Postgraduate Diploma

Pancreatic Endocrinology

tech global university

tech global university

Postgraduate Diploma

Pancreatic Endocrinology

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Credits: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-pancreatic-endocrinology**

Index

01

Introduction

The pancreas is one of the organs of greatest interest to all endocrine specialists, since the increasing prevalence of diabetes in society means that scientific studies and developments on pancreatic disorders are multiplying. That is why the specialist must be completely up to date in this field, which is why the university has created this complete program. Thanks to the intervention of leading professionals in the field of endocrinology and nutrition, this degree offers a comprehensive, direct and efficient update on issues such as hypoglycemia, insulin therapy, oral antidiabetics and other issues of special interest.

Get up to date on the most pressing developments in diabetes, including its genetic basis, macrovascular complications and cutting-edge insulin therapy"

Thanks to the studies that have been made on the pancreas in recent years, scientific advances and postulates on endocrinological emergencies have increased considerably. This provides an unbeatable framework for action for all specialists in this area, who, with up-to-date knowledge, can tackle the most complex pathologies with much greater precision and certainty.

This makes it especially important to keep abreast of these advances, so TECH has assembled a team of prestigious endocrinology professionals to develop all the contents of this program. Coming from highly prestigious hospitals with diversified specialties, this program benefits from a multidisciplinary perspective that combines the latest scientific knowledge with the most effective and cutting-edge clinical practice.

Therefore, this Postgraduate Diploma becomes a preferential academic option for any specialist who wants to get up to date in Pancreatic Endocrinology. With a completely online format, there are no fixed schedules or fixed classes, and the elective load can be taken at the pace chosen by the specialist. This makes it possible to combine this program with the most demanding personal and professional responsibilities.

The **Postgraduate Diploma in Pancreatic Endocrinology** contains the most complete and up-to-date educational program on the market. The most important features include:

- The development of case studies presented by experts in Endocrinology
- 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
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions for experts and individual reflection work
- Content that is accessible from any fixed or portable device with an Internet connection

A complete team of highly qualified teachers will be ready to solve any doubts or complications that may arise throughout the degree"

Get up-to-date on the most important dietary and pharmacological treatments for obesity, complemented by important advances in clinical nutrition and dietetics"

It delves into issues such as thyrotoxic crises, acute adrenal insufficiencies, hypocalcemia and other first level endocrinological emergencies.

In TECH you are the one who decides when, where and how to study all the content, since you will be able to access it from any device with an internet connection.

The program's teaching staff includes professionals from the sector who contribute their work experience to this training 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 training programmed to train in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

02

Objectives

Given the importance and prevalence of diabetes in society and the role played by the pancreas in the endocrine system, the aim of this degree is to delve into all the most urgent issues for the specialist in this area. That is, complete topics dedicated to diabetes mellitus, myxedematous comas, enteral and parental nutrition and more updated issues that will undoubtedly be of great use in the daily practice of the specialist.

You will incorporate the latest scientific postulates and theses on Pancreatic Endocrinology into your regular work"

General Objective

- Be able to accurately interpret currently available clinical information and associate it effectively in clinical practice

Thanks to TECH's thoroughness in the elaboration of all its contents, you will find material that lives up to your highest expectations"

Specific Objectives

Module 1. Diabetes Mellitus

- Provide and expand knowledge on the pathogenesis and pathophysiology of diabetes mellitus
- Provide the basis of knowledge of the main chronic complications (micro and macrovascular) of this pathology
- Discuss the different therapeutic options for this endocrinological disease

Module 2. Endocrinological Emergencies

- Know the most frequent causes that occur in the most common endocrine and metabolic emergencies, developing the activities to be carried out with the patient in the situations described in the contents
- Prioritize the actions to be carried out according to their importance for the patient's life
- Identify the differential diagnosis in relation to the metabolic and electrolyte alterations of these pathologies
- Recognize the importance of the evaluation of blood analysis and metabolic values in the detection of related problems

