

Hybrid Professional Master's Degree Telemedicine





Hybrid Professional Master's Degree Telemedicine

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

Credits 60 + 4 ECTS

Website: www.techtute.com/us/medicine/hybrid-professional-master-degree/hybrid-professional-master-degree-telemedicine

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01

Introduction

Telemedicine has expanded its scope in recent years by implementing tools such as mobile applications, remote monitoring software and the management of clinical information through Big Data and Artificial Intelligence in its daily practice. However, not all professionals manage to keep up to date on their advantages and disadvantages. For this reason, TECH has designed this degree where its main innovations are grouped together in a theoretical and practical way. To this end, the program is divided into two parts. The first part devotes 1,800 hours to the theoretical study of new concepts and the second part includes an intensive stay in a renowned hospital center. In this last phase, the physician will handle modern technologies under the rigorous guidance of leading experts.





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*Get an exhaustive and rigorous update
on all the novelties of Telemedicine
through this very complete Hybrid
Professional Master's Degree"*

In a very short time, Telemedicine has become an indispensable health branch. Therefore, every day, science and technology support its progress with new technological resources. As a result, specific mobile applications have emerged for the diagnosis and monitoring of dermatological lesions, indicative of skin cancer. At the same time, monitoring patches have been developed to remotely check the clinical variables of patients with chronic heart disease. Telesurgery has also experienced a considerable boost in recent times due to the involvement of more efficient connectivity resources that make it possible for a surgeon, thousands of kilometers away, to operate on patients with robotic tools.

Contradictorily, not all specialists are up to date with these advances and very few are able to apply their advantages in their daily professional practice. In this context, TECH is committed to this Hybrid Professional Master's Degree in Telemedicine, with a pioneering methodological design of its kind. The degree, divided into two parts, devotes the first part to theoretical and 100% online learning of modern concepts related to this branch of healthcare. Therefore, over the course of 1,800 educational hours, the doctor will have total availability of the contents from any device connected to the Internet. At the same time, methods of great didactic value, such as Relearning, will help to make the process of assimilating knowledge faster and more flexible.

Then, in the second half of the program, TECH has planned an intensive 3-week stay in a medical facility of international prestige. In this practical environment, the professional will learn first-hand the latest working dynamics in Telemedicine. In addition, they will have the opportunity to discuss therapeutic options and the management of new technologies with leading experts in the field. At the end of this phase, the graduate will be ready to apply these new skills with excellence and even undertake personal eHealth projects.

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

- ♦ Development of more than 100 clinical cases presented by Telemedicine professionals
- ♦ 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
- ♦ Comprehensive systematized action plans for the main pathologies
- ♦ Presentation of practical workshops on procedures diagnosis, and treatment techniques
- ♦ An algorithm-based interactive learning system for decision making in the clinical situations presented throughout the course
- ♦ Practical clinical guides on approaching different pathologies
- ♦ All of this will be complemented by 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
- ♦ Furthermore, you will be able to carry out a clinical internship in one of the best hospital centers



Study, over the course of 1,800 hours, the most innovative concepts in the current practice of Telemedicine"

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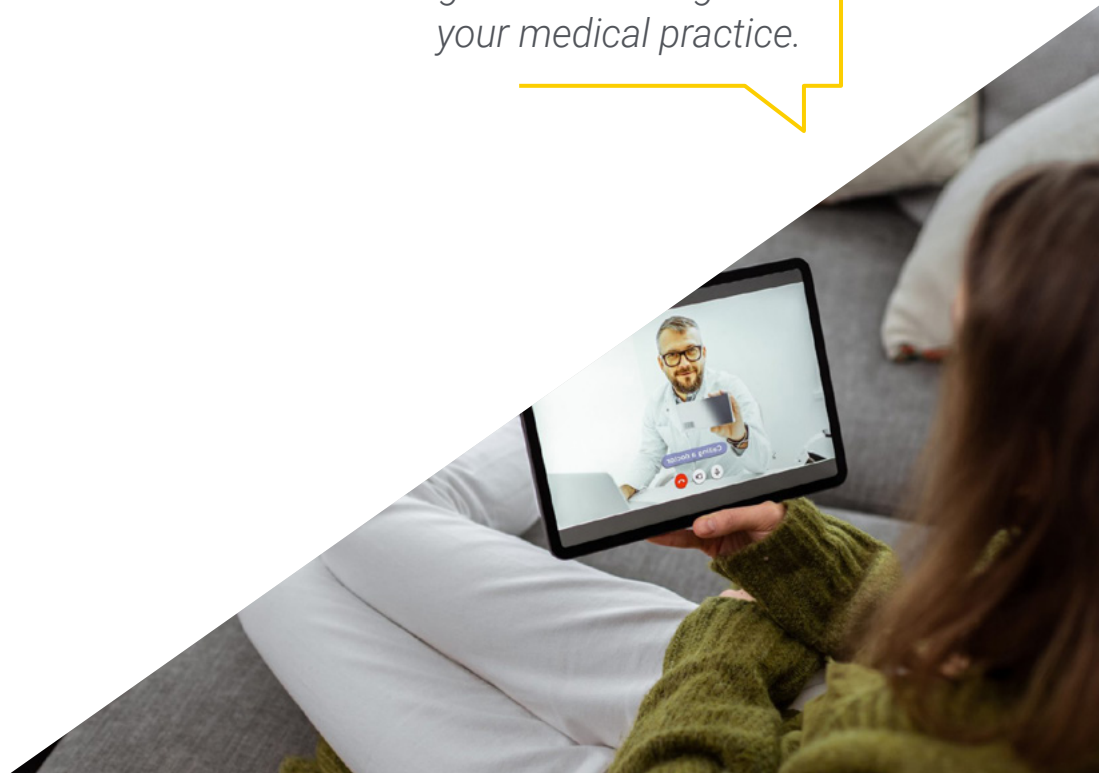
Completing the 3 weeks of clinical practice of this Hybrid Professional Master's Degree means that you will be ready to face the most diverse challenges of your professional practice"

In this proposed Professional Master's Degree, of a professionalizing nature and blended learning modality, the program is aimed at updating Telemedicine professionals who require a high level of qualification. The contents are based on the latest scientific evidence, and oriented in a didactic way to integrate theoretical knowledge into practice, and the theoretical-practical elements will facilitate the updating of knowledge and allow decision making in patient management.

Thanks to the multimedia content, developed with the latest educational technology, Medicine professionals will benefit from contextual learning, i.e., a simulated environment that will provide immersive learning programmed 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 purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

The two stages of this degree will provide you with an excellent mastery of the theoretical and practical skills necessary for the practice of Telesurgery.

