



Current Management of Digestive Pathology in Critically III Patients

» Modality: online

» Duration: 6 months

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/pk/medicine/postgraduate-diploma/postgraduate-diploma-current-management-digestive-pathology-critically-ill-patients

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# tech 06 | Introduction

Digestive pathology is closely related to the body's nutritional function, so proper nutrition in hospitalized patients reduces morbidity and mortality, which makes the prescription of proper nutrition one of the factors considered in the overall treatment of the patient. Nutritional therapy plays a key role in the medical practice performed in intensive care units, and has become a routine part of critical patient care. Likewise, it is directly related to the adequate management of glycemic values and, therefore, it is also associated with the prognosis of critically ill patients, especially in cases where parenteral nutrition is used, reducing the number of complications resulting from poor glycemic control.

This Postgraduate Diploma in Current Management of Digestive Pathology in the Critically III Patient is oriented to update the knowledge of the specialist physician in digestive pathology in the critically ill patient and their nutrition. The student will be able to incorporate the advances in the management procedures of the most frequent and relevant digestive pathologies, such as pancreatitis or digestive hemorrhage, that we can find in patients in intensive care units, so that the physician can maintain quality in his daily clinical practice.

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Scientific evidence increases the quality of medical care. Staying current is key to providing better care for critically ill patients with digestive pathology"

The Postgraduate Diploma in Current Management of Digestive Pathology in Critically III Patients contains the most complete and updated scientific program on the market. The most important features of the program include:

- Contains Clinical cases presented by experts. The graphic, schematic, and eminently practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional practice.
- Diagnostic and therapeutic novelties on the care of patients with digestive problems.
- Presentation of practical workshops on procedures, diagnostic and therapeutic techniques for infectious diseases and guidelines for transplant procedures.
- \* Video lessons on different pathologies and how to approach them.
- Algorithm-based interactive learning system for decision-making in the presented clinical situations.
- 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.

# Introduction | 07 tech



This Postgraduate Diploma may be the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge in the care of patients with digestive pathology in the intensive care unit, you will obtain a Postgraduate Diploma from TECH Technological University"

Its teaching staff includes leading intensive care physicians, who bring the experience of their work to this specialization, in addition to other specialists belonging to prestigious scientific societies

The multimedia content developed with the latest educational technology will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive training program to train in real situations.

This program is designed around Problem Based Learning, whereby the physician must try to solve the different professional practice situations that arise during the course. For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in Intensive Care Medicine and with extensive teaching experience.

Increase your decision-making confidence by updating your knowledge with this Postgraduate Diploma course.

Don't miss the opportunity to update your knowledge in the care of patients with digestive pathology in the intensive care unit to increase the quality of daily medical care.







# tech 10 | Objectives



### **General objective**

 Update the specialist's knowledge in the management of patients with digestive pathology, with special attention to severe pancreatitis, liver failure and digestive hemorrhage, as well as to update the procedures in nutritional support for critical patients and to address the management of glycemia and some of the endocrinometabolic pathologies that most frequently require admission to the Intensive Care Unit.



### **Specific objectives**

- Update diagnostic and therapeutic procedures in the current management of severe pancreatitis in the critically ill patient.
- Identify the admission criteria and determine the prognosis and complications of the cirrhotic patient in the intensive care unit.
- Incorporate advances in the procedure for the management of acute liver failure in the critically ill patient.
- Identify new developments in the current management of acute mesenteric ischemia in light of the latest scientific evidence, in the patient in the intensive care unit.
- Establish prevention procedures for acute non-variceal upper gastrointestinal bleeding.
- Point out the main advances in the protocols for the administration of artificial nutrition in the intensive care unit.

- Establish new developments in the management of glycemia in critically ill patients in order to increase the safety of therapeutic actions and improve their prognosis.
- Describe the main aspects of hyperglycemic crises: ketoacidosis and hyperosmolar coma.
- Identify risk factors for complications of enteral and parenteral nutrition in the intensive care unit.
- Define the main signs and symptoms of thyrotoxicosis and myxedema coma and update diagnostic and therapeutic management procedures.
- Point out the key points of the procedure of indication and use of extrarenal continuous hyperfiltration techniques in the intensive care unit.
- Assess the importance of the use of citrate in extrarenal plasma clearance techniques.
- Incorporate advances in the use of pharmacology in the critically ill patient.
- Update the procedures for the critical patient with suspected severe intoxication in the intensive care unit.
- Analyze the diagnostic role of ultrasound in the intensive care unit and to establish the advantages of its use in routine diagnostic practice.
- Identify the main aspects of the Patient Safety Program in the intensive care unit.
- Describe the usefulness of the electronic medical record in the intensive care unit.
- Explain the "ICU without walls" project for early detection of patients at risk.
- Value humanization in the intensive care unit as a protective factor for optimal patient prognosis.

- Describe prognostic indicators in the intensive care unit.
- Incorporate skills to improve communication, relationship and participation in the care of the family of the critically ill patient within the intensive care unit.
- Explain the different special situations that the intensive care physician may face in relation to the limitation of therapeutic effort, the decision not to resuscitate or to rule out admission to the intensive care unit.







