

Postgraduate Diploma

Implementation Strategies in Telemedicine Projects





Postgraduate Diploma Implementation Strategies in Telemedicine Projects

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/medicine/postgraduate-diploma/implementation-strategies-telemedicine-projects

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 20

05

Methodology

p. 24

06

Certificate

p. 32

01

Introduction

Digital information systems have become the basis for integrating any strategy of change toward eHealth, as they modulate the provision and measurement of outcomes in terms of the relative preferences of decision-makers. For this reason, healthcare organizations are increasingly committed to establishing quality management and patient safety systems in order to provide more effective diagnoses and treatments. That is why with this TECH Technological University program, the healthcare professional who is going to carry out his activity using new technologies will master the regulatory and ethical implications of his activity in the digital plane through a series of audiovisual resources, based on the Relearning methodology that consist in the approach of real cases and simulation.





“

eHealth is here to stay and this Postgraduate Diploma provides the basic foundations in Telemedicine that will help you succeed professionally in the digital age”

The aim of this Postgraduate Diploma is to deepen the necessary knowledge and skills to get footing in the inevitable shift traditional healthcare to digital healthcare. To this end, the objectives, work and debates proposed in this module on ICT in health, are intended to affect not only the work of professionals, but also the management processes, quality of care and perceived quality of health services.

On the other hand, with the birth of the internet, social networks and applications, in recent years a paradigm shift has begun, in which the patient begins to explore his or her potential to make changes that benefit his or her health. This represents the basis of patient-centered medicine, where patients, healthcare professionals and the healthcare sector work together to empower patients in the prevention, timely diagnosis and better management of diseases. Aspects such as ethics and medical and telemedicine-related liability are also taken into account.

Finally, students will delve into the process of creating ICT projects for the health sector. starting from problem analysis and the needs within the health sector, ICT projects will help develop and implement practical solutions and applications. Students will also become familiar with the different areas in which telemedicine is already at work. Overall, it is an innovative and necessary Postgraduate Diploma, a safe bet to prepare future doctors for what is already being taking place in the present.

The extensive experience and training our teaching staff has in this area of medicine positions this Postgraduate Diploma above others on the market, providing graduates with a reference of excellence. Both the course management and the teaching staff will put their knowledge and professional experience at the disposal of students in a practical manner.

It is also a 100% online program that provides professionals with the ease of being able to study it comfortably, wherever and whenever they want. All you need is a device with internet access to take your career one step further. A modality in line with present times, with TECH's guarantee of future projection.

This **Postgraduate Diploma in Implementation Strategies in Telemedicine Projects** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ The development of case studies presented by Telemedicine experts
- ♦ 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
- ♦ Practical exercises where self-assessment can be used to improve learning
- ♦ Its special emphasis on innovative methodologies
- ♦ 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



Thanks to this The Postgraduate Diploma, you are betting on a quality healthcare system with a guaranteed future, while keeping patient wellbeing in mind"

“

There is an increasing demand for medical teleconsultations. With this Postgraduate Diploma you will master the digital field and boost your career into the virtual environment"

The program includes, in its teaching staff, professionals from the sector who bring to this program the experience from their work, in addition to recognized specialists from prestigious reference societies and 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 professional will be assisted by an innovative interactive video system created by renowned and experienced experts.

Establishing quality and patient safety management systems ensures accurate diagnoses and treatments, get to know them all.

You will learn how to create ICT projects for the health sector from professionals who already apply them in their daily work.



02 Objectives

The program design will allow students to approach and apply Telemedicine so that they can turn their medical knowledge toward tele-assisted healthcare. In this way, you will bring your professional profile up to date and boost your career to a position demanded by patients and the current healthcare system, both public and private, given the current pandemic situation. The program has been designed by a team of experts with contents that will enable the future graduate to reach the proposed objectives. For this reason, TECH establishes a series of general and specific objectives through which students will be guided.





