

# Hybrid Professional Master's Degree Nephrology and Dialysis Nursing





## Hybrid Professional Master's Degree

### Nephrology and Dialysis Nursing

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1,620 h

Website: [www.techtitute.com/us/nursing/hybrid-professional-master-degree/hybrid-professional-master-degree-nephrology-dialysis-nursing](http://www.techtitute.com/us/nursing/hybrid-professional-master-degree/hybrid-professional-master-degree-nephrology-dialysis-nursing)

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# 01

# Introduction

Chronic Kidney Disease is an emerging problem worldwide and it is crucial that nurses train and update their knowledge in this area to provide the best therapeutic care to their patients. Aware of this, TECH offers professionals in this field this complete program of blended learning modality, in which the student will learn in an intensive way and with a perfect combination of theory and practice everything related to these pathologies and dialysis treatment. The skills covered in this degree will not only make the student a better nurse, but will also enable them to manage and lead work teams within specialized care units.



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*Don't miss this great opportunity and become an expert professional in Nephrology and Dialysis Nursing thanks to this complete Hybrid Professional Master's Degree that TECH brings to you"*

The nursing staff has become indispensable in the care of the chronic renal patient, in renal replacement therapy or with kidney transplantation. These professionals are in charge of closely monitoring risk factors and renal progression, immunology, genetics, histopathology and study techniques and stratification of this class of patients. For this reason, nurses must constantly keep up to date with the latest guidelines and protocols for nephrology and dialysis care. In addition, they must possess a holistic mastery of the technologies that today facilitate their tasks, as well as the treatment of the patients they must provide. Likewise, new information technologies have posed a superlative challenge for this class of healthcare experts, who are expected to manage some of the patient care through digital tools.

TECH has identified all these needs and, in response, has created this innovative academic program based on a blended learning mode of study. The degree consists of two well-defined educational moments. In the first one, the Nephrology and Dialysis Nursing student will delve into the renal functions and the variants that cause their deterioration. Through these contents, students will be able to prevent risk factors that may appear in patients supervised by them under renal care therapies. They will also analyze the role of the nursing staff and their work protocols during the extraction of organs for transplantation and the subsequent approach to people treated with this type of procedure. These subjects will be available on a 100% learning platform without restrictive schedules or continuous evaluation chronograms.

At the end of this pedagogical stage, TECH has foreseen the development of practical skills in its students through an intensive on-site stay. This modality of studies will take place in a first level medical institution, in 8-hour shifts, from Monday to Friday, for 3 weeks. In these institutions, the student will exchange with leading experts in this health sector and will have the personalized guidance of an assistant tutor.

This **Hybrid Professional Master's Degree in Nephrology and Dialysis Nursing** 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 nursing professionals with expertise in intensive care and university professors with extensive experience in the critical patient
- ◆ Its graphic, schematic and practical contents provide scientific and assistance information on those medical disciplines that are essential for professional practice
- ◆ Recommendations on life support maneuvers; critical care in patients with neurological, cardiovascular, respiratory disorders; care of the severe trauma patient in intensive care, pharmacology and transport in the critically ill patient, etc
- ◆ Comprehensive systematized action plans for the main pathologies in the intensive care unit. in the intensive care unit
- ◆ Presentation of practical workshops on procedures, diagnosis, and treatment techniques in critical patients
- ◆ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- ◆ Practical clinical guides on approaching different pathologies
- ◆ With a special emphasis on evidence-based medicine and research methodologies in Intensive Care Nursing
- ◆ 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 available 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

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*In addition to the theoretical preparation, you will have the luxury of a 3-week intensive stay where you will acquire all the necessary skills to grow personally and professionally”*

This Master's program, which has a professionalizing nature and Communication Management blended learning modality, is aimed at updating For Nursing professionals who perform their functions in aesthetic units, and 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 nursing practice, and the theoretical-practical elements will facilitate the up-to-date of knowledge and allow decision making in patient management.

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 an immersive education program 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 throughout the program. For this reason, the student will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of Intensive Care units who also have extensive teaching experience.

*What you study is very important, but knowing how to put it into practice your objective. Take advantage of this opportunity and become a true expert in Nephrology and Dialysis Nursing.*

*Up-to-date your knowledge through the Hybrid Professional Master's Degree in a theoretical and practical way and adapted to your needs and professional interests.*



02

# Why Study this Hybrid Professional Master's Degree?

This Hybrid Professional Master's Degree is of vital importance for nurses who wish to update their knowledge in the field of nephrology and dialysis. Through this innovative program, devised by TECH, students will learn about the most advanced protocols to be followed by nurses in monitoring and assisting patients with renal problems. In addition, this degree has a practical stay where the student can quickly and flexibly assimilate the mastery of the most effective work techniques available.





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*Nephrological Nursing has become a highly demanded specialty on an international scale and through this training you will be able to specialize in its potentialities"*

### **1. Updating from the Latest Technology Available**

TECH, through this degree, will instruct its students on how to properly operate a modern hemodialysis machine and adjust it to ensure greater patient comfort. They will also examine the surgical instruments that the nursing staff must handle during the removal of organs for renal transplants.

