

# Professional Master's Degree

## Major Burns





## Professional Master's Degree Major Burns

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

Website: [www.techtitute.com/in/medicine/professional-master-degree/master-major-burns](http://www.techtitute.com/in/medicine/professional-master-degree/master-major-burns)

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# 01

# Introduction

Patients who are affected by major burns usually require multidisciplinary care involving different branches of medicine, as the damage may be deeper than skin damage, and could include damage to vital organs. Therefore, specialization in this field is very important for physicians working in burn units or other related areas. If you want to improve your skills in this field, TECH Technological University has designed this high-level educational program with the main updates in the field.





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*Keeping up to date is key to providing better care to our patients. For this reason, at TECH we have designed this Professional Master's Degree to be at the same level as the leading experts in Major Burns”*

In a single program, this Professional Master's Degree has all the information necessary for the care required by patients with severe burns. The multidisciplinary aspect of the specialization is noteworthy, as these patients are extremely complex and require many specialists working together, with the aim of achieving a rapid recovery.

In addition to the complete and fully up-to-date information, it offers the greatest experience from the teaching staff in the treatment of this type of patient. This experience is very valuable since there are very few burn wards and, therefore, the possibility of specialization is scarce.

An innovative part of this Professional Master's Degree is that the theoretical information is complemented with graphs, diagrams, clinical case studies and explanatory videos that will be very useful to retain the information. It also highlights the main developments and provides recommended readings for many topics, especially for those that are new or controversial. As for the case studies, many of them are based on real-life situations, through which the ability to solve different scenarios will be exercised, in addition to serving as a self-assessment for learning.

In this way, the student will update or attain knowledge that will enable them to treat these patients and to work in a team through knowledge of issues related to other specialties. It will also enable the student to face the initial assessment and treatment, fundamental moments for the prognosis. In addition, it has the advantage of being a 100% online specialization, so the student can decide from where to study and at what time to do so, and in this way, they can flexibly self-direct their study schedule.

This **Professional Master's Degree in Major Burns** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- More than 75 clinical case studies are presented by experts in Burns
- 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 presentation of practical workshops on procedures and techniques
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- Action protocols and clinical practice guidelines, which cover the most important latest developments in this specialist area
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection work
- Special emphasis on test-based medicine and research methodologies
- Content that is accessible from any fixed or portable device with an Internet connection



*Boost your skills in treating patients with major burns and give your profession a boost"*

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*This Professional Master's Degree is the best investment you can make in a specialization to update your knowledge of Major Burns”*

The teaching staff includes a team of prestigious urologists, who bring their experience to this educational program, as well as renowned specialists from leading scientific societies.

Its multimedia content, developed with the latest educational technology, will allow professionals to learn in a contextual and situated learning environment, i.e., a simulated environment that will provide immersive specialization for real situations.

The design of this program focuses on Problem-Based Learning, by means of which professionals must try to solve the different professional practice situations that are presented to them throughout the academic year. To achieve this, you will be assisted by an innovative interactive video system developed by renowned experts in the field of Major Burns, with extensive teaching experience.

*This Professional Master's Degree will allow you to study from anywhere in the world. All you need is a computer or mobile device with an internet connection.*

*Our innovative teaching methodology will allow you to study as if you were dealing with real cases, thereby improving your skills.*



02

# Objectives

The program in Major Burns is designed to facilitate the performance of the healthcare professional with the latest advances and most innovative procedures in the sector.







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*This program will both bring a sense of confidence in your daily healthcare activities and will help you grow professionally"*



## General objectives

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- Learn to manage and treat this complex pathology in which Intensive Care Medicine Specialists and plastic surgeons are fundamentally involved, but also other specialists such as anesthesiologists, infectologists, rehabilitators, psychiatrists, etc., and, of course, specialized nurses
- Offer a complete, integrated and multidisciplinary specialization that enables the care of patients with severe burns and that, through knowledge of multidisciplinary aspects, facilitates collaboration with other specialists





## Specific objectives

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### Module 1. Burns: Epidemiology, Classification and Reference Centers