“

You will delve deeper into the different ICT uses in Health, their implementation and evaluation”



General Objectives

- ♦ Delve into the understanding of the environment in which telemedicine services are developed, including challenges, limitations and opportunities in the area
- ♦ Delve into the ethical, legal, technical and medical aspects of creating and implementing telemedicine projects
- ♦ Gain a deeper understanding of the different areas of use of ICTs in health care.
- ♦ Master the new techniques and technologies that are emerging to better serve patients and their needs
- ♦ Further the analysis, development, implementation and evaluation of eHealth and telemedicine projects
- ♦ Identify the political, social, legal, technological and economic fundamentals and dimensions for the implementation of ICT in health systems
- ♦ In-depth study of the ethical and legal aspects of attending a patient by telematic means
- ♦ Delve into the importance of digital interoperability in healthcare and the application of standards for its implementation
- ♦ Recognize the importance of empowering patients and healthcare stakeholders in the world of digital health
- ♦ Master learning and differentiate between reliable and unreliable sources of information
- ♦ Learn the main aspects of project evaluation and its technical dimensions
- ♦ Obtain skills for the clinical application of technologies





Specific Objectives

Module 1. eHealth, ICT in Public and Community Health

- ◆ Deepen understanding of the conceptual map and operational framework of eHealth and telemedicine
- ◆ Deepen understanding of the conceptual map of healthcare systems
- ◆ Further understanding of health system organizations

Module 2. Legislation, Ethics and Safety in e-Health

- ◆ Master the ethical-legal framework for the implementation of new technologies
- ◆ Thoroughly study patient and health professional responsibilities in telemedicine practice
- ◆ Deepen awareness of the need for privacy and security of information
- ◆ Define data protection legislation
- ◆ Master and apply data security and privacy
- ◆ Differentiate between the various bioethical approaches and their ICT application
- ◆ Develop the different implementation measures to ensure patient safety in a quality management environment

Module 3. Telemedicine Project Strategy, Implementation and Evaluation

- ◆ Deepen the knowledge and skills for the analysis of the needs of health professionals and the health sector, to provide solutions through ICT projects
- ◆ Delve into the process by which a technological project is designed for the healthcare sector
- ◆ Master the process by which the implementation of an ICT project is carried out
- ◆ Deepen knowledge for the evaluation of ICT projects
- ◆ Explore in depth the different areas and sectors where telemedicine is in operation

03

Course Management

This program has a highly qualified team with extensive experience in the field, which will offer students the best tools to gain solid knowledge in the specialty of Telemedicine. In order to offer quality education aimed at excellence, TECH has the best professionals in this medical field for students to develop their skills effectively during the course. Thus, students have the guarantees required to specialize in a booming field that will catapult them to professional success, contributing to their performance functions in a sustainable and responsible way for humanity.



“

It's time to get into tele-assisted medicine, acquire the fundamentals with the best team of professionals thanks to TECH”

International Guest Director

Nicole Blegen is an internationally renowned professional with an outstanding background in **digital transformation and product management** in the **healthcare** sector. As such, she has worked in key roles, such as **Vice President of the Center for Digital Health at Mayo Clinic**, where she has led the enablement of **digital products**, overseeing a growing team of more than 80 employees. In fact, her work has been instrumental in implementing and optimizing **digital solutions**, achieving effective integration into clinical practice and across organizational boundaries.

Likewise, back at **Mayo Clinic**, she has served as **Director of Digital Practice**, orchestrating the expansion of **digital care** solutions , increasing **remote patient monitoring** by over 300% and video **telemedicine** by a staggering 10,000% during the **COVID-19** pandemic. In addition, its proactive approach and ability to reduce implementation times by more than 50% have been crucial to improving **operational efficiency** and provider and patient satisfaction.

In addition, Nicole Blegen has played a leading role in **Internal Business Consulting** and **Management Engineering**, with a commitment that has been recognized with the **Internal Consulting Process Excellence Award** from the **AIMC**, reflecting her ability to drive impactful change and optimize efficiency within the organization. In addition, he has served as **Regional Marketing Manager at Rotech Healthcare**, as well as **Promotions Manager at Diageo**, where he has managed revenue growth and brand visibility.