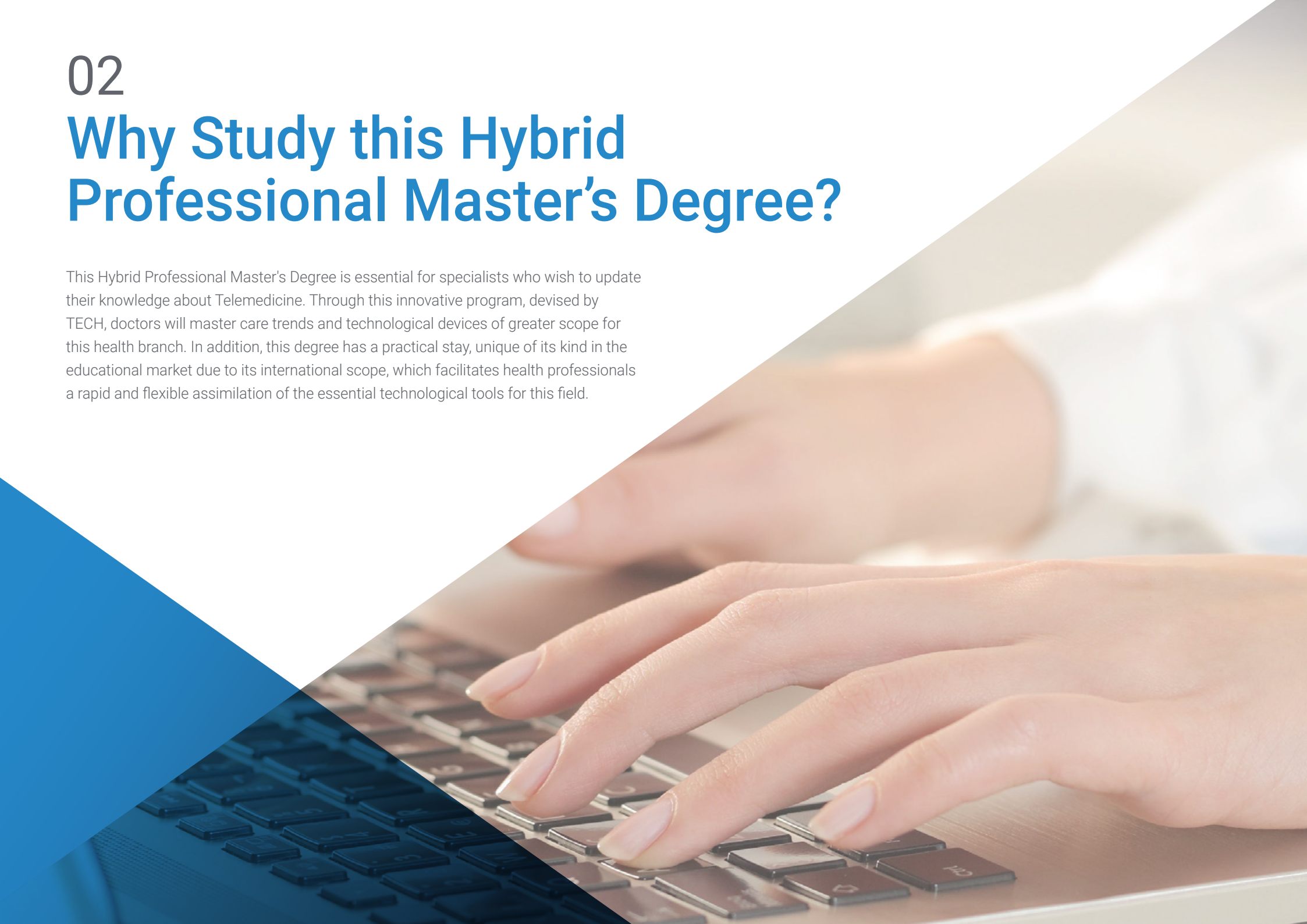
Get up to date with a program, pioneer of its kind, where you will find the most recent criteria to implement Artificial Intelligence technologies in your medical practice.



02

Why Study this Hybrid Professional Master's Degree?

This Hybrid Professional Master's Degree is essential for specialists who wish to update their knowledge about Telemedicine. Through this innovative program, devised by TECH, doctors will master care trends and technological devices of greater scope for this health branch. In addition, this degree has a practical stay, unique of its kind in the educational market due to its international scope, which facilitates health professionals a rapid and flexible assimilation of the essential technological tools for this field.



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This Hybrid Professional Master's Degree is all you need to know in depth how Dermatology, Cardiology and Ophthalmology benefit from Telemedicine today"

1. Updating from the latest technology available

Telemedicine branches such as Telesurgery have evolved rapidly in recent years. This has been possible due to technological innovations related to connectivity and remote management of large equipment. There has also been an increase in the number of platforms where specialists can interact with each other and with patients in search of solutions to their health problems. All these innovations will be addressed in this very complete Hybrid Professional Master's Degree to enhance their application in the daily medical practice of the graduates.

2. Gaining in-depth knowledge from the experience of top specialists

Throughout this program, health professionals will have a teaching team of excellence that will provide them with personalized guidance at all times. These professors have chosen the contents of the syllabus based on their daily practical experience, which means that the program has an in-depth analysis of the most common problems encountered in daily work practice.

3. Entering first-class clinical environments

In a second stage of this program, TECH has foreseen the needs of its students in terms of the management of the most complex technological tools related to Telemedicine. For this reason, it has planned a practical stay where doctors will work with leading experts in this professional field and in hospital facilities of international scope.





4. Combining the best theory with state-of-the-art practice

At the academic level, few study programs manage to unify the theoretical field with practical activity with greater excellence than TECH. From its Hybrid Professional Master's Degree model, students achieve a holistic mastery of the trends and techniques embodied in its educational content. They also have 3 weeks of practical activity in a prestigious center to apply everything they have learned in healthcare interventions.

5. Expanding the boundaries of knowledge

With this program, TECH offers physicians the opportunity to broaden their professional horizons from an international perspective. This is possible thanks to the breadth of contacts and collaborators available at TECH, the largest digital university in the world.



You will have full practical immersion at the center of your choice"

03 Objectives

Telemedicine is in high demand, but it requires constant updating due to the continuous advances that are taking place in this field. Based on this issue, TECH and its team of experts have developed this comprehensive program with the aim of providing physicians with all the information they need to keep up to date with the latest and most effective diagnostic, prevention, treatment and follow-up strategies. Therefore, upon completion of the program, the graduate will be ready to implement ambitious procedures and eHealth projects with significant impact on the patients in their care.