### **2. Delving from the experience of the best Communication Management**

Through this training, students will have a team of excellent teachers who will provide them with personalized guidance at all times. These professors have chosen the contents of the syllabus based on their daily practical experiences, thus providing the degree program with an in-depth analysis of the most common problems of daily work practice.

### **3. Delve in first level environments in the field of nursing.**

In a second stage of this program, TECH has foreseen the needs of its students in terms of handling the complex tools that nurses must manipulate in the area of dialysis and nephrology. For this reason, it has planned a practical on-site stay where students will work side by side with leading experts in this professional field and in hospitals of international importance.





#### 4. Combining the Best Theory with State-of-the-Art Practice

In the pedagogical panorama, there are not many study programs that manage to combine the theoretical field with practical activity. TECH, through its Hybrid Professional Master's Degree, has reversed this context, providing its students with a holistic mastery of the most important trends and techniques for the Nephrology and Dialysis Nursing professional.

#### 5. Expanding the Boundaries of Knowledge

This training aims to enable all students to broaden their professional horizons from an international perspective. This is possible thanks to the breadth of contacts and partners available at TECH, the world's largest digital university. In this way, students will have the opportunity to interact with experts from different latitudes and become familiar with global nursing standards.



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

# 03 Objectives

The correct functioning of a Nephrology and Dialysis Nursing service is essential to offer patients the best health care; therefore, the purpose of this program is to provide students with the most comprehensive and innovative information within this professional area. Therefore, they will update their clinical practice dynamics and procedures, based on the latest scientific evidence in this field.





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*This program gives you the opportunity not only to up-to-date your theoretical knowledge, but also to put it into practice in front of real patients and with the tutoring of experts in the field"*