Due to all of the above, she has more than demonstrated an ability to deliver outstanding results globally, combining her **product management** expertise with an **innovative strategic vision**.



Ms. Blegen, Nicole

- Vice President of Digital Health at Mayo Clinic, Minnesota, United States
- Director of Digital Practice at Mayo Clinic
- Director in Internal Business Consulting and Management Engineering at Mayo Clinic
- Health Systems Engineer at the Mayo Clinic
- Regional Marketing Manager at Rotech Healthcare
- Promotions Manager at Diageo
- Master of Business Administration (MBA) from the University of St. Thomas
Bachelor's Degree in Business Administration and Management from the University of Minnesota
- Award for Excellence in Internal Consulting Processes, granted by the
- Association for Media Research (AIMC)

“

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

Management



Dr. Serrano Aísa, Pedro Javier

- ♦ Specialist in Cardiology at the Clinical symptoms Hospital in Zaragoza
- ♦ Head of Cardiology at Policlínica Navarra
- ♦ Head of the Cardiology Department of Viamed Montecanal Hospital, Zaragoza, Spain
- ♦ Director of Cardiomoncayo
- ♦ Degree in Medicine and Surgery from the University of Zaragoza



Dr. Achkar Tuglaman, Nesib Nicolás

- ♦ Director of Clinical Telemedicine at AtrysHealth
- ♦ Co-founder of the International Telemedicine Hospital
- ♦ Medical specialist Viamed Group Health



Dr. Sánchez Bocanegra, Carlos Luis

- ♦ Computer Engineer specialized in Big Data and e-Health
- ♦ Head of the IT Department of the Junta de Andalucía (Regional Government of Andalusia)
- ♦ Collaborating Professor at the University of Distance Education (UNED) and the Open University of Catalonia (UOC)
- ♦ Director of several Professional Master's Degree Final Projects at Italiano University Hospital in Argentina and the School of Medicine at the University of Antioquia
- ♦ Member of HOPE (Health Operation for Personalized Evidence) project group Vaccine Project
- ♦ Author of several articles on e-Patients, social networks and social media applied to health
- ♦ PhD in Computer Engineering from the University of Seville, specializing in Medical Informatics and eHealth
- ♦ Computer Management Engineer from the University of Malaga (UMA)
- ♦ Graduate in Information Systems Engineering from the Catholic University of Avila (UCAV)
- ♦ Master's Degree in Free Software by the Open University of Catalonia (UOC)

Professors

Dr. Chacón Vargas, Karla Azucena

- ♦ Coordinator of the Telehealth Program of the State of Chihuahua
- ♦ Consultant in Telemedicine of the World Health Organization
- ♦ Leader of the international research project Esperanza with the National University of Distance Education, University of Cataluña and the Health Secretariat of the State of Chihuahua
- ♦ Master in Telemedicine from the University Oberta de Catalunya (UOC)
- ♦ Degree in Medical Surgery from the Autonomous University of Ciudad Juarez
- ♦ Degree in Diabetes Education from the Autonomous University of Chihuahua

Dr. Urrutia Rica, Rosa

- ♦ Leader in Telemedicine, in the area of Quality and Environment and as the Group's Data Protection Delegate AtrysHealth
- ♦ Degree in Biology from the University of Barcelona
- ♦ Specialized in the Integrated Management of Quality, Environment, Occupational Risk Prevention and Data Protection.. Catalanian Institute of Technology
- ♦ Superior Data Protection Program. Spanish Association for Quality





“

Our teaching team will provide you with all their knowledge so that you are up to date with the latest information on the subject"

04

Structure and Content

The syllabus of this Postgraduate Diploma has been designed to bring professionals closer to the fundamentals of medicine applied to telecare, whose momentum has gained strength after the current pandemic situation. It therefore becomes an essential exercise for any doctor today. This way, the content of the program has been structured in a conglomerate of new and updated information.