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Enroll in TECH and get up to date on the main advances in Telemedicine for the distribution of medicines and medical supplies to hard-to-reach areas using drones”



General Objective

- This Hybrid Professional Master's Degree aims to enable each specialist to delve into the development of current Telemedicine services, including the challenges, limitations and areas of opportunity of this branch of care. They will also delve into the new ethical, legal, technical and health aspects that must be taken into account to implement such a project. You will also learn about information technologies (ICT) in the healthcare field and how to use them to meet the needs of your patients and those that arise during your professional practice



With this comprehensive and innovative program, you will implement modern resources such as Artificial Intelligence, the Internet of Things or Big Data in your daily Telemedicine practice"





Specific Objectives

Module 1. eHealth, ICT in Public and Community Health

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

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

- ♦ Master the ethical and legal framework for the implementation of new technologies.
- ♦ Thoroughly study patient and health professional responsibilities in telemedicine practice
- ♦ Define legislation related to data protection, privacy and security of medical information of medical information
- ♦ Differentiate between the various bioethical approaches and their ICT application
- ♦ Apply the different implementation measures to ensure patient safety in a quality management environment

Module 3. eHealth Information Systems

- ♦ Deepen understanding of how eHealth and telemedicine information systems work.
- ♦ Implement the use of standards and project interoperability as an element of integration
- ♦ Analyze the concept of ontologies and semantic terms, including the most commonly used ones

Module 4. Patient Centered Medicine: ePatient

- ♦ Develop the patient's potential in the prevention and timely diagnosis of diseases through ICTs
- ♦ Master the digital tools and services available
- ♦ Validate, through precise methodologies, the communication channels
- ♦ Identify the strengths, weaknesses, threats and opportunities offered by these vehicles
- ♦ Develop health promotion material through communication channels

Module 5. Health Promotion through ICTs

- ♦ Address the development of ICTs and their influence on health promotion.
- ♦ Evaluate the impact from a managerial perspective of the implementation of technological tools for health promotion
- ♦ Understand the specific knowledge and technologies for health promotion health promotion interventions in health and social environments

Module 6. Data Analytics, Big Data in Healthcare, Traceability, and Artificial Intelligence

- ♦ Delve into the advanced technological elements that can be integrated in Telemedicine
- ♦ Understand the operation and objectives of the use of these elements, as well as the usefulness of data analysis for decision making (MEB)
- ♦ Correctly apply the environment of the advanced information system of data to information with its projection to knowledge and wisdom

Module 7. Skills and Requirements for Clinical Application in Telemedicine

- ♦ Acquire skills for the integration and incorporation of technologies in health and clinical processes
- ♦ Identify the necessary tools for the management of change. The disruption of the technological era in healthcare
- ♦ Provide resources for the promotion of healthy lifestyles using new technologies

Module 8. Communication and Digital Marketing Applied to Telemedicine Projects

- ♦ Manage the digital environment in depth: its possibilities and its risks
- ♦ Implement an eHealth project in the digital universe, its communication and sales strategy and define the objectives to be achieved
- ♦ Develop digital marketing techniques that will allow to achieve the objectives

Module 9. 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 and the knowledge necessary to evaluate them
- ♦ Assess the different areas and sectors where Telemedicine is in operation



Module 10. Business Models and Skills

- ◆ Put into practice the concept of digital transformation and its impact on the company
- ◆ Indicate the skills needed to build and develop a business model
- ◆ Develop product and management; MVP and technology validation through legislation, privacy and intellectual property notions
- ◆ Explain the search for financing and alternative methods

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Delve into the most relevant theory in this field, subsequently applying it in a real work environment”

04 Skills

Upon completion of all phases of this educational program, the graduate will be ready to apply the latest trends in the field of Telemedicine in their daily practice. This is possible thanks to the wide range of skills that are contemplated throughout this degree, unique in its kind by integrating a theoretical and practical update on this specialty.



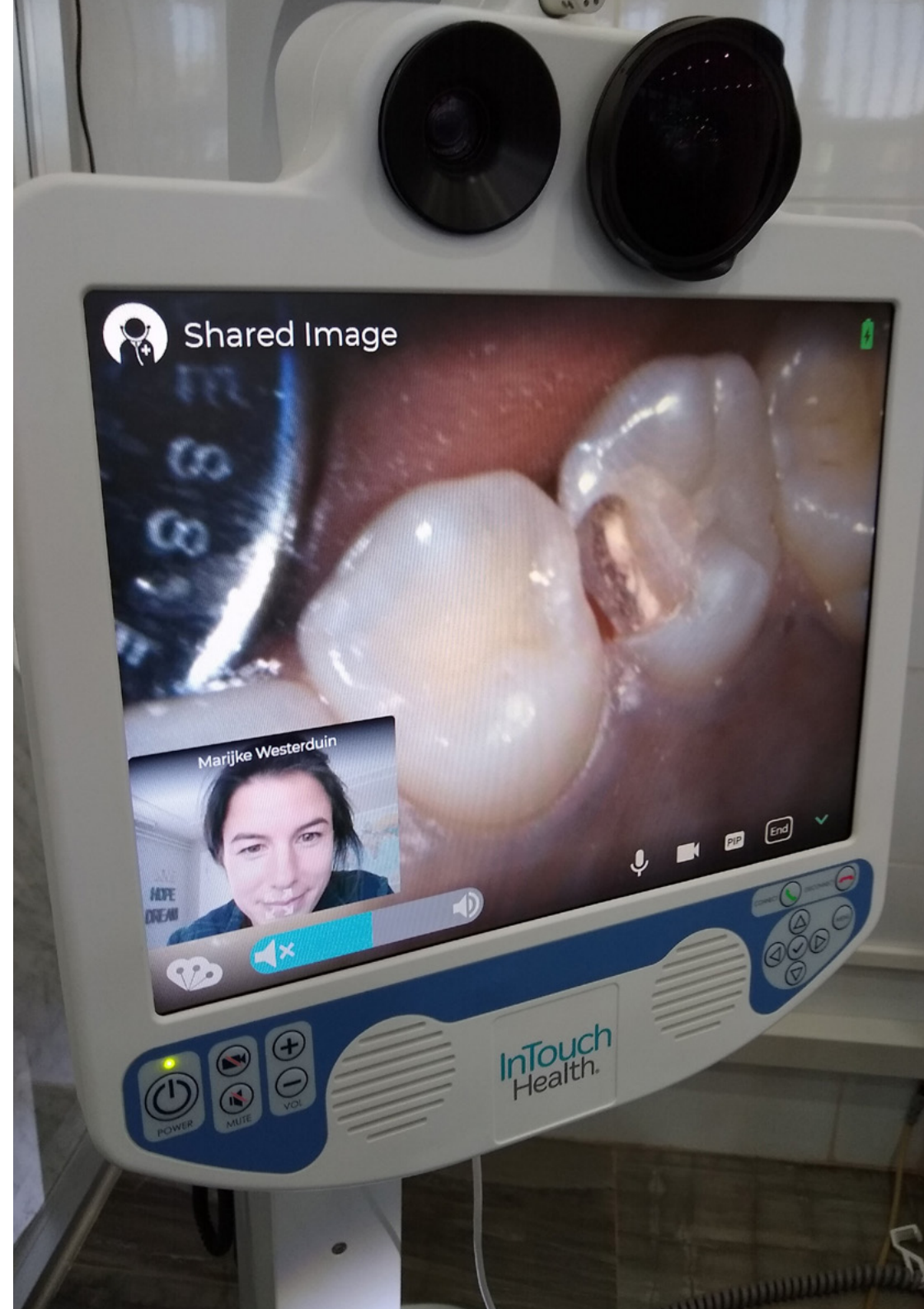
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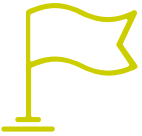
Enroll now with TECH and accumulate new experiences to achieve a professional practice of Telemedicine, according to the latest technological resources”