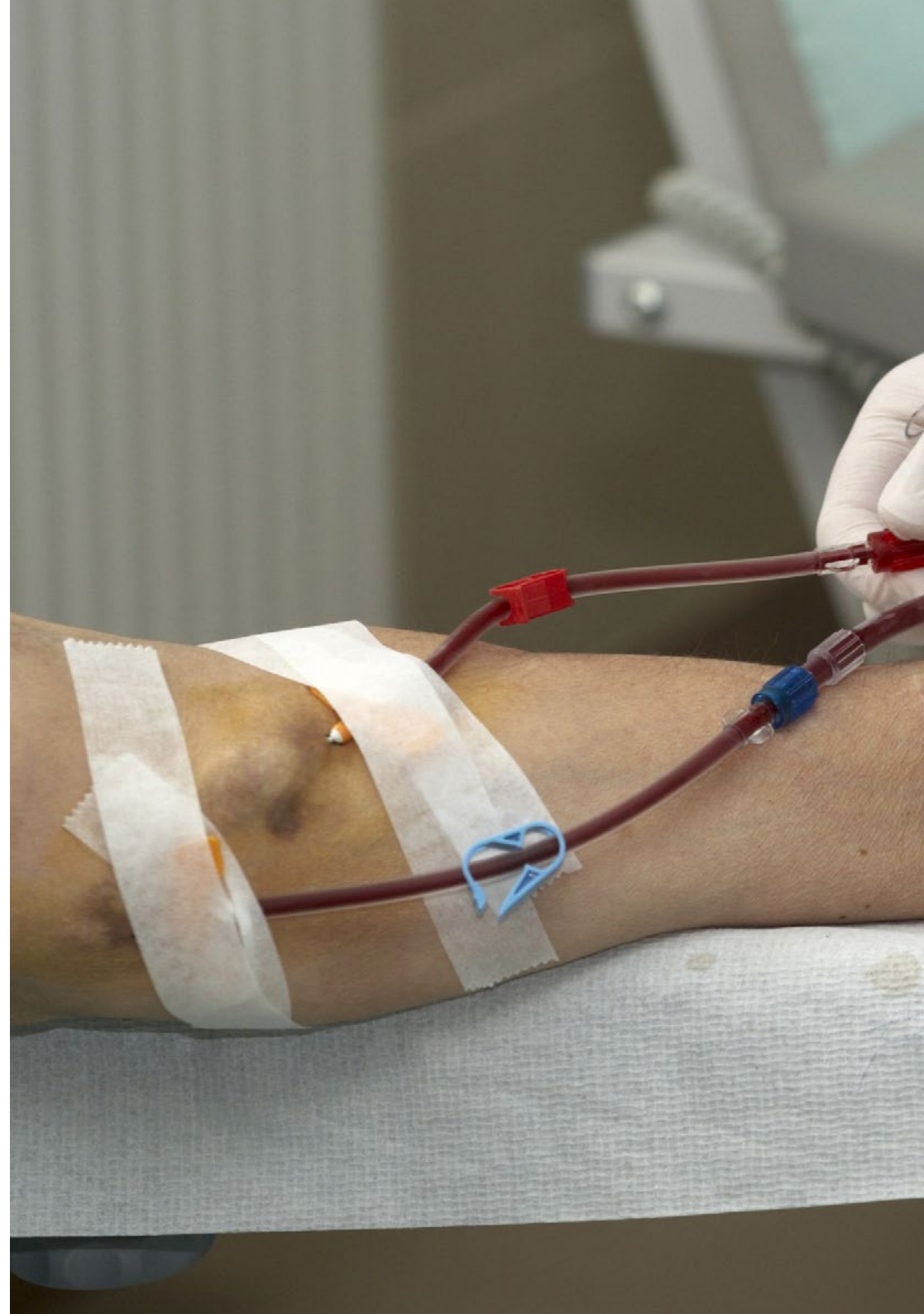
## General Objective

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- ♦ The general objective of the Hybrid Professional Master's Degree in Nephrology and Dialysis Nursing is to integrate a series of competencies in nursing professionals that will allow them to work successfully with patients with Chronic Nephrological Disease.
- ♦ To this end, it offers in detail a cutting-edge educational program, from both a practical and theoretical point of view, in which the nurse will acquire the knowledge and will be able to put it into practice in front of real patients



*This refresher program will generate a sense of security when practising nursing, which will help you grow both personally and professionally”*





## Specific Objectives

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### Module 1. Advanced in Kidney Disease

- ◆ Acquire basic knowledge on fundamental aspects of diagnosis, etiology, pathophysiology, and prevention of renal disease
- ◆ Identify the risk factors of kidney disease and its different stages
- ◆ Identify signs and symptoms that indicate pathology of renal origin
- ◆ Gain up-to-date knowledge of the different examination methods in Nephrology
- ◆ Expanding knowledge in the promotion of self-care
- ◆ Acquire knowledge for the management of the renal patient in the emergency department
- ◆ Know how renal failure affects the different stages of the drug

### Module 2. Pre-Dialysis

- ◆ Acquire the necessary knowledge to guarantee quality care of a patient during the pre-dialysis program
- ◆ Train and educate students in the knowledge of the different techniques of renal replacement therapy
- ◆ Gain up-to-date knowledge of the care required by the patient in a pre-dialysis program.
- ◆ Describe the importance of education in the treatment of this illness and in the selfcare associated with it

### Module 3. Renal Function Replacement Therapy: Hemodialysis

- ◆ Develop in nursing professionals the set of knowledge and skill competencies for the comprehensive approach and management of the patient in the hemodialysis program
- ◆ Provide the essential fundamentals and the latest theoretical and practical advances to any professional who needs or decides to start learning about Hemodialysis or who, being already in it, wants to update their knowledge
- ◆ Gain up-to-date knowledge of the quality and efficiency of the new hemodialysis technologies

#### **Module 4. Up-to-date Information on Other Techniques for Extranrenal Depuration in Hospitals**

- ◆ Acquire knowledge of the different extrarenal depuration techniques
- ◆ Know the different parameters of efficacy, dosage, water balance of treatment in each technique
- ◆ Gain up-to-date knowledge of the care required by the patient in a Hemodialysis program
- ◆ Update knowledge that allows the student to distinguish the different types of vascular accesses and to know the management and care of each one of them
- ◆ Gain up-to-date knowledge of the strategies for patients at high risk of bleeding
- ◆ Describe the different types of coagulation in a hemodialysis session as well the latest developments for the control and care of chronic renal patients
- ◆ Gain up-to-date knowledge of the advances in the different hospitalbased renal replacement therapy techniques

#### **Module 5. Pediatric Hemodialysis**

- ◆ Acquire knowledge of how to properly manage different extrarenal pediatric techniques.
- ◆ Know the general nursing care in the different techniques of extrarenal depuration.
- ◆ Provide the essential foundations and the latest theoretical and practical advances to all professionals who need it, who decide to start learning about Hemodialysis, or who are already in this field and want to update their knowledge
- ◆ Gain up-to-date knowledge on the care and management of pediatric patients in hemodialysis.
- ◆ Acquire skills in the comprehensive management of a pediatric patient on dialysis

#### **Module 6. Peritoneal Dialysis**

- ◆ Develop in nursing professionals the set of knowledge and skill competencies for the comprehensive approach and management of the patient in the Peritoneal Dialysis Program
- ◆ Provide the essential fundamentals and the latest theoretical and practical advances to any professional who needs or decides to start learning about Peritoneal Dialysis or who, being already in it, wants to update their knowledge
- ◆ Up-to-date the knowledge in the care, approach and management of the patient in Peritoneal Dialysis program

#### **Module 7. Comprehensive Care: The Wellbeing of the Chronic Renal Patient**

- ◆ Identify the most common psychological problems in renal patients and resolve them in an appropriate way
- ◆ Understand the importance of good communication between doctors and patients as well as between the healthcare team and family members as an important support resource in nephrology
- ◆ Gain up-to-date knowledge of the psychosocial care needed by the chronic renal patient
- ◆ Recognise the different treatments that encourage the well-being of the chronic renal patient
- ◆ Acquire skills in care, health education, communication strategies and patient relations

