intubation Sequence Workshop
- 3.4. Basic Pediatric Life Support
- 3.5. Advanced Pediatric Life Support
  - 3.5.1. Recognition and Management of Critically Ill Children
  - 3.5.2. Advanced Airway Management
  - 3.5.3. Basics of Mechanical Ventilation in Pediatrics
  - 3.5.4. Infusion Routes and Drugs in Pediatric CPR
  - 3.5.5. Pediatric VAS Algorithms and Arrhythmia Treatment
- 3.6. Neonatal Resuscitation
  - 3.5.1. Post-resuscitation Stabilization and Neonatal Transport
- 3.7. Life Support in Special Cases
- 3.8. Invasive Procedures and Techniques in the Emergency Department

### Module 4. Respiratory Emergencies

- 4.1. Acute Dyspnea
- 4.2. Acute Chronic Obstructive Pulmonary Disease (COPD)
- 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. Headaches
- 5.4. Central Nervous System (CNS) Infections: Meningitis, Encephalitis and Brain Abscess
- 5.5. Coma
- 5.6. Seizures

### Module 6. Digestive Emergencies

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

- 8.1. Acute Febrile Episode
- 8.2. Febrile Seizures
- 8.3. Abdominal Pain
- 8.4. Gastrointestinal Disorders
- 8.5. Airway Diseases.
- 8.6. Acute Headache
- 8.7. Child Abuse.
- 8.8. Limping
- 8.9. Initial Care for Pediatric Polytrauma Patients

### Module 9. Endocrine Emergencies

- 9.1. Hyperglycemia
  - 8.1.1. Diabetic ketoacidosis
  - 8.1.2. Hyperosmolar Nonketotic Coma
- 9.2. Hypoglycemia
- 9.3. Addisonian Crisis
- 9.4. Other Endocrine Emergencies

### Module 10. Ophthalmologic Emergencies

- 10.1. Eyelid and Lacrimal System Diseases
- 10.2. Pink Eye
- 10.3. Sudden Loss of Vision.
- 10.4. Eye Injuries.

### Module 11. Otolaryngologic Emergencies

- 11.1. Infectious Processes in ENT
- 11.2. Foreign Objects in ENT.
- 11.3. Epistaxis.
- 11.4. Vertigo.
- 11.5. Sudden Loss of Hearing.

### Module 12. Trauma and Neurosurgical Emergencies

- 12.1. Locomotor System Trauma and Hemorrhage
- 12.2. Lower Extremity Trauma
- 12.3. Upper Extremity Trauma
- 12.4. Cranioencephalic Trauma
- 12.5. Thoracic Trauma.
- 12.6. Vertebral Trauma and Spinal Cord Injury.
- 12.7. Lower Back Pain and Lumbosciatica
- 12.8. Abominal and Pelvic Trauma
- 12.9. Trauma during Pregnancy
- 12.10. Special Traumas
- 12.11. Out-of-Hospital Major Trauma Care. Polytrauma Code
- 12.12. Burns
- 12.13. Workshop on Mobilization and Immobilization of Trauma Patients
- 12.14. Workshop on Functional Bandages
- 12.15. Suture Workshop
- 12.16. Plaster Workshop
- 12.17. Acute and Chronic Wound Care Workshop

### Module 13. Vascular Emergencies

- 13.1. Acute Limb Ischemia
- 13.2. Deep Vein Thrombosis (DVT)
- 13.3. Venous Insufficiency
- 13.4. Aneurysmal Disease

### Module 14. Gynecological Emergencies

- 14.1. Gynecological Emergencies
  - 14.1.1. Gynecological Abdominal Pain
  - 14.1.2. Vulvovaginal Infectious Disease
- 14.2. Pregnancy, Birth 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



### Module 15. Psychiatric Emergencies

- 15.1. Psychotic Symptomatology. Hallucinations
- 15.2. Suicidal Crisis Intervention
- 15.3. Nursing Care for Psychomotor Agitation
- 15.4. Behavioral Disorders. Psychomotor Agitation.
- 15.5. Alcohol Withdrawal Syndrome
- 15.6. Neuroleptic Malignant Syndrome.
- 15.7. Anxiety Attack. Panic Attack
- 15.8. 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. Electrocutation.
- 16.5. Dysbarism.