General Skills

- Master the transformation processes of the healthcare system to digital health, manage quality and patient safety by applying current regulations and the ethics of digital activity
- Recognize the different standards defined for the health care sector In addition, students will delve into the concept of health ontology and its importance in the field of digital health
- Acquire the necessary knowledge and skills of patient-centered medicine, its potential and the main technological tools required for its application, to be able to develop ICT projects, in which the patient-centered medicine is the core component
- Further develop skills for the use and literacy of the healthcare professional for the implementation of telemedicine in the healthcare sector
- Deepen understanding of the conceptual basis for the proper implementation and management of a telemedicine system. From different points of view, such as technological infrastructure, human resources, guidelines for the teleconsultation process
- Manage the use of Telemedicine thanks to the analysis of use cases for different needs of the health sector with the Patient-Centered Medicine approach
- Approach a technological and healthcare business project and transform it into a reality





Specific Skills

- ♦ Manage the processes of care and perceived quality of health services provided to people and safety
- ♦ Master the regulatory and ethical implications of the digital health activity
- ♦ Assess the importance of interoperability in the field of healthcare in order to be able to choose the most appropriate tools to meet the challenge of developing processes that require interoperability
- ♦ Recognize the different standards defined for the health care sector. In addition, students will delve into the concept of health ontology and its importance in the field of digital health
- ♦ Acquire the knowledge and skills required in patient-centered medicine, its potential and the main technological tools required for its application, in order to be able to develop ICT projects, in which the patient-centered medicine is the core component
- ♦ Integrate the principles of health promotion, with the diverse contexts and visions in relation to the opportunities and visions in relation to the opportunities involved in channeling skills and attitudes through ICTs
- ♦ Explore and report on models and intervention design schemes in relation to health determinants and social elements of health
- ♦ Delve into the importance of big data and the different types of models of analysis
- ♦ Develop skills for the use and literacy of the health professional for the implementation of Telemedicine
- ♦ Handle the conceptual bases for the proper implementation and management of a Telemedicine system, from different points of view such as: technological infrastructure, Human Resources, guidelines and guides for the Teleconsultation process
- ♦ Master the use of Telemedicine, thanks to the analysis of use cases for different needs of the health sector with the Patient-Centered Medicine approach
- ♦ Create a strategy to publicize your digital health project by impacting your target audience, as well as the various techniques to achieve your communication and sales objectives
- ♦ Develop and implement the project and get to know different areas where Telemedicine is already implemented, this from the analysis of the problem or the need of the health sector, in which the ICT project will be developed
- ♦ Apply the definitive knowledge for the evaluation of ICT projects for the health sector
- ♦ Approach a technological and health business project and transform it into a reality
- ♦ Expose key concepts that will allow the student to discover business opportunities in the healthcare
- ♦ Implement an innovative business idea and plan its successful implementation

05

Course Management

For this Hybrid Professional Master's Degree, TECH has involved experts of great prestige and extensive experience in Telemedicine. All of them have an excellent professional career, supported by their participation in academic publications and scientific communications. These professors have taken on the challenge of composing a degree that contains the most innovative aspects of this branch of healthcare. The result has been a very complete program that, for its mastery, will have the personalized advice and guidance of this prestigious faculty.





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The TECH teaching team has a high prestige within the medical community, backed by their years of career and innovations in the field of Telemedicine"

Management



Dr. Serrano Aísa, Pedro Javier

- ♦ Head of the Cardiology Department of Viamed Montecanal Hospital, Zaragoza, Spain
- ♦ Specialist in Cardiology from the University Lozano Blesa Clinical Hospital of Zaragoza
- ♦ Head of Cardiology at Policlínica Navarra
- ♦ Director at Cardiomoncayo Medical Center
- ♦ 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
- Doctorate in Computer Engineering from the University of Seville, specializing in Medical Informatics and e-Health
- 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 from Telemedicine in the World Health Organization
- ♦ Leader of the international research project Esperanza with the National University of Distance Education, the 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

Mr. Passadore, Nicolás

- ♦ Specialist in Medical IT
- ♦ Head of IT Department at Health CEMICO
- ♦ Developer and collaborator of the HOPE project
- ♦ Degree in Computer Sciences from the National University of Comahue
- ♦ Information Systems in Health Systems: Introduction to Biomedical Informatics at the Italian Hospital of Buenos Aires
- ♦ Master in Economics and Health
- ♦ Master's Degree in Business Intelligence and Big Data by Centro de Enseñanza Cardenal Cisneros Higher Education Center
- ♦ Master in Telemedicine from the University Oberta de Catalunya (UOC)
- ♦ Master in Health Informatics, Italian Hospital of Buenos Aires Argentina
- ♦ Member: HOPE interdisciplinary research group and TeleHealth advisory group