#### **Module 8. Nursing Process Involved in Dealing with the Chronic Renal Patient NANDA, NIC NOC**

- ◆ Know the nursing procedure involved in dealing with a chronic renal patient: NANDA, NIC, NOC
- ◆ Develop skills in the nursing methodology for caring for a chronic renal patient
- ◆ Gain up-to-date knowledge of the most common types of nursing diagnoses in chronic renal pathology
- ◆ Acquire up-to-date knowledge of the different nursing interventions involved in the nursing procedures of Chronic Kidney Disease



### **Module 9. Renal Transplant**

- ◆ Know the different techniques for removal of organs from a donor
- ◆ Know how to manage and approach a kidney transplant patient
- ◆ Gain up-to-date knowledge of the diagnostic aspects of death
- ◆ Know the diagnostic tests and maintenance of the cadaveric donor
- ◆ Gain skills in donor interviewing
- ◆ Gain up-to-date knowledge of the nursing care of a transplant recipient
- ◆ Acquire skills in the approach and management of complications in the transplant recipient
- ◆ Know the symptoms of kidney rejection and now how to confront the complications
- ◆ Develop communication skills between health professionals, patients with CKD and their family members in advance planning and decision

### **Module 10. Palliative Care of Chronic Renal Patients**

- ◆ Integrate the Palliative Care model into the treatment of renal patients at the end of life, during the dying process and in bereavement
- ◆ Analyze clinical situations involving ethical challenges
- ◆ Incorporate conservative treatment as a non-dialytic therapeutic option in advanced CKD
- ◆ Propose action plans for the improvement of continuous renal care
- ◆ Know the referrals to specialized units in Palliative Care and bereavement support
- ◆ Gain up-to-date knowledge in clinical, ethical and legal aspects in the initiation and withdrawal of dialysis
- ◆ Update knowledge in the control and management of pain in chronic renal patients requiring palliative care

### **Module 11. Use of ICT in Chronic Renal Patients**

- ◆ Gain skills in the use of new technologies in caring for a chronic renal patient
- ◆ Describe the different digital didactic resources that we can recommend to a chronic renal patient
- ◆ Acquire skills in the use of new technologies applied to chronic renal patients
- ◆ Develop competencies and skills to empower the chronic renal patient
- ◆ Know the current status and benefits of the use of ICT in the Chronic Kidney Disease procedures

### **Module 12. Research in Renal Patient Care**

- ◆ Understand and manage the research process in the field of healthcare and renal patients
- ◆ Gain up-to-date knowledge of the Nursing Research design
- ◆ Acquire skills in the different quantitative and qualitative research techniques
- ◆ Describe the different methodologies in care research
- ◆ Broaden knowledge of qualitative research
- ◆ Know the ICT resources used for care research in renal patients

# 04 Competencies

After passing the assessments of the Professional Master' Hybrid in Vocational and Career Guidance the professional will have superior competence and performance in this field. This knowledge will enable you to work in hospital dialysis units with greater guarantees of success. A very complete approach, in a high-level Advanced Master's Degree, which makes the difference between Professionals.



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*The skills you will acquire after completing this program will allow you to enter a labor market that increasingly demands more experts in the field”*



## General Skills

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- ◆ Acquire the ability to adapt to new medical situations and emergencies of dialysis patients of the patient undergoing dialysis treatment
- ◆ Identify potential new problems or complications that arise in patients under treatment and have the ability to problem solve
- ◆ Work as a function of the nursing team, identifying the patient's role as a priority
- ◆ Apply acquired knowledge and skills creatively and flexibly to new situations or broader or multidisciplinary contexts
- ◆ To act before the complications that may occur in the renal patient connected to the hemodialysis machine
- ◆ Describe and use new extrarenal depuration techniques
- ◆ Perform the necessary techniques and nursing care procedures, establishing a therapeutic relationship with renal patients and their families
- ◆ Deal with patients at high risk of bleeding in hemodialysis
- ◆ Provide comprehensive care to a pediatric renal patient
- ◆ Use the different equipment in peritoneal dialysis
- ◆ Know how identify the most common psychological problems in renal patients and know how to resolve them in an appropriate way
- ◆ Describe the phases of the renal donation and transplantation process, as well as how to manage the transplanted patient
- ◆ Use the Palliative Care model into the treatment of renal patients at the end of life, during the dying process and in bereavement





## Specific Skills

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- ◆ Describe the fundamental aspects of diagnosis, etiology, pathophysiology and prevention of kidney disease
- ◆ Identify the risk factors of kidney disease and its different stages
- ◆ Differentiate between acute renal failure and chronic renal failure and to propose the most appropriate nursing care for the type of pathology diagnosed
- ◆ Promote self-care in renal patients at all stages
- ◆ Deal with a renal patient who arrives in the emergency department
- ◆ Describe the different renal replacement therapy techniques
- ◆ Provide the care required by the patient in a pre-dialysis program
- ◆ Provide the comprehensive care of a patient in a hemodialysis program
- ◆ Manage the different extrarenal depuration techniques, as well as their different parameters of efficacy, dosage, water balance of treatment in each technique
- ◆ Identify the most prevalent nutritional problems in nephrology and select the appropriate diet recommendations in each of the stages of kidney disease
- ◆ Understand the different types of vascular access and know the way to manage and care for each one of them
- ◆ Identify when a chronic renal patient needs palliative care and direct them towards the different specialist units in Palliative Care and bereavement support
- ◆ Use web resources and ICT for personal and professional use.
- ◆ Know how to use different techniques to carry out your own research projects, develop a care plan or create a guide to clinical practice related to renal pathology