“

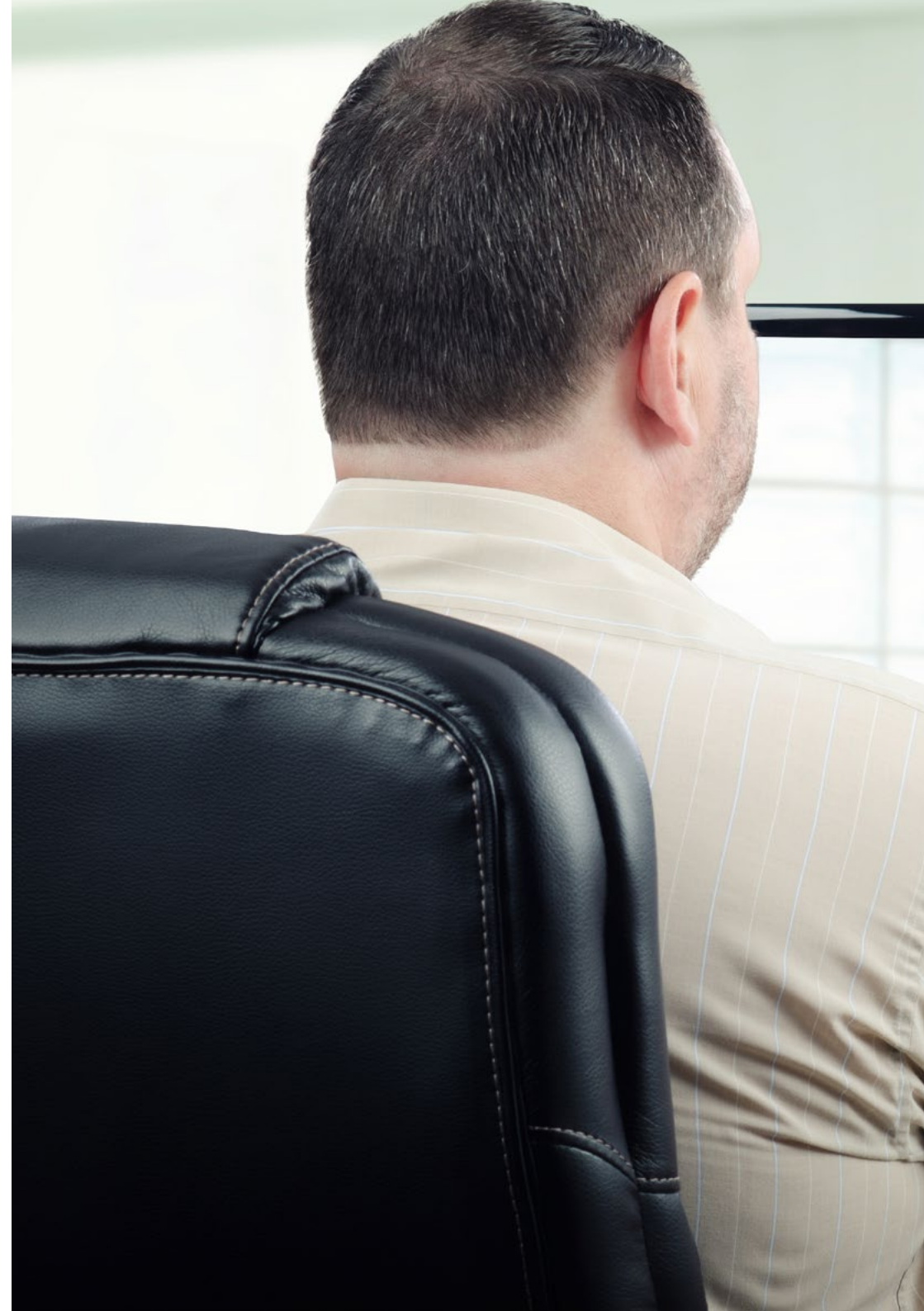
*You will delve deep into the
Health Systems of the 21st
century and emerge in eHealth”*