**Dr. Serra, Guillem**

- ◆ Telemedicine Specialist
- ◆ Founder and CEO of MediQuo
- ◆ Co-founder of MeetingDoctors
- ◆ Health Market Manager at Barcelona Digital Technology Centre
- ◆ Project Manager and Technical Product Manager at Gem-Med
- ◆ Emergency Physician at the General Hospital of Vic
- ◆ Degree in Surgery and Medicine from the Autonomous University of Barcelona
- ◆ Graduate in Mathematics from the Polytechnic University of Catalonia
- ◆ Master's Degree in Mathematical Engineering from the Polytechnic University of Catalonia
- ◆ Master's Degree in Bioengineering from the Polytechnic University of Catalonia
- ◆ Executive MBA from IESE Business School and the University of Navarra

Ms. Gómez Navarro, Cristina

- ◆ Head of Marketing and Customer Strategy at Ibercaja
- ◆ Ecosystem Innovation Plus Enterprise Unit Specialist
- ◆ Master's Degree in Digital Marketing from EAE Business & Marketing School
- ◆ Law Degree, University of Zaragoza
- ◆ IZO Certification in Customer Experience

Dr. Urrutia Rica, Rosa

- ◆ Telemedicine Leader in the Quality and Environment Area and Data Protection Delegate of the Atrys Health Group
- ◆ Specialized in the Integrated Management of Quality, Environment, Occupational Risk Prevention and Data Protection at the Catalan Institute of Technology
- ◆ Advanced Data Protection Program by the Spanish Association for Quality
- ◆ Degree in Biology from the University of Barcelona.

06

Structure and Content

The syllabus of this program provides a thorough review of the most innovative aspects of Telemedicine. The degree, throughout its modules, describes the most modern technologies that are implemented in this field and their different utilities for the diagnosis, treatment and remote monitoring of patients. Likewise, the physician will receive updated notions on how to undertake a personal eHealth project, making their practice more in line with the advances in ICT. In addition, for the mastery of all these contents, the graduate will be supported by methodologies of great didactic value such as Relearning.





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The syllabus of this program is accessible from a 100% online learning platform with multiple interactive and audiovisual resources"

Module 1. eHealth, ICT in Public and Community Health

- 1.1. Healthcare Systems in the 21st Century: eHealth (Telemedicine, mHealth, Ubiquitous Health)
 - 1.1.1. The Organization of International Healthcare Systems
 - 1.1.1.1. Healthcare System Models
 - 1.1.1.2. Financing and Provision
 - 1.1.1.3. Sources of Healthcare System Financing
 - 1.1.2. The Actors and Roles in the Healthcare System
 - 1.1.3. The Current State of Telemedicine. Evolution
 - 1.1.3.1. Medicine 1.0 to Medicine 5.0
 - 1.1.3.1.1. Personalized
 - 1.1.3.1.2. Predictive
 - 1.1.3.1.3. Preventative
 - 1.1.3.1.4. Participative
 - 1.1.3.1.5. Populational
- 1.2. Profile of the Main ICT-health Telematic Services Developed by the Autonomous Communities in Spain BORRAR
 - 1.2.1. The Concept of Telematic Service
 - 1.2.2. ICT-Health Development by CC.AA BORRAR
- 1.3. The Challenges of Public and Community Health and Information and Communication Technologies (ICTs)
- 1.4. Evaluation and Quality of Care. What Do Citizens Think?
- 1.5. The Key Aspects of Health Reforms and the Implementation of New Models
 - 1.5.1. The Management Process for Healthcare Reform
 - 1.5.2. Telemedicine and Healthcare Reforms
 - 1.5.3. Health Management Models with Telemedicine

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

- 2.1. Protection of Personal Health Data. The GDPR
- 2.2. 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. eHealth Information Systems

- 3.1. Health Information Systems
- 3.2. Healthcare Information Systems (HIS)
- 3.3. Health Information Systems within an International Framework
- 3.4. Information Systems and their Relationships
- 3.5. Health Models
- 3.6. The Clinical Layer of Information Systems
- 3.7. Clinical Documentation
- 3.8. Interoperability in Healthcare
- 3.9. Syntactic and Semantic Digital Healthcare Standards
- 3.10. Ontologies and Terminologies in the Healthcare Field
 - 3.10.1. Main Semantic Ontologies
 - 3.10.2. The Functionality of Healthcare Ontologies

Module 4. Patient Centered Medicine: ePatient

- 4.1. Patient-Centered Medicine, ePatient
- 4.2. Social Media and the Media
 - 4.2.1. Social Media Impact in Health
 - 4.2.2. Social Networks as a Means of Communication
- 4.3. Generic Communication Channels: Facebook, Twitter, Instagram
- 4.4. Proprietary Communication Channels. Personal Health Portals
- 4.5. Knowledge Managers
- 4.6. Strengths, Weaknesses, Opportunities and Threats (SWOT)
- 4.7. Social Network Analytics. Security and Privacy
- 4.8. Patient School
- 4.9. Network of Professional and Non-professional Caregivers
 - 4.9.1. Existing Models
- 4.10. Social Networks for Diseases

Module 5. Health Promotion through ICTs

- 5.1. Health Promotion
- 5.2. Social Determinants of Health
 - 5.2.1. The Healthcare System
 - 5.2.2. ICTs to Better Distribute Health and Wellbeing
- 5.3. Community Health and Community Development
- 5.4. Salutogenesis and health assets: asset maps
 - 5.4.1. Salutogenesis and Health Assets
 - 5.4.2. The Assets Maps
- 5.5. Health Promotion and Prevention Strategy in the National Health System
- 5.6. The Organization and Management of Health Promotion Based on Digital Approaches
- 5.7. Primary Health Care and ICT
 - 5.7.1. First Contact Providers
- 5.8. Promoting Active and Healthy Aging through Digital Solutions
 - 5.8.1. Problem Solutions with ICT Support
 - 5.8.2. Adherence in Chronic Elderly Patients

- 5.9. The Digital Literacy of Healthcare Professionals
 - 5.9.1. The Need for Digital Health Training for Professionals
 - 5.9.2. Implementing Digital Literacy Planning
- 5.10. The Future of Health Promotion and Disease Prevention in a Mobile Health Context
 - 5.10.1. Artificial Intelligence in the Prevention and Early Diagnosis of Diseases
 - 5.10.2. Apps and their Impact on Health Promotion

Module 6. Data Analytics, Big Data in Healthcare, Traceability, and Artificial Intelligence