Module 3. Clinical Nutrition and Dietetics

- Update the knowledge in the field of dietetics and its connection with the most prevalent diseases and in which its knowledge can be transcendental to achieve a favorable clinical evolution
- Know the different types of nutrition, their indications, their singularities and their mechanics of administration

03

Course Management

With Endocrinology being such a wide and necessary health branch in any health center, TECH has entrusted the elaboration of this program to the most outstanding professionals in this field. This gives an added value to the Postgraduate Diploma, which has both the most rigorous and current scientific vision and the practical and useful perspective of professionals who face the most complex endocrine pathological conditions.

You are assured of the quality and appropriateness of all the contents of this program thanks to the high professional and academic quality of all the teachers"

International Guest Director

Awarded on multiple occasions for her contribution to the field of Medicine, Dr. Susan Samson is a prestigious physician highly specialized in **Endocrinology, Diabetes** and **Metabolism.** In fact, she has devoted most of her professional career to optimizing the overall well-being of patients with endocrine disorders, ranging from Diabetes *Mellitus to* Hyperthyroidism.

Therefore, she has carried out her duties in health institutions of international reference such as the Mayo Clinic Hospital in the United States. Among her main achievements, she has developed innovative **evaluation methodologies** based on the latest scientific evidence. This has enabled healthcare professionals to design **personalized** and more effective **treatments,** taking into account the specific needs of each user. At the same time, it has implemented various monitoring programs based on emerging technologies such as **Telemedicine** and even **Artificial Intelligence.** Thanks to this, it has enabled **real-time monitoring** of the clinical status of numerous individuals with **chronic diseases** to improve their quality of life.

On the other hand, she has balanced these tasks with her role as **President of the American Association of Clinical Endocrinology**. In this way, she has contributed significantly to the creation of **care protocols** for people with different conditions. She has also collaborated with regulatory agencies to develop **health policies** to address the optimization of care for patients with long-term conditions.

In her commitment to clinical excellence, she has led several **scientific research** projects in areas ranging from addressing **Pituitary Pathologies** or **Acromegaly** to **Cushing's Disease.** Likewise, these findings have driven advances to maximize the quality of care. In this sense, her work has been rewarded in the form of awards, such as the "Rising Star Award" given by the Baylor College of Medicine for her outstanding leadership.

Dr. Samson, Susan

- President of the Department of Endocrinology at Mayo Clinic Hospital in Florida, United States
- President of the American Association of Clinical Endocrinology
- Director of the Baylor St. Luke's Pituitary Center in Texas
- Internship in Endocrinology, Diabetes and Metabolism at Baylor College of Medicine
- M.D. from Queen's University
- Doctor of Philosophy with specialization in Molecular Biology, University of Calgary.
- Member of the Royal College of Physicians and Surgeons of Canada

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

Management

Dr. Gargantilla Madera, Pedro

- Chief of Internal Medicine Service of El Escorial University Hospital
- Professor of the Francisco de Vitoria University
- Science communicator and regular contributor to various media (RNE, Abc digital, Huftington post, Cinco Noticias)
- Member of the Association of Medical Writers and Artists (ASEMEYA)
- Master's Degree in Clinical Unit Management

Professors

Dr. Carrasco Lara, Pablo

- Specialist Physician in Endocrinology and Nutrition at the El Escorial University Hospital
- Specialist in Endocrinology and Nutrition at Hospital La Luz, University Hospital of Getafe, University Hospital of Fuenlabrada and General University Hospital Gregorio Marañón
- Degree in Medicine at the Faculty of Health Sciences of the Rey Juan Carlos University in Madrid
- Master's Degree in Integration and Clinical Problem Solving in Medicine at the University of Alcalá, Madrid
- Specialty in Endocrinology and Nutrition via MIR at the University Hospital of Getafe
- Expert in Chronic Complications of Diabetes Mellitus at the University of Barcelona
- Master's Degree in Clinical Nutrition in Medicine at the CEU-Cardenal Herrera University