05

# Course Management

The teachers of this program have been carefully selected by TECH. These experts have put together an innovative and comprehensive syllabus that brings together the latest techniques for nursing care of patients with chronic renal disorders. In addition, the degree includes a second phase, in which the student will have a direct exchange with highly prestigious experts in their natural working environment. With the help of all these professionals, the TECH graduate will be able to obtain competitive positions where they will be distinguished by their rigorous work systematization.

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*TECH and its professors will provide you with access to academic guidance customized to your interests and educational needs”*

## Management



### Ms. Molina Fullerat, Ruth

- ◆ Specialist Nurse in Surgery and Dialysis
- ◆ Co-creator of the 24 Hour Dialysis App
- ◆ Nurse Specialist in the Hemodialysis Unit of the Hospital Campus de la Salud, Granada
- ◆ Nurse Specialist in the Dialysis Unit of the Virgen de las Nieves Hospital, Granada
- ◆ Nurse Specialist in the Dialysis Unit of Hospital Clínico San Cecilio, Granada
- ◆ Nurse Specialist in the Dialysis Unit of the Hospital Doctor Negrin Las Palmas de Gran Canaria
- ◆ Nurse Specialist in the Dialysis Unit of the Torrecárdenas Hospital, Almería, Spain
- ◆ Albert Jovell Award 2016 Accésit to Diálisis 24h app for "Best initiative that improves patient health outcomes, developed by healthcare professionals, individually or as a team"
- ◆ 1st prize Hinnovar de Novartis, 2014 edition, Hospital Management Category
- ◆ Accésit Professor Barea Award 2015 "Effect of a support tool on adherence to treatment, anxiety and quality of life of dialysis patients"
- ◆ Award for the isysCore Foundation, naming Dialysis 24h as the second best app in Spain
- ◆ Diploma in Nursing. Cádiz University



## Professors

### **Aguilar Amores, Manuel Salvador**

- ♦ Dialysis Product Applications Specialist
- ♦ Dialysis and Renal Transplant Nurse. Andalusian Health Service
- ♦ Primary Care Nurse
- ♦ University Lecturer
- ♦ Diploma in Nursing. University of Seville
- ♦ Master's Degree in Nephrological Nursing. International University of Andalusia
- ♦ Postgraduate Diploma in Pediatric Hemodialysis for Nursing. CEU Cardenal Herrera University
- ♦ Postgraduate Diploma in Human Resources Management, Nursing. National University of Distance Education - UNED
- ♦ 2019 Award from the Alcer Renal Foundation, Area of Dialysis and Prevention of Chronic and Advanced Kidney Disease. For the national initiative #HemodialysisDances
- ♦ Baxter Research Award, issued by EDTNA/ERCA in partnership with SAS

### **Arenas Bonilla, Manuel Fernando**

- ♦ Nurse in Hemodialysis Services Almeria, Spain
- ♦ University Lecturer
- ♦ Diploma in Nursing

### **Ms. Bravo Bazán, Marina**

- ♦ Nurse specialist in the Hemodialysis Department
- ♦ Nurse of the Nephrology CMU, Hemodialysis Service, Virgen de Las Nieves Hospital Granada, Spain
- ♦ University Teacher
- ♦ Postgraduate Certificate in Nursing

### **Ms. Cruz Gómez, Sandra**

- ♦ Surgical Nurse
- ♦ Postgraduate Certificate in Nursing
- ♦ Santa Ana Motril Hospital Granada, Spain

### **Dr. Fraile Bravo, Mercedes**

- ♦ Specialist in Nephrology Nursing
- ♦ Extremadura Health Service Care Coordinator
- ♦ Author of numerous publications in the Scientific Journal of the Spanish Society of Neurological Nursing
- ♦ PhD in Nursing
- ♦ Associate Professor of the Nursing Department at the University of Extremadura
- ♦ Postgraduate Certificate in Nursing
- ♦ Degree in Social and Cultural Anthropology
- ♦ Member of the Spanish Society of Neurologic Nursing

### **Ms. Frasset Morant, Julia**

- ♦ Nurse in the Intensive Care Unit of the de Gran Canaria Negrín University Hospital of Valencia
- ♦ Diploma in Nursing from the Hospital Clínico Universitario de Valencia
- ♦ Member of the Board of Directors of the Spanish Association of Degree in Palliative Care Nursing (AECPAL)