## tech 14 | Structure and Content

### Module 1. Digestive Critical Care

- 1.1. Current Management of Severe Pancreatitis.
  - 1.1.1. Diagnosis and Prognosis. Value of Imaging Tests.
  - 1.1.2. Supportive Therapy.
  - 1.1.3. Nutritional Support.
  - 1.1.4. Complications.
- 1.2. The Cirrhotic Patient in the ICU.
  - 1.2.1. Admission
  - 1.2.2. Prognosis.
  - 1.2.3. Complications.
- 1.3. Current Management of Acute Liver Failure.
  - 1.3.1. Diagnosis.
  - 1.3.2. Initial Management and Supportive Care.
  - 1.3.3. Transplant Indications.
- 1.4. Management of Acute Mesenteric Ischemia
  - 1.4.1. Initial Management
  - 1.4.2. Postoperative Control.
  - 1.4.3. Prognosis.
- 1.5. Acute Upper Gastrointestinal Bleeding (Not Due to Esophageal Varices)
  - 1.5.1. Prevention.
  - 1.5.2. Management

### Module 2. Nutrition and Metabolism in the Critically III Patient

- 2.1. Artificial Nutrition in the ICU.
  - 2.1.1. Key Points
  - 2.1.2. Protocols.
- 2.2. Management of Glycemia in the ICU.
  - 2.2.1. Hyperglycemia in Critically III Patients.
  - 2.2.2. Protocol Proposal.
- 2.3. Hyperglycemic Crises.
  - 2.3.1. Ketoacidosis.
  - 2.3.2. Hyperosmolar Coma

- 2.4. Management of Enteral Nutrition Complications.
  - 2.4.1. Gastric Residue.
  - 2.4.2. Diarrhea.
  - 2.4.3. Constipation.
  - 2.4.4. Others.
- 2.5. Thyroid Pathology in the ICU.
  - 2.5.1. Thyrotoxicosis/Thyroid Storm.
  - 2.5.2. Myxedematous Coma.
  - 2.5.3. Management of Thyroid Pathology in Critically III Patients.

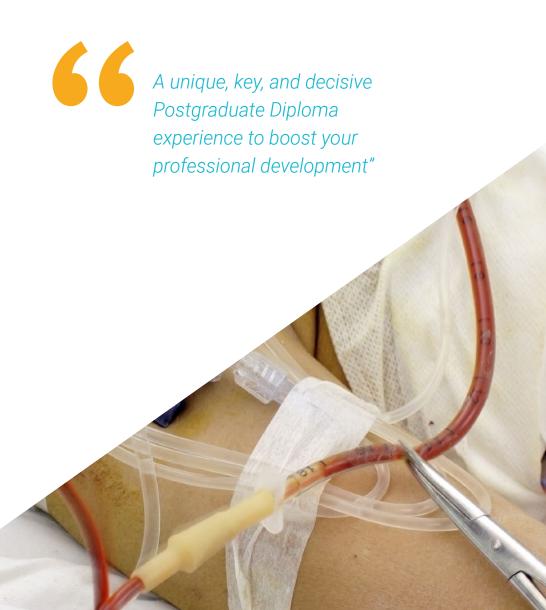
### Module 3. Other Pathologies of Interest in the Critically III Patient

- 3.1. Key Points of Pharmacology in the Critically III Patient.
  - 3.1.1. Interactions.
  - 3.1.2. Pharmacology of Antibiotics.
- 3.2. The Pregnant Woman and the Postpartum Mother in the ICU.
  - 3.2.1. Preeclampsia/Eclampsia.
  - 3.2.2. HELLP Syndrome.
  - 3.2.3. Postpartum Hemorrhages.
  - 3.2.4. The Pregnant Woman in the ICU.
- .3. Initial Management in the Patient With Suspected Severe Poisoning.
  - 3.3.1. Key Points in the General Management of Critical Poisoning.
  - 3.3.2. Frequent Pharmacological Intoxications.
  - 3.3.3. Most Important Antidotes.
  - 3.3.4. Role of Extrarenal Clearance Techniques.
- 3.4. Ultrasound in the ICU: a Diagnostic Tool for the Intensive Care Physicians.
  - 3.4.1. Ultrasound for the Canalization of Pathways.
  - 3.4.2. Thoracic Ultrasound for Intensive Care Physicians.
  - 3.4.3. Abdominal Ultrasound for Intensive Care Physicians.
- 3.5. Transport of Critically III Patients.
  - 3.5.1. Intrahospital Transfer.
  - 3.5.2. Interhospital transfer.

- 3.6. Critical Care in Hematology, Rheumatology and Oncology.
  - 3.6.1. Acquired and Congenital Hematologic Disorders.
  - 3.6.2. Thrombocytopenia, Platelet Disorders and Hemolytic Anemias.
  - 3.6.3. Rheumatologic Complications in Intensive Care.