- ♦ Familiarization with burn-related skills
- ♦ Gain an in-depth understanding of the latest developments in classifications and severity scores
- ♦ Clearly outline the actions required for on-site care and transfer of the burned patient
- ♦ Provide the student with the criteria for patient referral to referral centers

### Module 2. Initial Hospital Care and Fluid Therapy

- ♦ Gain an in-depth understanding of the basics of fluid therapy and monitoring in critically ill patients
- ♦ Discuss existing differences in criteria
- ♦ Know how to interpret the results of monitoring with special attention to limitations and possible errors
- ♦ Integrate data from different surveys to enable the student to make appropriate decisions

### Module 3. Primary Care: Airway and Hemodynamics

- ♦ Specialize in the main complications of the burn patient
- ♦ Comment on new classifications and new proposals for action in smoke inhalation syndrome
- ♦ Gain a deeper understanding of the systemic complications of some toxic fumes
- ♦ Learn the skills to diagnose and treat patients with smoke inhalation syndrome

#### Module 4. Surgical Treatment

- ♦ Gain a deeper understanding of the surgical criteria, techniques and materials necessary for surgical treatment
- ♦ Assist the student in multidisciplinary decision making through familiarity with the patient's clinical situation and surgical needs in order to find the best time for surgery and the most appropriate type of surgery at that time

#### Module 5. Pathophysiology and Infection

- ♦ Gain an in-depth understanding of the pathophysiological basis of extensive burns
- ♦ Explain the importance of sepsis in the burn patient and the complications for its early diagnosis, providing the student with criteria and updates on indicators
- ♦ Provide information to aid in the antibiotic treatment of the severe burn patient

#### Module 6. Complications

- ♦ Specialize in the main complications in order to try to prevent them or to stop them early on
- ♦ Understanding the possible severity that these patients may reach
- ♦ Educate the student in the detection and treatment of complications

#### Module 7. Treatment of the Critically Ill Patient with Skin Pathology

- ♦ Specialize in the unique features of the treatment of these burn patients compared to other critical patients
- ♦ Discuss innovative therapeutic possibilities
- ♦ Provide information on other pathologies such as toxic epidermal necrolysis that have a similar treatment and that have been shown to have a better prognosis when admitted and treated in burn units





### **Module 8. Nutrition and Rehabilitation**

- ♦ Make the student aware that the objective of the treatment should be to return to normal life with the minimum number of repercussions and that the treatment of the acute phase is as important as the avoidance of later complications
- ♦ Have a deeper understanding of the nutritional needs of these patients
- ♦ Highlight the importance of rehabilitation at all times

### **Module 9. Pediatric Burns**

- ♦ Know in depth everything related to pediatric burn patients in a structured way and not as mere appendices

### **Module 10. Other Aspects**

- ♦ Highlight the importance of pre- and post-mental illness and post-ICU syndrome
- ♦ Provide students with quick practice guides that will facilitate their work



*Our goal is to achieve academic excellence and to help you achieve it too"*

# 03 Skills

After passing the assessments of the Professional Master's Degree in Major Burns, the physician will have acquired the professional skills necessary for a quality and up-to-date practice based on the latest scientific evidence.





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*With this program, you will be able to master new procedures in the care of large burns that will improve the health of your patients"*



## General Skill

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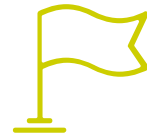
- ♦ To face the care of patients with major burns having the most up to date information and having automatic responses to different situations thanks to the case studies provided during the program

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*Seize the Opportunity and take the step to get up to date on the Latest Developments in Major Burns”*







## Specific Skills

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- ◆ Recognize the severity of patient burns
- ◆ Perform an adequate assessment and initial treatment of the burn patient
- ◆ Gain in-depth knowledge of the two most severe problems that can arise in burn patients: respiratory failure and shock
- ◆ Know the special characteristics of some burns from a surgical point of view
- ◆ Know how to use antibiotic therapy appropriately, especially avoiding the development of resistance
- ◆ Identify the main complications that can affect the burn patient
- ◆ Know how to prepare the anesthesia required for multiple surgical reinterventions and apply the appropriate treatment
- ◆ Deal with the care of pediatric burn patients, taking into account their individual cases
- ◆ Perform preventative work with patients

04

# Course Management

A team of leading professionals in the field of burns, who work in major hospitals of great prestige and prestige, have created the materials, transferring to the program their experience gained in their jobs throughout their careers.