Dr. Torres Rodríguez, Enrique

- Chief of the Emergency Department of the Hospital de El Escorial in Madrid
- Specialist in Internal Medicine
- Master's Degree in Healthcare Unit Management

Dr. Mattei, Isabella

- Attending Physician in Endocrinology and Nutrition at the Hospital 12 de Octubre in Madrid and at the Hospital Fundación Jiménez Díaz spending two days a week in general practice
- Resident Physician in Endocrinology and Nutrition at the12 de Octubre University Hospital in Madrid
- Degree in Medicine and Surgery from the University of Florence

Dr. Albi Rodríguez, Salomé

- Assistant, Pediatrics Department, 12 de Octubre University Hospital, Madrid
- University Degree in Medicine and Surgery from the Complutense University of Madrid
- Doctor in Medicine and Surgery at the Universidad Autónoma de Madrid
- Specialty of Pediatrics and Specific Areas

Dr. Fiorante, Silvana

- Internal Medicine Service at El Escorial Hospital in Madrid
- Professor in the Faculty of Health Sciences in the Degree in Dietetics and Nutrition at the Catholic University of Avila
- Degree in Medicine from the National University of La Plata
- Doctor of Medicine and Surgery from the Complutense University of Madrid with Cum Laude distinction
- Master's Degree on Human Immunodeficiency Virus Infection by the Ministry of Health, Consumption and Social Welfare at the Universidad Rey Juan Carlos with Cum Laude distinction
- Master's Degree in Clinical Management of Health Care Units at the International University Menéndez Pelayo with Cum Laude distinction

04

Structure and Content

The structure and contents of this program have been developed following the *relearning* pedagogical methodology, in which TECH is a pioneer. Thanks to the reiteration of the most important concepts and contents throughout the program, the specialist is updated in a progressive and natural way, without having to make an excessive effort in the hours of study invested.

You will have at your disposal; exercises, real case studies and a whole host of supplementary readings on each topic"

Module 1. Diabetes Mellitus

1.1. Etiology, Classification and Prevalence
1.2. Etipathogenesis, Insulin Resistance and Metabolic and Molecular Pathogenesis
1.3. Type I Diabetes Mellitus
1.4. Genetic Basis of Type II Diabetes Mellitus
1.5. Microvascular Complications
  1.5.1. Pathogenesis.
  1.5.2. Diabetic Retinopathy.
  1.5.3. Diabetic Nephropathy
  1.5.4. Diabetic Neuropathy
1.6. Macrovascular Complications
  1.6.1. Ischemic Heart Disease
  1.6.2. Diabetic Cardiomyopathy
  1.6.3. Heart Failure
  1.6.4. Stroke
  1.6.5. Peripheral Arterial Disease
1.7. Oral Antidiabetics
1.8. Insulin Therapy
1.9. Special considerations
  1.9.1. Lipodystrophic Diabetes Mellitus
  1.9.2. Total Parenteral Nutrition
  1.9.3. Glucocorticoids
1.10. Diabetes and Public Health
  1.10.1. Type II Diabetes Mellitus Screening
  1.10.2. Prevention of Type II Diabetes Mellitus

Module 2. Endocrinological Emergencies

2.1. Thyrotoxic Crisis
2.2. Myxedematous Coma
2.3. Non-Ketotic Hyperglycemic Hyperosmolar Crisis
2.4. Diabetic ketoacidosis
2.5. Acute Adrenal Insufficiency
2.6. Hypoglycemia
2.7. Pituitary Apoplexy
2.8. Hypocalcemia
2.9. Hypercalcemia
2.10. Pediatric Endocrinologic Emergencies