Module 1. eHealth, ICT in Public and Community Health

- 1.1. Healthcare Systems in the 21st Century: eHealth (Telemedicine, mHealth, Ubiquitous Health)
- 1.2. The Organization of International Healthcare Systems
- 1.3. Financing and Provision
- 1.4. The Actors and Roles in the Healthcare System
- 1.5. Current Panorama of Telemedicine in Spain. Evolution
- 1.6. Medicine 1.0 to Medicine 5.0
- 1.7. Profile of the Main ICT-health Telematic Services Developed by the Autonomous Communities in Spain
- 1.8. The Challenges of Public and Community Health and Information and Communication Technologies (ICTs)
- 1.9. Evaluation and Quality of Care. What The People Say
- 1.10. The Key Aspects of Health Reforms and the Implementation of New Models

Module 2. Legislation, Ethics and Safety in e-Health

- 2.1. Protection of Personal Health Data
- 2.2. General aspects of the PBL. The Security and Privacy of Health Information
- 2.3. Data Protection and Patient's Rights. Informed Consent
- 2.4. Recommendations and Good Practice to Ensure Security and Privacy
 - 2.4.1. The Risks of Using New Technologies in Medicine
 - 2.4.2. Security Controls in Data Processing
 - 2.4.3. Specific Recommendations for the Handling of Health Data
- 2.5. Ethical Issues in the Telematic Provision of Health Services. Informed Consent in Telemedicine
- 2.6. Characteristics of the Doctor-Patient Relationship in Telemedicine
 - 2.6.1. The Evolution of the Doctor-Patient Relationship Throughout History
 - 2.6.2. The Influence of New Technologies in the Doctor-Patient Relationship
 - 2.6.3. Recommendations for Maintaining an Optimal Doctor-Patient Relationship in Telematic Services
- 2.7. Legislation and Bioethics in Clinical Practice, Research and Clinical Trials
 - 2.7.1. The International Code of Medical Ethics
 - 2.7.2. Ethics Committees for Medical Research
 - 2.7.3. The Handling of Data Associated with Clinical Trials





- 2.8. Medical Liability
 - 2.8.1. The Regulatory Context of Medical Liability
 - 2.8.2. Confidentiality
 - 2.8.3. The Characteristics of Medical Liability Associated with Telemedicine
- 2.9. Lex artis and Telemedicine
- 2.10. Patient Safety and Quality Assurance

Module 3. Telemedicine Project Strategy, Implementation and Evaluation

- 3.1. Technological Innovation Models and their Application in the Health Sector
- 3.2. Healthcare Needs Analysis for the Creation of Projects
- 3.3. Design of Technological Projects for the Health Sector
- 3.4. Research Principles for Healthcare Technology Assessment
- 3.5. Viability of Healthcare Projects
- 3.6. Telemedicine Apps in the Healthcare Environment
- 3.7. Telemedicine for Immediate or Urgent Care
 - 3.7.1. Tele-Heart Attack
 - 3.7.2. Tele-Stroke
 - 3.7.3. Primary Care Consultation
- 3.8. Use of Telemedicine in Prediction, Prevention and Diagnosis
 - 3.8.1. Teledermatology
 - 3.8.2. Teleophthalmology
 - 3.8.3. Telecardiology
 - 3.8.4. Teleradiology
- 3.9. Telemedicine in Healthcare Intervention and Treatment
 - 3.9.1. Telerehabilitation
 - 3.9.2. Teleulcer
 - 3.9.3. Telesurgery
- 3.10. Application of Telemedicine in Specific Areas
 - 3.10.1. Mental Health
 - 3.10.2. Geriatrics
 - 3.10.3. Chronic Patients
 - 3.10.4. Rare Diseases
 - 3.10.5. Nursing

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.