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*The best professionals in this field  
have come together to offer you the  
most specialized expertise in burns"*

## Management



### Dr. Rubio Mateo-Sidrón, Jose Alfonso

- ♦ Attending Physician in Intensive Care Medicine University Hospital 12 de Octubre
- ♦ Fellowship in Cardiothoracic Critical Care. Papworth Hospital. Cambridge UK
- ♦ Extracorporeal Life Support Organization (ELSO)
- ♦ Specialist in Intensive Care Medicine
- ♦ Degree in Medicine. Cádiz University



### Dr. Sánchez Sánchez, Santos Manuel

- ♦ Head of Section of Intensive Care Medicine La Paz University Hospital
- ♦ Doctor of Medicine from the Autonomous University Madrid. Outstanding Cum Laude
- ♦ Master's Degree in Clinical, Medical and Healthcare Management. CEU Cardinal Herrera University
- ♦ Medical Specialist in Intensive Care Medicine. La Paz University Hospital
- ♦ Degree in Medicine and Surgery University of Salamanca

## Professors

### Dr. Rodríguez Peláez, Jorge

- Resident of Intensive Care Medicine at La Paz University Hospital
- Degree in Medicine from the University of Oviedo
- Advanced CPR Instructor. Autonomous University of Barcelona
- Teaching assistant for the Master in Critical Illness and Emergencies

### Dr. Flores Cabeza, Eva

- Specialist in Intensive Care Medicine in the Burn Unit at the La Paz University Hospital
- Member of the High-Level Isolation Unit La Paz-Carlos III
- Certified Expert in Emerging and High-Risk Virus Pathology in the UAM

### Dr. Cachafeiro Fuciños, Lucía

- Specialist in Intensive Care Medicine in the Burns Unit at La Paz University Hospital
- Member of the High-Level Isolation Unit (HLIU) at La Paz University Hospital. La Paz University Hospital Research Institute IdiPAZ

### Dr. Ruiz Barranco, Inés

- Specialist in Intensive Care Medicine in the Burn Unit at the La Paz University Hospital
- Head of the ICU service in the Multidisciplinary Critical Care Unit COVID-19, newly created

### Dr. García Muñoz, Andoni

- Associate of Intensive Care Medicine
- Degree in Medicine and Surgery, University of the Basque Country
- Master's Degree in Clinical Ultrasound for Emergency and Intensive Care CEU

### Dr. Arellano Serrano, María Soledad

- Resident of Intensive Care Medicine La Paz University Hospital
- Degree in Medicine and Surgery from the University of Alcalá de Henares

### D. Velasco Herrero, Jose Carlos

- Nurse in the intensive care-burn unit at la Paz University Hospital
- Nurse of the Skin Bank Unit of the la Paz University Hospital
- Diploma in Nursing from the University of Valladolid
- Professor of Undergraduate and Master's Degree students at the UAX

### Dr. Díaz Alvariño, Claudia

- Resident of Intensive Care Medicine at La Paz University Hospital (Madrid)
- Degree in Medicine from the Faculty of Medicine of the University of Santiago de Compostela
- Accredited instructor and teaching collaborator in Basic Life Support and Life Support courses

**Dr. Díaz Blázquez, Pedro**

- ♦ Medical Specialist in Rehabilitation. Burn Unit. La Paz University Hospital
- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid

**Dr. Agrifoglio Rotaeché, Alexander**

- ♦ Attending Physician in the Intensive care medicine Service. La Paz University Hospital. La Paz University Hospital Research Institute IdiPAZ
- ♦ PhD in Medicine and Surgery, Autonomous University of Madrid

**Dr. Díaz, Mercedes**

- ♦ Specialist in Pediatric Surgery, Pediatric Burn Unit, since 2002 La Paz Pediatric Hospital
- ♦ Certificate of Completion of Specialized Training in Pediatric Surgery
- ♦ Lecturer in courses on Initial Pediatric Trauma Care and Pediatric Damage Control Surgery
- ♦ Coordinator of the course on Initial Pediatric Trauma Care
- ♦ Lecturer in Continuous Training Courses on Initial Pediatric Burn Care