Module 3. Clinical Nutrition and Dietetics

3.1. General Principles
  3.1.1. Assessment of Nutritional Status
  3.1.2. Nutritional Requirements
  3.1.3. Food Groups
  3.1.4. Markers of Malnutrition
3.2. Dietetics and Dietethotherapy
  3.2.1. Dietary Recommendations
  3.2.2. Characteristics of the Different Types of Diets
  3.2.3. Nutritional Requirements
3.3. Enteral Nutrition
  3.3.1. Methods and Mechanics of Administration
  3.3.2. Indications, Contraindications and Complications

3.4. Parenteral Nutrition
- 3.4.1. Types
- 3.4.2. Routes and Mechanics of Administration
- 3.4.3. Indications, Contraindications and Complications
- 3.4.4. Nutrients in Parenteral Nutrition
- 3.4.5. Preparation of Mixtures for Parenteral Nutrition

3.5. Dietary and Pharmacological Treatment of Obesity
- 3.5.1. Pretreatment Assessment
- 3.5.2. Modifications in Caloric Content
- 3.5.3. Modifications in Dietary Macronutrients
- 3.5.4. Specific Role in the Control of Obesity
- 3.5.5. Pharmacological Treatment of Obesity

3.6. Diabetes Mellitus
- 3.6.1. Objectives
- 3.6.2. Types of Diets
- 3.6.3. Nutrition Strategies
- 3.6.4. Recommended Caloric Intakes
- 3.6.5. Macronutrient Distribution
- 3.6.6. Other Nutrients

3.7. Nutritional Aspects of Hyperlipemia
- 3.7.1. Influence of Fatty Acids on Cardiovascular Risk
- 3.7.2. Effects of Sterols on Cardiovascular Risk
- 3.7.3. Recommendations to Reduce the Impact of the Atherogenic Diet
- 3.7.4. Other Nutritional Recommendations

3.8. Hydrosaline Metabolism
- 3.8.1. Sodium-Controlled Diet
- 3.8.2. Potassium-Controlled Diet
- 3.8.3. Diet in Arterial Hypertension

3.9. Nutrition in Gastrointestinal Pathologies
- 3.9.1. Celiac Disease Diet
- 3.9.2. Diet and Hepatobiliary Disease
- 3.9.3. Diet and Inflammatory Bowel Disease
- 3.9.4. Lactose Intolerance
- 3.9.5. Probiotics, Prebiotics, Symbiotics, and Fiber

3.10. Nutrition and Renal Pathology
- 3.10.1. Malnutrition as a Morbidity and Mortality Factor
- 3.10.2. Nutritional Assessment in Renal Patients
- 3.10.3. Nutritional Recommendations
- 3.10.4. Nutritional Treatment

You will acquire a deep and effective update on all the most necessary topics related to Pancreatic Endocrinology"

05

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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