### Module 17. Skin Emergencies

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

### Module 18. Skin Emergencies

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

### Module 19. Oncologic Emergencies

- 19.1. Basic Management of Patients with Oncologic Emergencies
- 19.2. Febrile Syndrome in Oncologic Patients (Special Attention to Febrile Neutropenia)
- 19.3. Pain and Terminal Sedation
  - 19.3.1. Types of Pain
  - 19.3.2. Pain Treatment
  - 19.3.3. Terminal Sedation
- 19.4. Acute Complications of Chemotherapy Treatment

### Module 20. Infectious Emergencies

- 20.1. Risk Exposure and Exposure to Potentially Contaminating Material.
- 20.2. Fever in H.I.V. Patients with Respiratory Focus
- 20.3. Fever of Unknown Origin
- 20.4. Urinary Tract Infections
- 20.5. Fever and Rash

### 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. How to Prepare a Research Protocol in Health
  - 24.1.1. Headings that Make Up the Protocol of a Research Project
  - 24.1.2. Editorial Staff articles with Scientific Structure
  - 24.1.3. Writing a Case Report, Review, Research Article
  - 24.1.3. Style in Scientific Communication
- 24.2. Master's Thesis: Academic Work of Bibliographic Review and Research.
  - 24.2.1. The Importance of a Master's Thesis
  - 24.2.2. Proposal and Feasibility of a Master's Thesis
  - 24.2.3. Recommendations for the Preparation of the Master's Thesis
  - 24.2.4. Recommendations for the Preparation of the Master's Thesis
  - 24.2.5. Recommendations for the Defence of the Master's Thesis

**Module 25. Update on Coronavirus Infections**

- 25.1. Discovery and Evolution of Coronaviruses.
- 25.2. Main Microbiological Characteristics and Members of the Coronavirus Family.
- 25.3. Epidemiological Changes in Coronavirus Infections since its Discovery to Present Day
- 25.4. The Immune System and Coronavirus Infections.
- 25.5. Pathogenesis and Pathophysiology of Coronavirus Infections.
- 25.6. Risk Groups and Transmission Mechanisms of Coronaviruses.
- 25.7. Natural History of Coronavirus Infections.
- 25.8. Latest Information on Microbiological Diagnosis of Coronavirus Infections.
- 25.9. Current Biosafety Measures in Microbiology Laboratories for Coronavirus Sample Handling
- 25.10. Up-to-Date Management of Coronavirus Infections.
- 25.11. Future Challenges in the Prevention, Diagnosis, and Treatment of Coronavirus

06

# 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.



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

## At TECH we use the Case Method

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

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.



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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.*



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

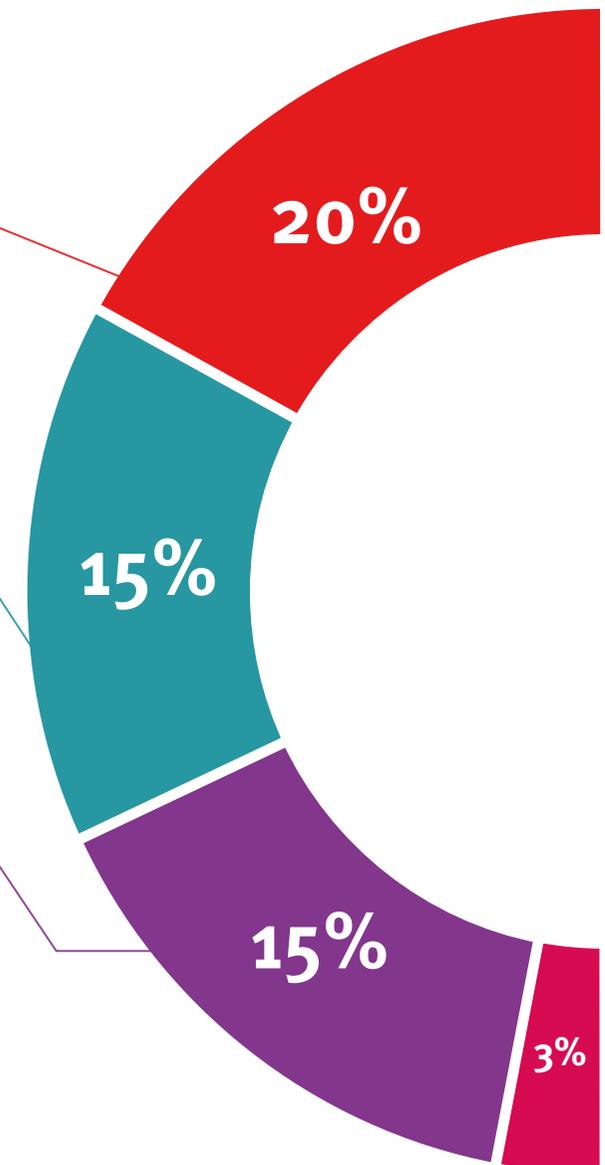
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