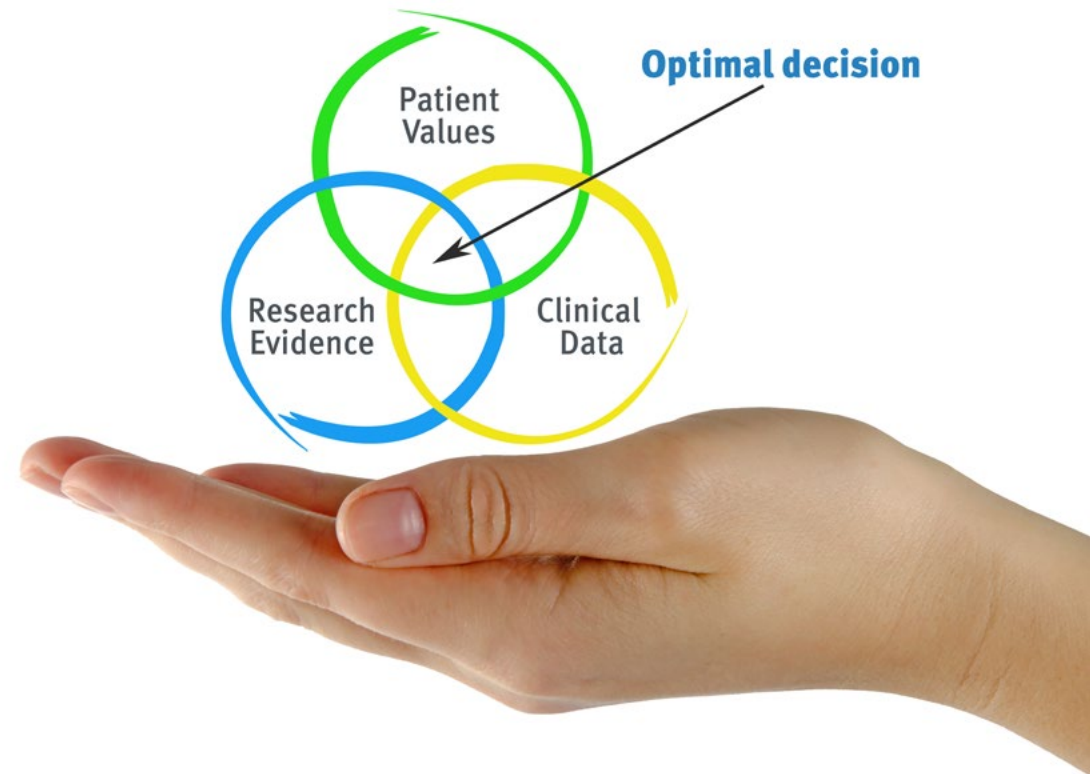
“

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. Gervas, 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.

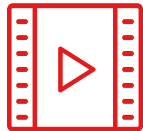
Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