At TECH we use the Case Method

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

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

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

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

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

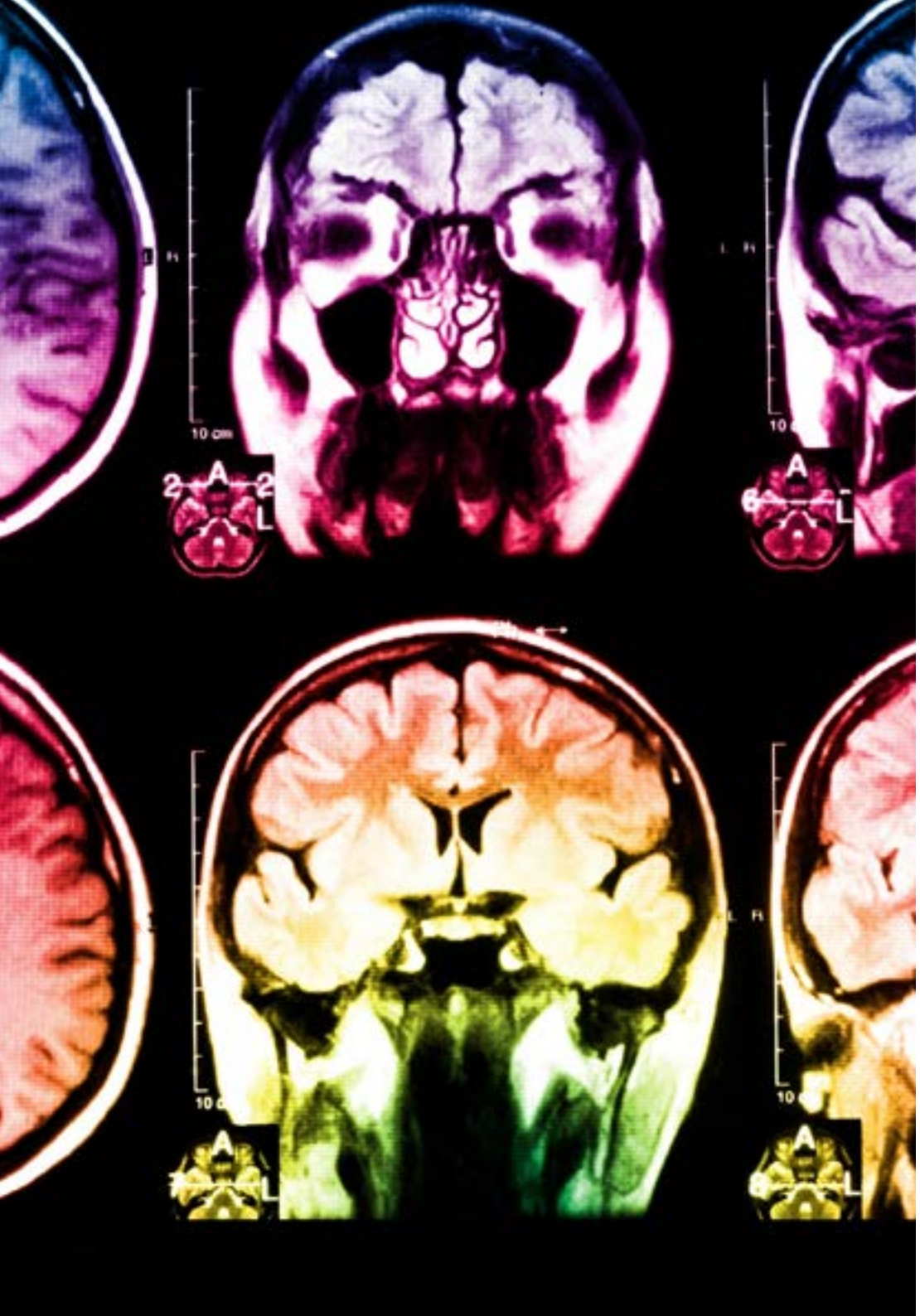
1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



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.