### **Ms. González Lobo, María Ángeles**

- ♦ Specialist Nurse in Operating Theatre and Dialysis
- ♦ Member of the Organ Transplant and Kidney Implant Team Hospital in Virgen de Las Nieves Hospital
- ♦ Postgraduate Certificate in Nursing

**Ms. Gómez Reina, Encarnación**

- ♦ Clinical Psychologist and Pediatric Nurse Practitioner
- ♦ Clinical Child and Independent Psychology
- ♦ Nurse Pediatric in the Intensive Care Unit of the in the Hospital
- ♦ Grade in Nursing from the University of Seville
- ♦ Degree in Psychology from the National Distance Education University(UNED)

**Mr. Granados Camacho, Sergio**

- ♦ Nurse in the the Hemodialysis and Chronic Diseases Unit
- ♦ Integrated of the kidney, kidney-pancreas transplant protocol team, Regional University Hospital
- ♦ Diploma in Nursing
- ♦ Member of the Spanish Society of Nephrological Nursing.

**Guisado Oliva, José**

- ♦ Hemodialysis Nurse Expert
- ♦ Nurse in the Hospital Campus de la Salud Hospital
- ♦ Diploma in Nursing

**Dr. Gutiérrez Vilchez, Elena**

- ♦ Head of the Pediatric Hemodialysis Service, Carlos Haya Hospital
- ♦ Head of the Pediatric Hemodialysis Service at the University Regional Hospital
- ♦ Specialist in Nephrology
- ♦ University Lecturer
- ♦ Researcher and author of several scientific publications.
- ♦ Degree in Medicine and Surgery
- ♦ Specialization in Nephrology
- ♦ Member of the Spanish Society of Nephrology

**Dr. López-González Gila, Juan de Dios**

- ♦ Nephrologist
- ♦ Nephrology Outpatient Physician at the San Cecilio University Hospital
- ♦ Resident in Nephrology, university Virgen de Las Nieves Hospital
- ♦ University Lecturer
- ♦ Degree in Medicine and Surgery
- ♦ Dialysis and Renal Transplant Member of the Spanish

**Ms. Mata Ortega, Olga**

- ♦ Specialist in Hemodialysis Nursing
- ♦ Nurse in Nephrology, university Virgen de Las Nieves Hospital. Granada, Spain
- ♦ Regional Manager of Hemodynamic Monitoring and Product Launch Vygon
- ♦ World Medica Coronary Sales Specialist
- ♦ Nurse in the Hospitalization, Critical and Emergency Departments, and Hemodialysis in the Andalusian Health Service
- ♦ Hemodialysis Nurse Specialist in Health Studies SL
- ♦ Hemodialysis Nurse Specialist at Inmaculada Hospital
- ♦ Diploma in Nursing from the University of Granada
- ♦ Master in People and Team Management and Development Gates Group

**Ms. Laguna Fernández, Clara**

- ♦ Postgraduate Certificate in Nursing
- ♦ Carlos Haya Hospital Malaga, Spain

**Dr. Morales García, Ana Isabel**

- ◆ Specialist in Nephrology, Virgen Doctor Las Nieves Hospital Granada, Spain
- ◆ Doctor of Medicine in the Area of Nephrology from the University of Almeria
- ◆ Degree in Medicine and Surgery
- ◆ Member of the Spanish Society of Nephrology and the Spanish Society of Dialysis and Transplantation

**Ms. Muñoz Becerra, Mercedes**

- ◆ Specialised in Nephrology Nursing
- ◆ Co-creator of the Dialysis24h App
- ◆ Services Nurse at in Nephrology, Virgen de Las Nieves Hospital. Granada
- ◆ Nurse and Care Coordinator of Hemodialysis Service, Campus de la Salud Hospital Granada
- ◆ University Lecturer
- ◆ Diploma in Nursing from the University of Granada
- ◆ Member of the Spanish Society of Nephrology

**Ms. Nieto Poyatos, Rosa María**

- ◆ Specialised in Nephrology Nursing
- ◆ Nephrology Nurse at the Guadix Dialysis Center of the Virgen de las Nieves University Hospital Granada
- ◆ Co-author of the Guadix Dialysis Social Network
- ◆ Hemodialysis Unit UGC Nephrology, Campus de la Salud Hospital Granada, Spain
- ◆ Postgraduate Certificate in Nursing

**Dr. Palomares Bayo, Magdalena**

- ◆ Specialist in Nephrology
- ◆ Head of the Hemodialysis Unit at the Hospital Campus de la Salud Granada, Spain

- ◆ Specialist Physician at the Virgen de las Nieves University Hospital
- ◆ Doctor of Medicine Specializing in Nephrology
- ◆ Degree in Medicine and Surgery