**Dr. de Miguel, Miriam**

- ♦ Specialist in the Children's Burn Unit of the La Paz University Hospital
- ♦ Lecturer in the courses "Initial Pediatric Trauma Care" and "Damage Control Surgery", La Paz University Hospital
- ♦ Member of the European Pediatric Burns Club
- ♦ Member of the Spanish Association of Burns and Electrical Trauma
- ♦ Training stay at the Shriners Hospital for Burned Children in Boston (USA)
- ♦ Attendance and presentation of papers at the 7th World Congress of Pediatric Burns, Boston (USA), and at the 8th World Congress of the European Pediatric Burns Club in Birmingham, UK





**Dr. Durán De la Fuente, Pilar**

- ♦ MD Pediatric Anesthesiologist La Paz Children's Hospital, Madrid
- ♦ Teacher in the course of Initial Pediatric Trauma Care
- ♦ IMS Simulation Instructor
- ♦ Pediatric and Neonatal CPR Instructor
- ♦ Head of Safety of the Surgical Block of La Paz Children's Hospital

**Dr. Avilés García, Marcelo**

- ♦ Specialist in Intensive Care Medicine. La Paz University Hospital, Madrid
- ♦ Degree in Medicine and Surgery from Mayor de San Simón University
- ♦ MIR in Intensive Care Medicine at La Paz University Hospital

**Ms. Moro Ansoleaga, Ana María**

- ♦ Pediatric Nurse Specialist
- ♦ Diploma in Nursing from the Pontificia de Comillas University, Madrid
- ♦ Nursing supervisor UCIN. Gregorio Marañón University Hospital, Madrid

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*The leading professionals in the field have come together to offer you the most comprehensive knowledge in this field, so that you can develop with total guarantees of success”*

05

# Structure and Content

The structure of the curriculum has been designed by a team of professionals who are familiar with the implications of medical education in the approach to the patient, aware of the relevance of the current specialization and committed to quality teaching through new educational technologies.







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*This Professional Master's Degree contains the most complete and up-to-date scientific program on the market”*

## Module 1. Burns: Epidemiology, Classification and Reference Centers

- 1.1. Epidemiology
  - 1.1.1. Incidence
  - 1.1.2. Economic Importance
  - 1.1.3. Major Disasters
- 1.2. Classification of Burns
  - 1.2.1. Histological Classification
  - 1.2.2. Clinical Classification
  - 1.2.3. Grading
  - 1.2.4. Equivalence Between the Different Classifications
  - 1.2.5. Particular Areas of Burn Incidence
  - 1.2.6. New Technologies in Depth Diagnostics
- 1.3. Extension of Burns
  - 1.3.1. Rule of 9
  - 1.3.2. Lund and Browder Chart
  - 1.3.3. Right Hand Rule
  - 1.3.4. New Methods
- 1.4. Location and Severity of Burns
  - 1.4.1. Importance of localization
  - 1.4.2. Minor Burns
  - 1.4.3. Moderate Burns
  - 1.4.4. Severe Burns
- 1.5. The way they are formed
  - 1.5.1. Importance of the Mechanism
  - 1.5.2. Epidemiological Impact on the Different Mechanisms
  - 1.5.3. Main Mechanisms
- 1.6. Severity Scores
  - 1.6.1. Baux Score
  - 1.6.2. ABSI Severity Index
  - 1.6.3. Other Methods

- 1.7. Management of Burn Patients
  - 1.7.1. Brief History
  - 1.7.2. Decisive Historic Moments
- 1.8. Treatment at the Place of Accident
  - 1.8.1. Separation from Place of Accident
  - 1.8.2. Evaluation
    - 1.8.2.1. ABCDE
    - 1.8.2.2. Polytraumatized
    - 1.8.2.3. Specific
  - 1.8.3. Start of Treatment
- 1.9. Transfer
  - 1.9.1. Transfer to Hospital
- 1.10. Referral Centers
  - 1.10.1. Necessity
  - 1.10.2. Members
  - 1.10.3. Structure