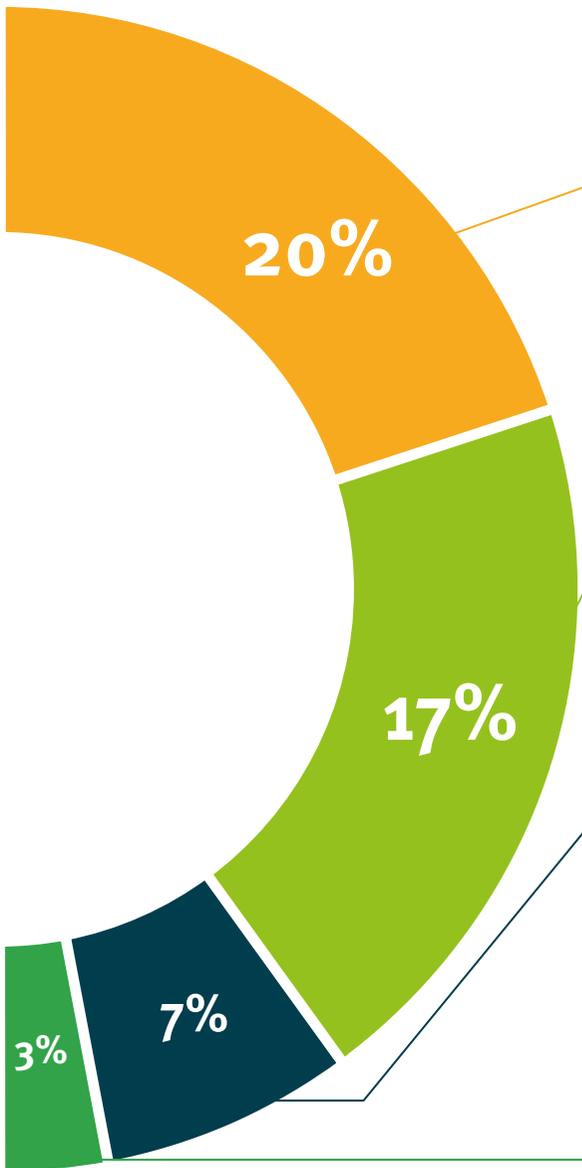
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### 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.





#### 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.



# 07 Certificate

The Professional Master's Degree in Emergencies in Primary Care guarantees students, in addition to the most rigorous and up-to-date education, access to a Professional Master's Degree 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”*

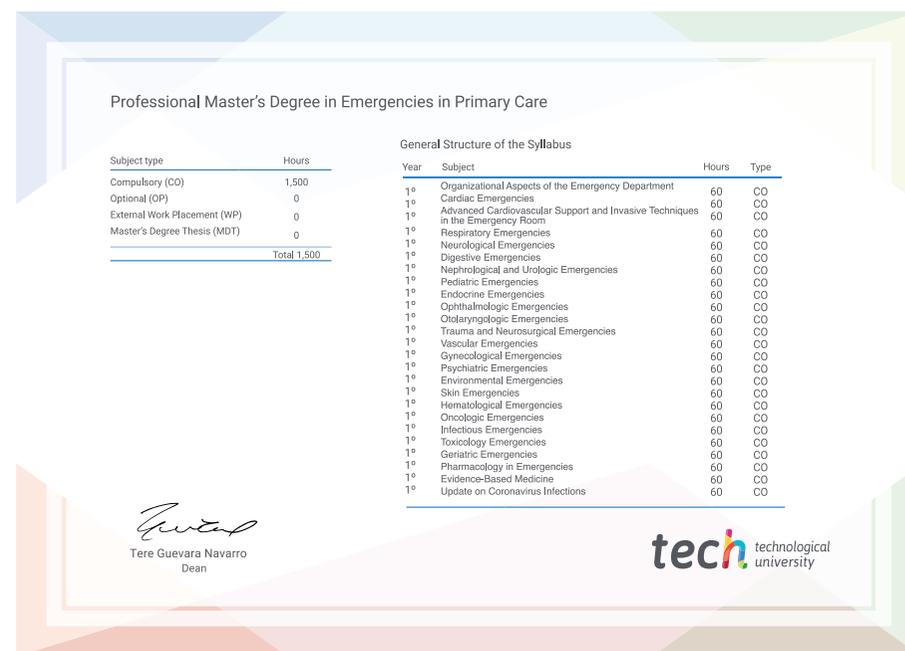
This **Professional Master's Degree in Emergencies in Primary Care** contains the most complete and up-to-date scientific on the market.

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

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Professional Master's Degree, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Professional Master's Degree in Emergencies in Primary Care**

Official N° of Hours: **1,500 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.



## Professional Master's Degree

### Emergencies in Primary Care

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Schedule: at your own pace
- » Exams: online

# Professional Master's Degree

## Emergencies in Primary Care