**Ms. Pérez Jiménez, María Teresa**

- ◆ Nurse assistant in the Palliative Care unit.
- ◆ Nurse of the Palliative Care Home Support Team at the Regional University Hospital of Malaga  
Nurse in the Acute Mental Health Unit at the Civil Hospital. Malaga
- ◆ Contributing writer to the Nursing on the Net section of the Fanzine of the blog Nuestra Enfermería
- ◆ Nurse in the Child and Adolescent Psychiatric Unit, Son Espases University Hospital  
Balearic Islands, Spain
- ◆ Coordinator of the Digital Journal Redes de Dirección de Enfermería del Hospital  
Universitario Son Espases. Balearic Islands, Spain
- ◆ Mental Health Nursing Events and Communication Management
- ◆ President of the International Virtual Congress on Mental Health Nursing, editions I and II
- ◆ Nurse at the University Hospital of La Ribera
- ◆ Nurse at Hospital Francesc de Borja
- ◆ Diploma in Nursing from the University of Jaén
- ◆ Master in Nursing Management by CEU Cardenal Herrera University.
- ◆ Master's Degree in Digital Health from the Universidad Europea Miguel de Cervant

**Ms. Torres Colomera, Inmaculada**

- ◆ Specialised in Nephrology Nursing
- ◆ Head of the Peritoneal Dialysis Unit at Torrecárdenas University Hospital Almeria, Spain
- ◆ Nurse of the Nephrology CMU, Hemodialysis Service
- ◆ Postgraduate Certificate in Nursing

**Ms. Sánchez García, Belén**

- ◆ Nurse
- ◆ Postgraduate Certificate in Nursing
- ◆ Nurse in Carlos Haya Hospital Malaga, Spain

**Ms. Rebollo Rubi, Ana**

- ◆ Specialised in Nephrology Nursing
- ◆ Nurse in ERCA Consultation at the Regional University Hospital of Malaga
- ◆ Nurse at the Regional University Hospital of Malaga
- ◆ Postgraduate Certificate in Nursing
- ◆ Member of the Spanish Society of Nephrological Nursing



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*This program of studies constitutes a unique, key and decisive training to boost your professional development in the field of Nephrology Nursing"*

# 06

## Educational Plan

This degree is distinguished from others in the academic market by its innovative educational curriculum. It includes the main Palliative Care that a nursing professional should provide to chronic renal patients. At the same time, it delves into the activity guidelines of these healthcare personnel when caring for transplant patients and their donors. It also discusses the psychological support that nurses should provide to patients and families during the dialysis process. All these theoretical contents will be available on a 100% online learning platform and as a complement to the assimilation of knowledge, the student will have access to various multimedia resources such as infographics, videos and interactive summaries.



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*The theoretical part of this program is not subject to pre-established schedules or timetables so that you can self-manage your progress on an individualized basis"*

## Module 1. Advanced in Kidney Disease

- 1.1. Latest Information on Renal Disease
  - 1.1.1. Kidney Structure and Function
  - 1.1.2. Uremic Toxins
  - 1.1.3. Hydroelectrolyte Balance and Acid-Base Balance
  - 1.1.4. Hydration Disorders
  - 1.1.5. Acid-base Balance Disorders: Acidosis, Alkalosis
  - 1.1.6. Potassium Disorders: Hyperkalemia, Hypokalemia
  - 1.1.7. Conceptual Basis of Renal Pathology
  - 1.1.8. General Aspects in Nursing Care of Patients with Renal Pathology
- 1.2. Prevention of Renal Failure Advancing
  - 1.2.1. Definition and Risk Factors of CKD
  - 1.2.2. Evaluation, Diagnosis and Stratification
  - 1.2.3. Diagnosis and Management of Proteinuria
  - 1.2.4. Hygiene and Medication Management of Hypertensive Patients
  - 1.2.5. Strategies to Promote Self-Care
  - 1.2.6. Comorbidity Management
  - 1.2.7. Prevention and Progression of CKD in a Diabetic Patient
- 1.3. Renal Pathologies
  - 1.3.1. Urinary Function Disorders: Proteinuria, Hematuria, Azotemia, Oliguria
  - 1.3.2. Nephritis
  - 1.3.3. Nephrotic Syndrome
  - 1.3.4. Urinary Infection
  - 1.3.5. Renal Lithiasis
  - 1.3.6. Hemolytic Uremic Syndrome and Thrombocytic Thrombocytopenic Purpura
  - 1.3.7. Primary Glomerulonephritis
  - 1.3.8. Nephropathies of Systemic Diseases
  - 1.3.9. Interstitial and Toxic Nephropathies
  - 1.3.10 Renal Vasculopathies