## Module 2. Initial Hospital Care and Fluid Therapy

- 2.1. Re-Evaluation
  - 2.1.1. Water and Hemodynamic Status
  - 2.1.2. Respiratory Status
  - 2.1.3. Compartment Syndrome
- 2.2. Types of Fluid
  - 2.2.1. Crystalloids
    - 2.2.1.1. Classic
    - 2.2.1.2. Balanced
  - 2.2.2. Colloids
    - 2.2.2.1. Albumin
  - 2.2.3. Transfusions

- 2.3. Formulas to Initiate Fluid Therapy
  - 2.3.1. Formulas with Colloids
  - 2.3.2. Formulas without Colloids
  - 2.3.3. Other Formulas
- 2.4. Fluid Therapy Problems
  - 2.4.1. Causes of Fluid Creep
  - 2.4.2. Effects of Fluid Creep
- 2.5. Non-Invasive Monitoring
  - 2.5.1. Heart Rate
  - 2.5.2. Arterial Pressure
  - 2.5.3. Diuresis
- 2.6. Invasive Monitoring
  - 2.6.1. Central Venous Pressure
  - 2.6.2. Pulmonary Artery Catheter
  - 2.6.3. Transpulmonary Thermodilution
  - 2.6.4. Ultrasound
  - 2.6.5. Others
- 2.7. Protocols Based on Non-Invasive Monitoring
  - 2.7.1. Indications
  - 2.7.2. Errors
- 2.8. Protocols Based on invasive Monitoring
  - 2.8.1. PVC Problems
  - 2.8.2. S-G Catheter Problems
- 2.9. Thermodilution Monitoring
  - 2.9.1. Heart Failure
  - 2.9.2. Static Preload Values
  - 2.9.3. Preload Dynamic Values
  - 2.9.4. Frequent Errors
- 2.10. Situation-specific Protocols
  - 2.10.1. Protocols for Less Severe Patients
  - 2.10.2. Protocols for Severe Patients

### Module 3. Primary Care: Airway and Hemodynamics

- 3.1. Upper Airway Obstruction due to Cervicofacial Burns
  - 3.1.1. Initial
  - 3.1.2. After Resuscitation
- 3.2. Smoke Inhalation Syndrome
  - 3.2.1. Diagnostic suspicion
  - 3.2.2. Confirmatory Diagnosis
  - 3.2.3. Classification of Injuries
- 3.3. Airway Management in Burn Patients
  - 3.3.1. Intubation Indications
  - 3.3.2. Influence of Intubation and Mechanical Ventilation on Prognosis
  - 3.3.3. Early Extubation
- 3.4. Mechanical Ventilation
  - 3.4.1. Indications
  - 3.4.2. Modes
- 3.5. Tracheostomy
  - 3.5.1. Surgical Technique
  - 3.5.2. Percutaneous technique:
  - 3.5.3. Indications
- 3.6. Systemic Intoxication by Inhalation
  - 3.6.1. Carbon Monoxide
  - 3.6.2. Cyanides
  - 3.6.3. Others
- 3.7. Cardiogenic Shock in Major Burn Patients
  - 3.7.1. Frequency (F)
  - 3.7.2. Intercurrence with Other Types of Shock
- 3.8. Hemodynamic Monitoring
  - 3.8.1. Objectives
  - 3.8.2. Complications
  - 3.8.3. Lactate

- 3.9. Vasoactive Drugs in Shock and Burn Patients
  - 3.9.1. Noradrenaline
  - 3.9.2. Terlipressin and Vasopressin
  - 3.9.3. Others
- 3.10. Hyperdynamic Phase
  - 3.10.1. Beta-Blockers