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

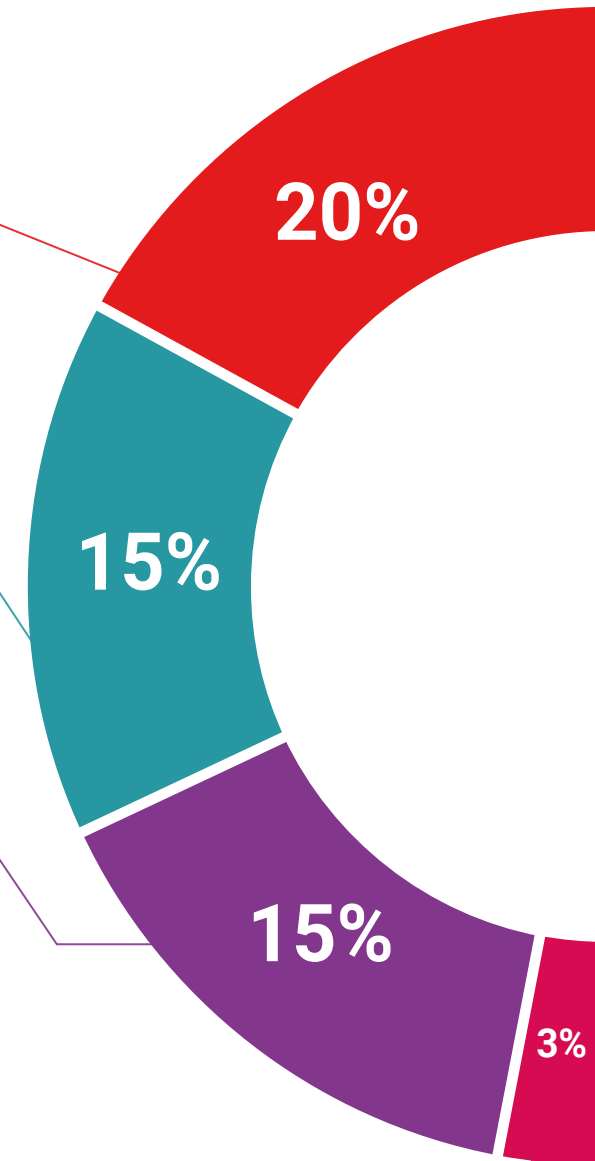
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

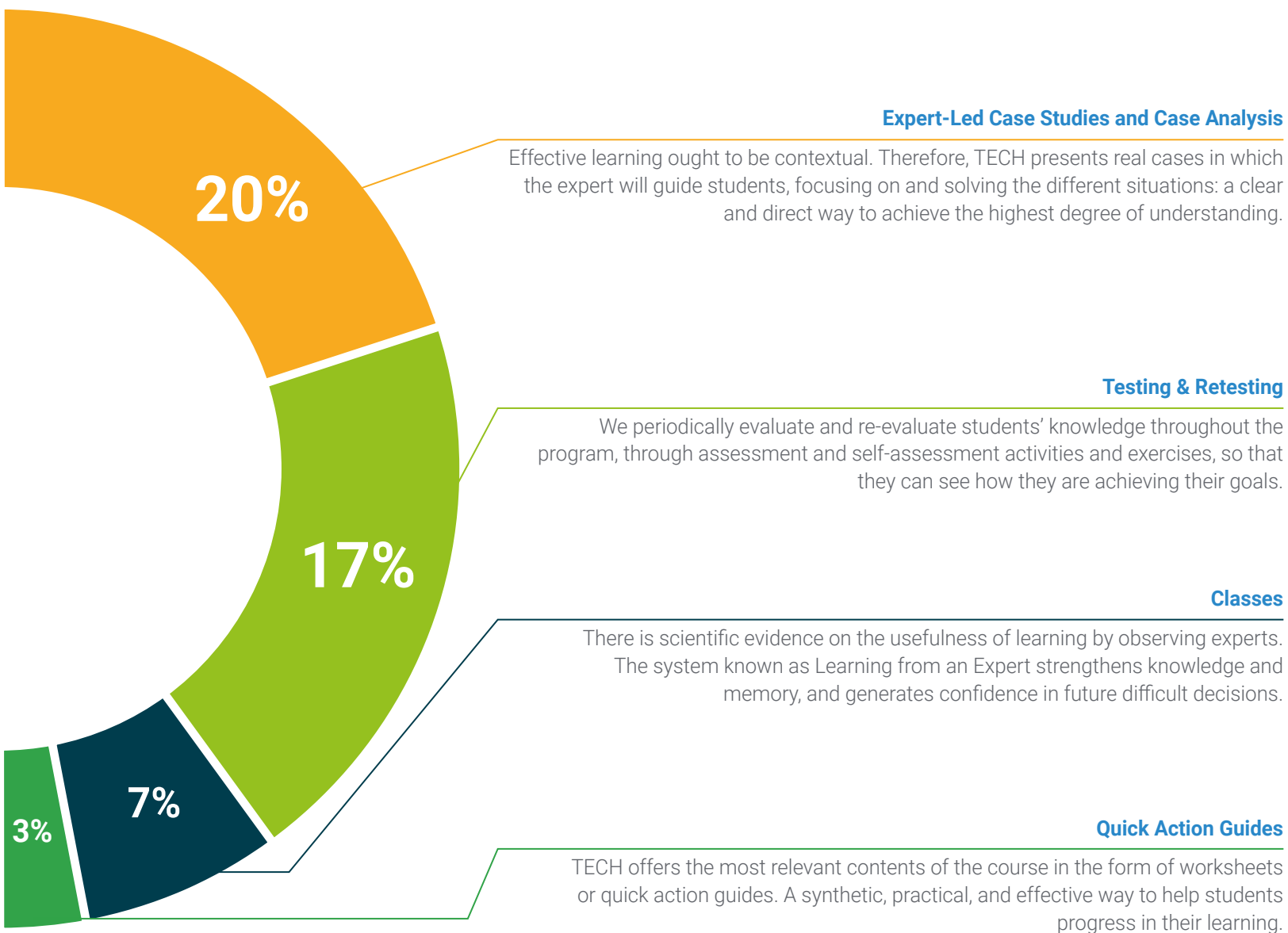
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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.