- 6.1. The Data
 - 6.1.1. Data Life Cycle
- 6.2. Application of Data Science and Big Data in Healthcare
- 6.3. State-of-the-Art in Healthcare and Artificial Intelligence
 - 6.3.1. The Uses of AI in Healthcare
- 6.4. Blockchain Technology
- 6.5. Virtual and Augmented Reality, the Internet of Things (IoT) and Home Automation
 - 6.5.1. The Uses of Virtual/Augmented Reality in Healthcare
 - 6.5.2. Uses of IoT in Healthcare
 - 6.5.3. Uses of Home Automation in Healthcare
- 6.6. Patient-Centered Artificial Intelligence: Neural Networks, Chatbots, Machine Learning
- 6.7. Emerging Applications in Healthcare Using AI
 - 6.7.1. Leading Emerging Applications of AI in Healthcare
- 6.8. Bioinformatics
- 6.9. Semantic Web in Healthcare
 - 6.9.1. Languages Used in Semantic Terminology
- 6.10. AI Implementation Strategy

Module 7. Skills and Requirements for Clinical Application in Telemedicine

- 7.1. Telemedicine Modes
- 7.2. Medical Assistance Guidelines and Protocols
 - 7.2.1. Clinical Practice Guidelines
 - 7.2.2. Digital Clinical Practice Guidelines Models (CPGs)
- 7.3. Change Management in Telemedicine: Raising Awareness and Training
 - 7.3.1. Change Management Piloting
- 7.4. Contributions of NTIC to the "New" Healthcare Model
- 7.5. General Requirements for a Telemedicine System
- 7.6. Major Subsystem Requirements: Information Exchange and Telecommunication
 - 7.6.1. Information Systems for Telemedicine
 - 7.6.2. Interoperability of Platforms for Videoconferencing Links
- 7.7. Requirements for Digital and Ubiquitous Healthcare
 - 7.7.1. Cohesive and Interoperable Information Systems Model
 - 7.7.2. Microservices-based Model
- 7.8. Peripheral Devices
 - 7.8.1. *Wearables*
 - 7.8.2. Ingestible Devices
- 7.9. Telemonitoring
- 7.10. Artificial Intelligence

Module 8. Communication and Digital Marketing Applied to Telemedicine Projects

- 8.1. The Application of Marketing to e-Health
- 8.2. The Creation of a Digital Marketing Strategy
 - 8.2.1. Funnel and Customer Segmentation
- 8.3. Traditional Advertising: SEO and SEM
- 8.4. e-Patients and Their Experience: Creation of a Digital Patient Journey
- 8.5. The Importance of Email Marketing
- 8.6. Social Media and Social Ads: Available Social Networks and What I Use Each One For

- 8.7. Inbound Marketing: A New Concept in Digital Businesses
- 8.8. E-commerce, Payment Methods and Patient Care
- 8.9. Doctor-patient Communication
- 8.10. Fake News and Internet Movements: Validation of Trustworthy Healthcare Websites

Module 9. Telemedicine Project Strategy, Implementation and Evaluation

- 9.1. Technological Innovation Models and their Application in the Health Sector
- 9.2. Healthcare Needs Analysis for the Creation of Projects
- 9.3. Design of Technological Projects for the Health Sector
- 9.4. Research Principles for Healthcare Technology Assessment
- 9.5. Viability of Healthcare Projects
- 9.6. Telemedicine Apps in the Healthcare Environment
- 9.7. Telemedicine for Immediate or Urgent Care
 - 9.7.1. Tele-Heart Attack
 - 9.7.2. Tele-Stroke
 - 9.7.3. Primary Care Consultation
- 9.8. Use of Telemedicine in Prediction, Prevention and Diagnosis
 - 9.8.1. Teledermatology
 - 9.8.2. Teleophthalmology
 - 9.8.3. Telecardiology
 - 9.8.4. Teleradiology
- 9.9. Telemedicine in Healthcare Intervention and Treatment
 - 9.9.1. Telerehabilitation
 - 9.9.2. Teleulcer
 - 9.9.3. Telesurgery
- 9.10. Application of Telemedicine in Specific Areas
 - 9.10.1. Mental Health
 - 9.10.2. Geriatrics
 - 9.10.3. Chronic Patients
 - 9.10.4. Rare Diseases
 - 9.10.5. Nursing

Module 10. Business Models and Skills

- 10.1. Digital Transformation: Processes, User Experience
- 10.2. The Creation of New Digitally Native Products and Services and the Emergence of Digital Business Models
- 10.3. Digital Business: The Lean Start-up, from Business Model to Business Plan
- 10.4. Industrial and Intellectual Property
- 10.5. Agile Methodology
- 10.6. Minimum Viable Products
- 10.7. Strategy and Metrics
- 10.8. Minimum Viable Product
- 10.9. Sales and Monetization
- 10.10. Lessons Learned



This syllabus will be accessible through any mobile device, without restrictive schedules or pre-established evaluation chronograms"

07

Clinical Internship

After completing the first stage of this degree, the physician will have the opportunity to expand their knowledge through an intensive stay. This clinical internship will take place in a hospital center equipped with the best resources and care tools for the updated development of Telemedicine.





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The clinical internship of this Hybrid Professional Master's Degree will allow you to handle state-of-the-art technology in Telemedicine, under the close supervision of an assistant tutor"

The clinical internship, integrated to this Hybrid Professional Master's Degree in Telemedicine, will allow the physician to attend a recognized hospital institution from Monday to Friday, up to 3 weeks. This intensive stay will be ideal to learn how to handle the latest technological devices and computer programs for this branch of health care.

At the same time, the specialist will be accompanied by a staff of distinguished experts. Through their advice and shared experiences, you will broaden your knowledge. Likewise, an assistant tutor will closely supervise all progress, offering the graduate the most personalized guidance tailored to their needs for improvement.

Practical teaching will be carried out with the accompaniment and guidance of teachers and other training colleagues who facilitate teamwork and multidisciplinary integration as transversal competencies for medical practice (learning to be and learning to relate).