## Module 4. Surgical Treatment

- 4.1. Initial Assessment and Urgent Treatment
  - 4.1.1. Circumferential Burns
  - 4.1.2. Compartment Syndrome
  - 4.1.3. Scarofasciotomies
  - 4.1.4. Initial Surgical Treatment
- 4.2. Surgical Treatment Indications: Debridement
  - 4.2.1. Surgical Debridement
  - 4.2.2. Enzymatic Debridement
- 4.3. Time Coverage
  - 4.3.1. Skin Substitutes
    - 4.3.1.1. Allografts
    - 4.3.1.2. Biosynthetics
- 4.4. Definitive Coverage: Skin Bank
  - 4.4.1. Autografts
    - 4.4.1.1. Techniques
  - 4.4.2. Skin Cultures
- 4.5. Dressings and Topical Antibiotics
  - 4.5.1. Dressings
  - 4.5.2. Topical Antibiotics and Antiseptics
  - 4.5.3. Others
- 4.6. Aspects of Special Burns
  - 4.6.1. Electrical
  - 4.6.2. Chemical
  - 4.6.3. Others





- 4.7. After-Effects, the Need for Reconstructive Surgery and Regulated Amputations
- 4.8. Special Aspects in Freezing
- 4.9. Radio-Induced Burns
- 4.10. Nursing Care

## Module 5. Pathophysiology and Infection

- 5.1. Pathophysiology of Burns
  - 5.1.1. Phases
- 5.2. SRIS
- 5.3. Infection from Burns
  - 5.3.1. Common Germs
  - 5.3.2. Local Treatment
- 5.4. Diagnosis of Sepsis in Burned Patients
- 5.5. Sepsis Indicators
  - 5.5.1. Classic
  - 5.5.2. NEW
  - 5.5.3. Future
- 5.6. Systemic Antibiotherapy
  - 5.6.1. Empirical
  - 5.6.2. Directed by Microbiological Screening
  - 5.6.3. Dose
- 5.7. Prophylactic Antibiotherapy
  - 5.7.1. Initial
  - 5.7.2. Periprocedures
- 5.8. Pneumonia Associated with Mechanical Ventilation
- 5.9. Other Infections.
  - 5.9.1. Secondary Bacteremia associated with Catheters
  - 5.9.2. Transient Bacteremia
  - 5.9.3. Others
- 5.10. Most Frequently Used Antibiotics

## Module 6. Complications

- 6.1. ARDS
- 6.2. Hematologic Dysfunction
  - 6.2.1. Red Blood Cells
  - 6.2.2. White Blood Cells
  - 6.2.3. Coagulation
- 6.3. Renal Dysfunction
  - 6.3.1. Early Onset
  - 6.3.2. Late Onset
- 6.4. Hepatic Dysfunction
- 6.5. Immunological Effects
- 6.6. Sympathetic and Adrenal Response
- 6.7. Multiorgan Failure
- 6.8. Compartment Syndrome in the Limbs
- 6.9. Intra-Abdominal Hypertension
  - 6.9.1. Incidence
  - 6.9.2. Measurement
- 6.10. Abdominal Compartment Syndrome and Others

## Module 7. Treatment of the Critically Ill Patient with Skin Pathology

- 7.1. Anesthesia in Burn Patients
- 7.2. Sedation
  - 7.2.1. Classic
  - 7.2.2. By Inhalation.
- 7.3. Analgesia
  - 7.3.1. Opioids
  - 7.3.2. Multimodal
- 7.4. Delirium and Anxiety
  - 7.4.1. Prevention
  - 7.4.2. Criteria
- 7.5. Macrodoses of Vitamin C in the Initial Burn Phase
- 7.6. Inhalation Syndrome Treatments

- 7.7. Specific Medical Treatment of Electrical Burns
- 7.8. Treatment of Necrotizing Soft Tissues Infections
- 7.9. NSTI Incidence and Pathophysiology
- 7.10. NSTI Diagnostic Diagnosis, and Treatment

## Module 8. Nutrition and Rehabilitation

- 8.1. Nutritional Needs of Burn Patients
  - 8.1.1. Formulas
- 8.2. Nutrition Protocols
  - 8.2.1. Enteral
  - 8.2.2. Parenteral
- 8.3. Trace Elements and Vitamin Requirements
  - 8.3.1. Trace Elements
- 8.4. Vitamins
- 8.5. Modulation of the Hypermetabolic Response
- 8.6. Anabolic Steroids
  - 8.6.1. Oxandrolone
- 8.7. Bone and Muscle Effects
- 8.8. Early-Stage Rehabilitation
  - 8.8.1. Postural
  - 8.8.2. Rehabilitation
    - 8.8.2.1. Physiotherapy
    - 8.8.2.2. Occupational Therapy
  - 8.8.3. Orthoses
    - 8.8.3.1. Splints
- 8.9. Rehabilitation in the Recovery Phase
  - 8.9.1. Postural
  - 8.9.2. Rehabilitation
  - 8.9.3. Orthoses
- 8.10. Compression Therapy