### Module 4. Intensive Care Unit Management

- 4.1. Patient Safety.
  - 4.1.1. Quality Culture.
  - 4.1.2. Event Notification.
  - 4.1.3. Tools to Improve Patient Safety (SWOT, FMEA, RCA).
- 4.2. ICU Without Walls.
  - 4.2.1. Early Detection Systems for the Critically III Patient in the Hospital.
  - 4.2.2. Intensive Care Intervention Outside the ICU.
  - 4.2.3. Experience and Results of a Proposed Model.
- 4.3. Information Systems.
  - 4.3.1. Electronic Medical Record in the ICU.
  - 4.3.2. Components of EHR in the ICU.
  - 4.3.3. EHR as an Assistance and Management Tool.
- 4.4. Humanization in the ICU.
- 4.5. Quality and Excellence in the ICU.
  - 4.5.1. Quality Models.
  - 4.5.2. The FOM Model.
  - 4.5.3. The Quality Group in the ICU.
- 4.6. Prognosis in the ICU.
  - 4.6.1. Scales for Prognostic Assessment.
  - 4.6.2. Usefulness for Clinical Decision Making.
- 4.7. The Family of the Critically III Patient.
  - 4.7.1. Communicating Bad News.
  - 4.7.2. Families in ICUs.
  - 4.7.3. Participation in Care.
- 4.8. ICU at the End of Life.
  - 4.8.1. Therapeutic Effort Limitation
  - 4.8.2. Decision not to Resuscitate.
  - 4.8.3. Rule Out Admission to ICU (Futility).







# tech 18 | Methodology

### At TECH we use the Case Method

In a given situation, what would you do? Throughout the program, you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you can experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching potential or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in professional medical practice.



Did you know that this method was developed in 1912 at Harvard for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

### The effectiveness of the method is justified by four fundamental achievements:

- 1. Students who follow this method not only grasp concepts, but also develop their mental capacity by evaluating real situations and applying their knowledge.
- 2. The learning process has a clear focus on practical skills that allow the student to better integrate into the real world.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- Students like to feel that the effort they put into their studies is worthwhile.
   This then translates into a greater interest in learning and more time dedicated to working on the course.



### **Re-Learning Methodology**

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our University is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analyzing cases.

The physician will learn through real cases and by solving complex situations in simulated learning environments.

These simulations are developed using state-of-the-art software to facilitate immersive learning.



# Metodology | 21 tech

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

With this methodology we have trained more than 250,000 physicians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Re-learning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

In our program, learning is not a linear process, but rather a spiral (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by our learning system is 8.01, according to the highest international standards.

# tech 22 | Methodology

In this program you will have access to the best educational material, prepared with you in mind:



### **Study Material**

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



### **Latest Techniques and Procedures on Video**

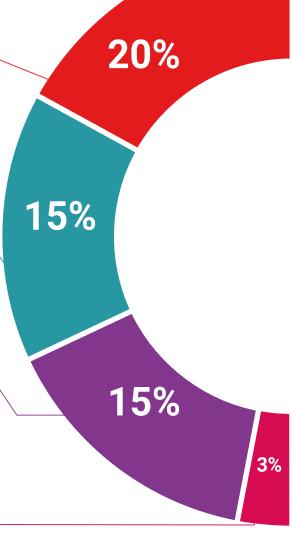
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



### **Interactive Summaries**

We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

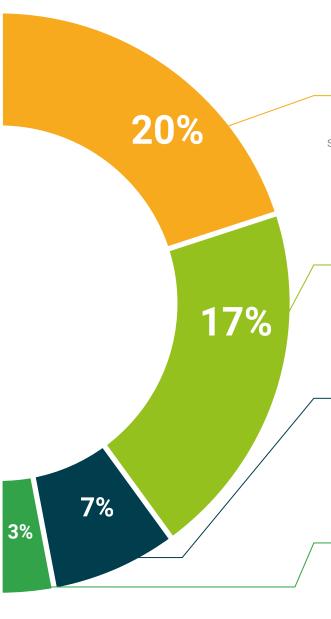
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





### **Additional Reading**

Recent articles, consensus documents, international guides. in our virtual library you will have access to everything you need to complete your training.



### **Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



### **Testing & Re-testing**

We periodically evaluate and re-evaluate your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.



### Classes

There is scientific evidence suggesting that observing third-party experts can be useful.





### **Quick Action Guides**

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.







# tech 26 | Certificate

The Postgraduate Diploma in Current Management of Digestive Pathology in Critically Ill Patients contains the most complete and updated scientific program on the market.

After the student has passed the evaluations, they will receive by mail their corresponding Postgraduate Diploma issued by TECH Technological University via tracked delivery.

The certificate issued by **TECH Technological University**, specifies the qualification obtained through the Postgraduate Diploma course, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: Postgraduate Diploma in Current Management of Digestive Pathology in **Critically III Patients** 

**ECTS: 18** 

Official Number of Hours: 450



### **POSTGRADUATE DIPLOMA**

Current Management of Digestive Pathology in Critically III Patients

This is a qualification awarded by this University, with 20 ECTS credits and equivalent to 500 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.

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