The procedures described below will be the basis of the training, and their realization will be subject to the center's own availability, to its usual activity and and its workload, the proposed activities being the following:



Module	Practical Activity
State-of-the-Art Tools and Devices in Telemedicine	Diagnose ear pain, caused by earwax plugs, from remote devices such as CellScope Oto HOME that captures video of the state of the ear canal
	Monitor and detect increases in intraocular pressure, a risk factor for Glaucoma and vision loss, through sensors implanted in the eyeball and communicating with an app
	Distribute medical supplies effectively and efficiently to remote locations using unmanned aerial vehicles or drones
	Apply skin patches to provide constant monitoring of your vital signs and other body data that can be accessed remotely by the physician and the patient
	Take pictures of moles and other suspicious skin lesions, using applications such as Mole Mapper to measure their growth and determine if they might be cancerous
	Use mobile video-calling applications to interact directly with the patient and learn about their self-assessment of their health status remotely
Big Data, IoT and Artificial Intelligence as New Supports for Telemedicine	Manage and organize patient records, according to different parameters, through Big Data tools for cloud queries such as DriCloud
	Use Artificial Intelligence algorithms can also help in the diagnosis of pathologies such as melanomas, based on the observation of data collected
	Track a patient's vital signs throughout the day and transmit data to the cloud through devices connected via the Internet of Things (IoT)
	Provide personalized reminders for medications and recommend routine check-ups for health conditions through Artificial Intelligence
Module	Practical Activity
New Benefits of Telemedicine for Medical Consultations	Remote review of mild ophthalmological symptoms such as allergic reactions, redness or irritation of the eye
	Evaluate fertility cycles, contraceptive methods or pregnancy from gynecology offices
	Evaluate visible symptoms associated with skin pathologies through video calls and photographs for the consideration of the Dermatology Units
	Remote monitoring, by the Cardiology Department, of chronic patients without too many complications (diseases such as arterial hypertension, low blood pressure or hypercholesterolemia)
	Participate in clinical trials of different types through remote access to national and international databases on pharmacological products and other therapeutic resources
Telesurgery and Other Trends in Remote Medical Intervention	Implement cutting, suturing and removal of body parts through surgical robots manipulated by surgeons thousands of miles away
	Using platforms such as Optimus Operating Room to allow a medical team to connect in real time with the operations and remotely participate in or guide the intervention
	Using platforms such as Optimus Operating Room to allow a medical team to connect in real time with the operations and remotely participate in or guide the intervention



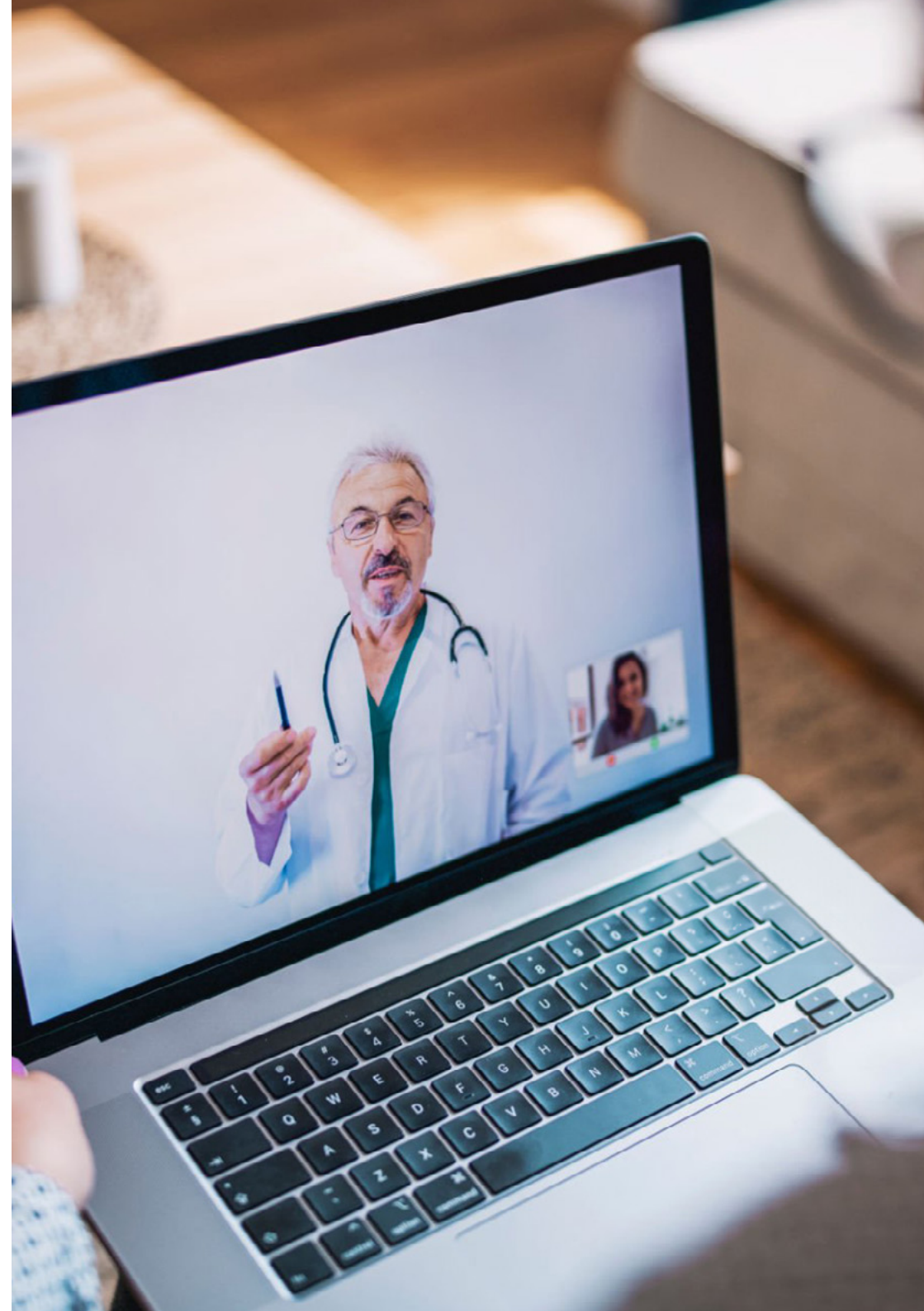
Complete this Hybrid Professional Master's Degree in a prestigious hospital center, equipped with the latest technological resources in the field of Telemedicine"

Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this educational entity undertakes to take out civil liability insurance to cover any eventuality that may arise during the internship during the stay at the internship center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



General Conditions of the Internship Program

The general terms and conditions of the internship agreement for the program are as follows:

1. TUTOR: During the Hybrid Professional Master's Degree, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

2. DURATION: The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

3. ABSENCE: If the students does not show up on the start date of the Hybrid Professional Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

4. CERTIFICATION: Professionals who pass the Hybrid Professional Master's Degree will receive a certificate accrediting their stay at the center.

5. EMPLOYMENT RELATIONSHIP: the Hybrid Professional Master's Degree shall not constitute an employment relationship of any kind.