06 Certificate

The Postgraduate Diploma in Implementation Strategies in Telemedicine Projects guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.



“

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

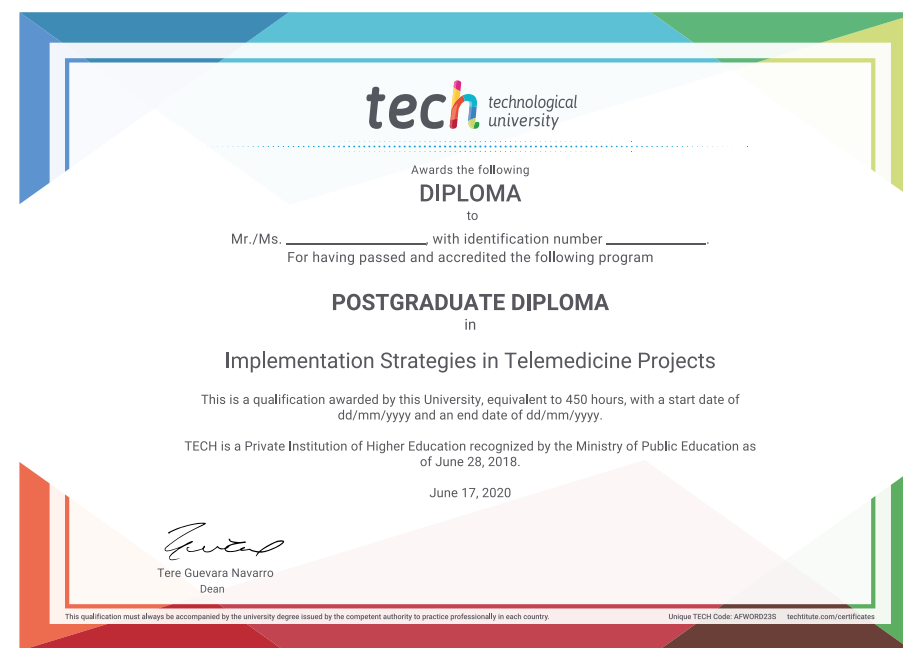
This **Postgraduate Diploma in Implementation Strategies in Telemedicine Projects** contains the most complete and up-to-date scientific on the market.

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

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

Title: **Postgraduate Diploma in Implementation Strategies in Telemedicine Projects**

Official N° of hours: **450 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.



**Postgraduate
Diploma**
Implementation
Strategies in
Telemedicine Projects

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Postgraduate Diploma Implementation Strategies in Telemedicine Projects