## Module 9. Pediatric Burns

- 9.1. Pathophysiology of Pediatric Burns
- 9.2. Initial Management of the Pediatric Patient
- 9.3. Distinguishing Features of Critical Burns in Children
- 9.4. Surgical Treatment
- 9.5. Temporary and Definitive Coverage
- 9.6. After-Effects and Transition to Adulthood
- 9.7. Rehabilitation and Physiotherapy

## Module 10. Other Aspects

- 10.1. Mental Illness in Burn Patients
  - 10.1.1. Self-Harm Attempts
  - 10.1.2. After Effects
- 10.2. Elderly and Frail Patients
- 10.3. Post-ICU Syndrome
  - 10.3.1. Definition
  - 10.3.2. Monitoring
- 10.4. Ethical Aspects
- 10.5. Prevention
- 10.6. Quick Guide to Initial Treatment
- 10.7. Quick Guide to Intra-ICU Care
- 10.8. Scientific and Patient Groups
- 10.9. Multidisciplinary Work
- 10.10. Expectations for the Future



*A unique, key and decisive program to boost your professional development”*

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.





“

*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.



## 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.*



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 Major Burns guarantees you, in addition to the most rigorous and updated training, access to a Professional Master's Degree issued by TECH Technological University.





“

*Successfully complete this program  
and receive your university degree  
without travel or laborious paperwork”*

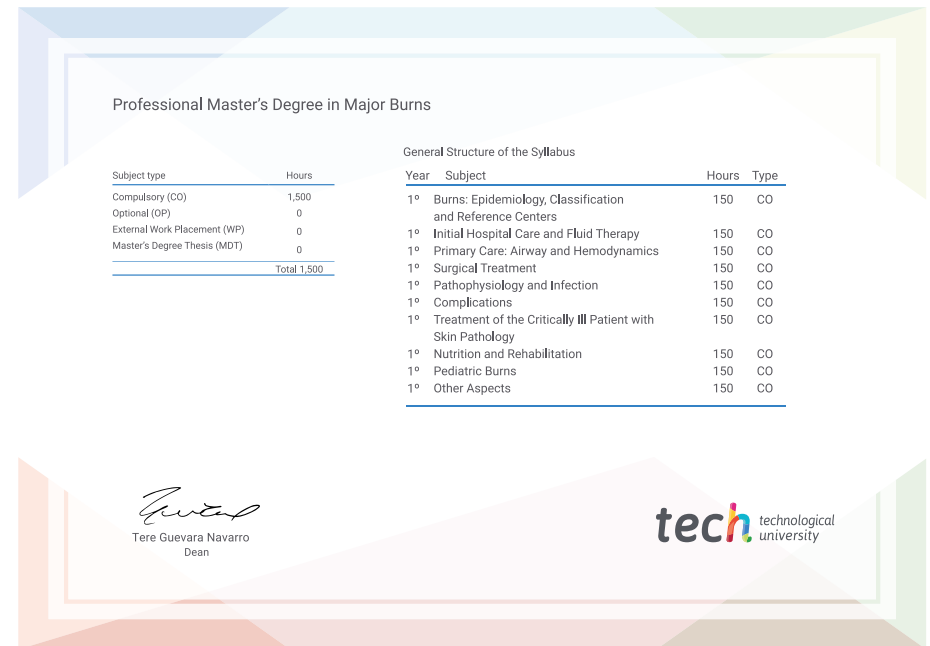
This **Professional Master's in Major Burns** contains the most complete and updated scientific program on the market.

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 certificate 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: **TECH Professional Master's Degree in Major Burns**

Official N° of hours: **1,500 h.**



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

future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service information  
knowledge present quality  
development languages  
virtual classroom



## Professional Master's Degree Major Burns

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

# Professional Master's Degree

## Major Burns