6. PRIOR EDUCATION: Some centers may require a certificate of prior education for the Hybrid Professional Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

7. DOES NOT INCLUDE: The Hybrid Professional Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed.

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

08

Where Can I Do the Clinical Internship?

In order to guarantee the physician the best updating process, TECH offers this practical stay in a prestigious center. In these facilities, they will find the best technological resources related to the field of Telemedicine. During this educational moment, the specialist will also discuss real cases and care strategies with experts with extensive professional experience. Therefore, they will be able to strengthen their skills and add the most modern and demanding skills to their practice.






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Get up to date on the most important developments in Telemedicine surrounded by professionals who master its theoretical and practical specificities with excellence”

tech 42 | Where Can I Do the Clinical Internship?



The student will be able to complete the practical part of this Hybrid Professional Master's Degree at the following centers:



Medicine

Centro Médico San Bernardo

Country	Spain	City	Madrid
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Address: Calle de Jerónimo de la Quintana, 8, Chamberí, 28010 Madrid

Since its inception, Centro Medico San Bernardo has been dedicated to providing excellent medical services

Related internship programs:

- Legal and Forensic Medicine
- Telemedicine





“

Enroll now and advance in your field of work with a comprehensive program that will allow you to put into practice everything you have learned”

09

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.



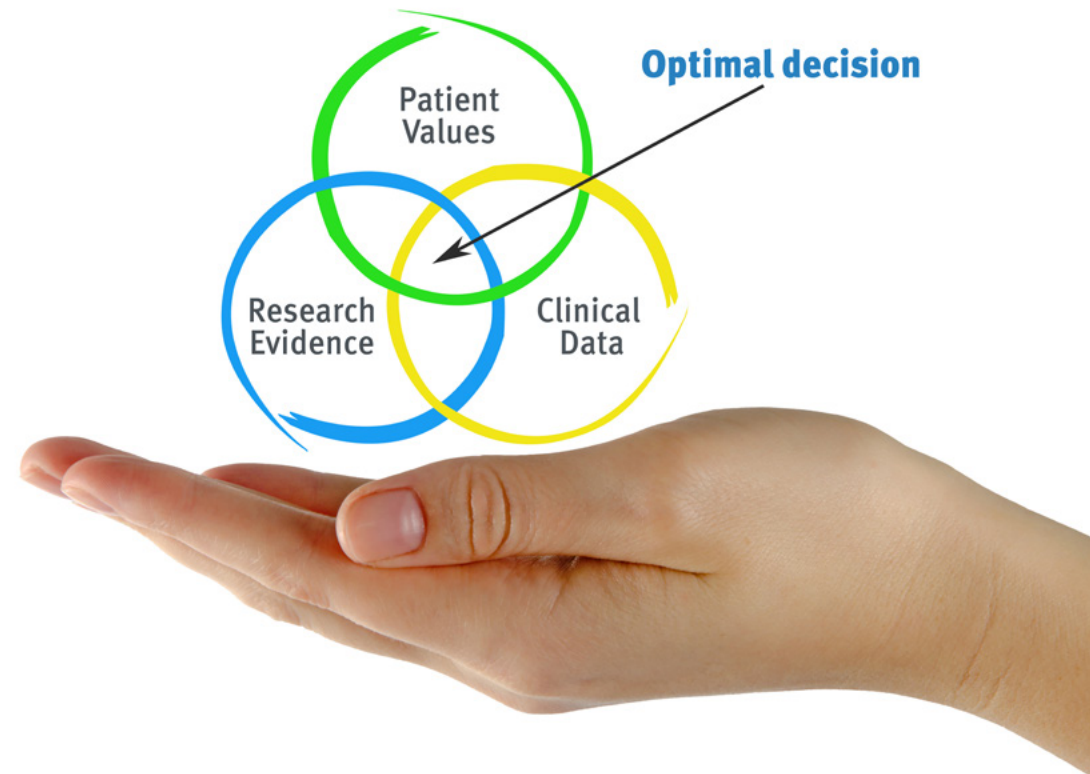
“

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.



10 Certificate

The Hybrid Professional Master's Degree in Telemedicine guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid Professional Master's Degree issued by TECH Global University.



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

This private qualification will allow you to obtain a **Hybrid Professional Master's Degree diploma in Telemedicine** 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.

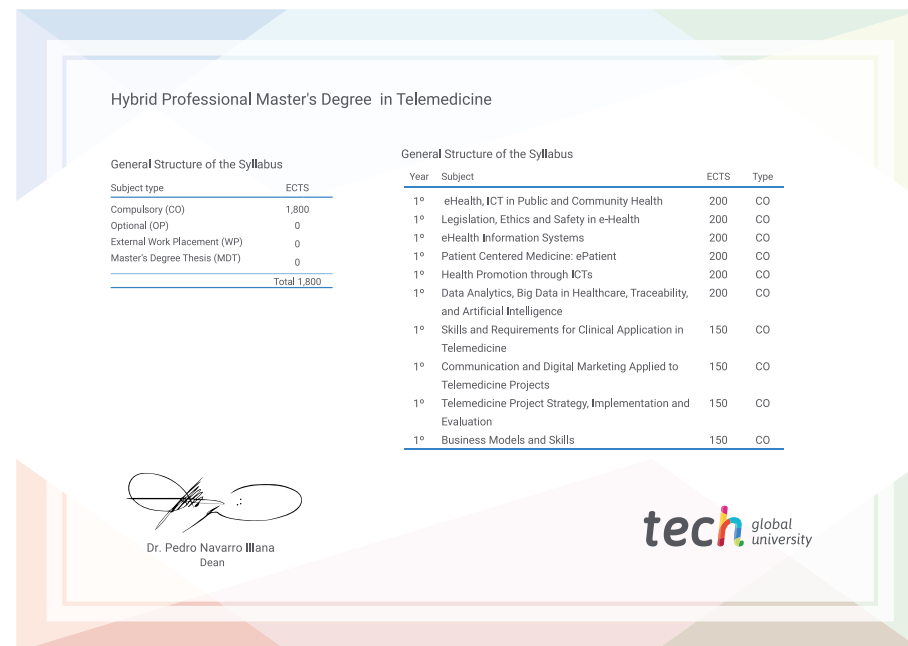
This **TECH Global University** private qualification, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Telemedicine**

Modality: **Hybrid (Online + Clinical Internship)**

Duration: **12 months.**

Credits **60 + 4 ECTS**



*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.

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



Hybrid Professional Master's Degree Telemedicine

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

Credits 60 + 4 ECTS

Hybrid Professional Master's Degree Telemedicine