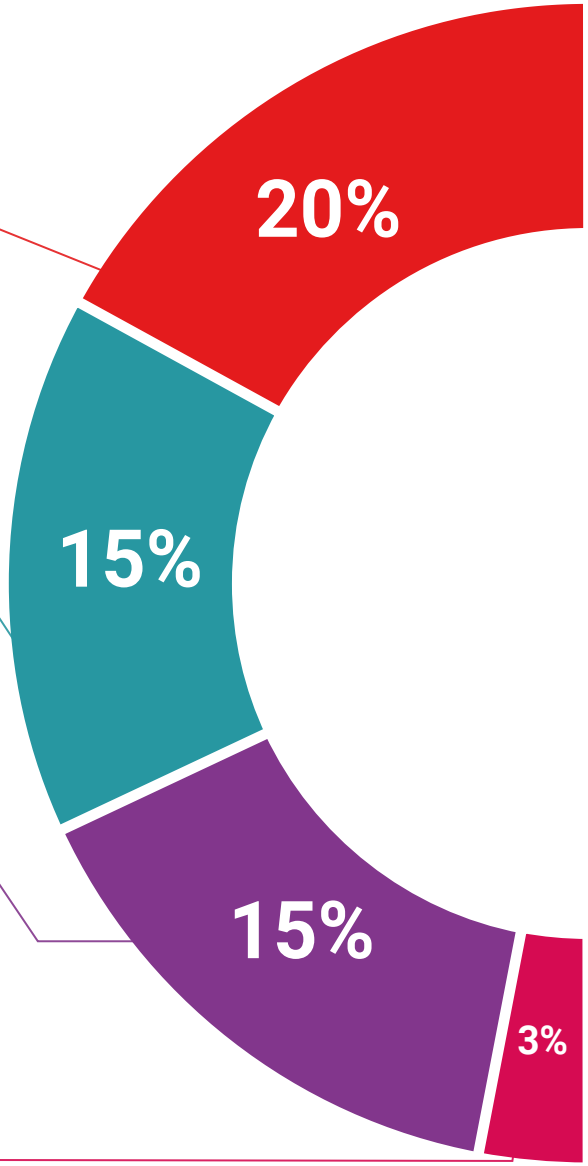
Interactive Summaries

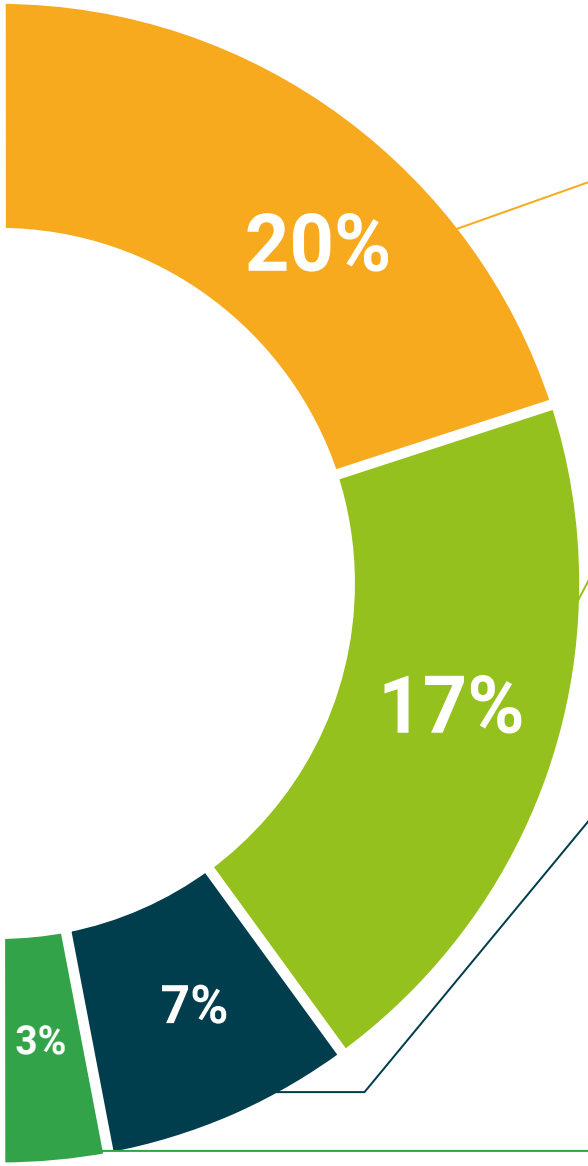
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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.

06

Certificate

The Postgraduate Diploma in Pancreatic Endocrinology guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.

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

This program will allow you to obtain your **Postgraduate Diploma in Pancreatic Endocrinology** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (***official bulletin***). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Pancreatic Endocrinology**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**


tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Postgraduate Diploma in Pancreatic Endocrinology

This is a program of 450 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

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

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

tech global university

Postgraduate Diploma

Pancreatic Endocrinology

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Credits: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Postgraduate Diploma

Pancreatic Endocrinology

tech global university