- 1.3.11 Congenital and Hereditary Diseases
- 1.3.12 Arterial Hypertension and Organ Repercussions
- 1.3.13 Diabetes and the Kidneys
- 1.3.14 Pregnancy and the Kidneys
- 1.3.15 Polycystic Kidney Disease
- 1.3.16 Types of Kidney Failure and the Associated Complications
- 1.3.17 General Aspects in Nursing Care of Patients with Renal Pathology
- 1.4. Methods of Examination in Nephrology
  - 1.4.1. Semiology and Physical Examination
  - 1.4.2. Inspection
  - 1.4.3. Palpitation
  - 1.4.4. Auscultation
  - 1.4.5. Imaging Techniques
  - 1.4.6. Intravenous Urography
  - 1.4.7. Renal Arteriography
  - 1.4.8. Ultrasound
  - 1.4.9. Gammagraphy
  - 1.4.10 Urine Study
  - 1.4.11 Urinary Sediment Analysis
  - 1.4.12 Evaluation of Renal Function: Urea, Creatinine and Clearance
  - 1.4.13 Osmolality and Functional Tests
  - 1.4.14 Renal Biops
  - 1.4.15 Protocol and Technique Procedure
  - 1.4.16 Renal Patient Management in Emergencies
- 1.5. Pharmacokinetics in Kidney Failure
  - 1.5.1. Absorption
  - 1.5.2. Distribution
  - 1.5.3. Metabolism
  - 1.5.4. Elimination
  - 1.5.5. Dosage Adjustment

## Module 2. Pre-Dialysis

- 2.1. Advanced Chronic Kidney Disease (ACKD) Consultation
  - 2.1.1. Medical Treatment
  - 2.1.2. Nutrition in Predialysis Program and SelfCare Patients
  - 2.1.3. Treatment Choice for Kidney Replacement
  - 2.1.4. Assessment of Social, Family and Cultural Situation of the Patient
- 2.2. Role of Nurses in Decision-Making in Replacement Kidney Treatment
  - 2.2.1. Assessment of Possible Vascular Accesses
  - 2.2.2. Assessment of Availability of the Patient for Peritoneal Dialysis
  - 2.2.3. Importance of Carer on Decision-Making
  - 2.2.4. General and Specific Nursing Care in Pre-Dialysis

## Module 3. Renal Function Replacement Therapy: Hemodialysis

- 3.1. Hemodialysis
  - 3.1.1. History and Current Status
  - 3.1.2. Evolution
- 3.2. The Physiology of Hemodialysis
  - 3.2.1. Dissemination
  - 3.2.2. UF
  - 3.2.3. Convection
  - 3.2.4. Convection
  - 3.2.5. Urea Kinetics
- 3.3. Dialysis Liquids
  - 3.3.1. Introduction
  - 3.3.2. Water Treatment
  - 3.3.3. Methods of Water Treatment
  - 3.3.4. Quality Control of Water
  - 3.3.5. The Water Treatment Plant. Types, Characteristics, Controls, Problems
- 3.4. Dialyzers
  - 3.4.1. Definition, Characteristics, Formats
  - 3.4.2. Types of Membranes
  - 3.4.3. Factors to Consider when Choosing a Dialyzer: Ideal Dialyzers

- 3.5. Indications of Hemodialysis
  - 3.5.1. Dialysis Dosis: Purification of Small, Medium and Large Molecules
  - 3.5.2. Preservation of Residual Renal Function
- 3.6. Dialysis Monitors
  - 3.6.1. Main Characteristics and Differences Between Different Types
  - 3.6.2. Preparation and Verification of the Material Needed
  - 3.6.3. Session Planning According to the Prescription: Composition and Temperature of Dialysis Liquids (DL)
    - 3.6.3.1. Sterility Conditions
    - 3.6.3.2. Adjustment of Connections of the Extracorporeal Circuit
    - 3.6.3.3. Ending the Session
  - 3.6.4. Monitor Address: Setting up, Priming, Connecting, Disconnecting and Disinfecting the Monitors
- 3.7. Quality / Efficacy of the Depuration Techniques
  - 3.7.1. Dialysis Dose KT or KT/V in Each Technique
  - 3.7.2. Water Balance
    - 3.7.2.1. Dry Weight
    - 3.7.2.2. Euvolemic Weight
    - 3.7.2.3. Bioimpedance Applications
- 3.8. High-flow Hemodialysis and Convective Techniques
  - 3.8.1. Definition
  - 3.8.2. Types
  - 3.8.3. Equipment Management
  - 3.8.4. Benefits of High-flow Hemodialysis and Convective Techniques
- 3.9. Anticoagulation in HD: Update
  - 3.9.1. The Clot. Coagulation Cascade
  - 3.9.2. Factors which Promote Clotting in HD
  - 3.9.3. Use of Anticoagulation in HD
    - 3.9.3.1. Measurement and Monitoring of Anticoagulation
  - 3.9.4. Anticoagulation with Heparin
    - 3.9.4.1. Unfractionated Heparin (UFH)
    - 3.9.4.2. Heparinization Types
    - 3.9.4.3. Low Molecular Weight Heparin (LMWH)
    - 3.9.4.4. Secondary Effects of Heparin
    - 3.9.4.5. UFH or LMWH?
  - 3.9.5. Influence of the Membrane and the HD Technique on Anticoagulation
  - 3.9.6. Strategies for Patients with High Risk of Bleeding
    - 3.9.6.1. HD without Heparin
    - 3.9.6.2. HD low dose of Heparin
    - 3.9.6.3. Regional Heparinization with Citrate
    - 3.9.6.4. Heparinization with Heparin and Protamine
    - 3.9.6.5. Citrate in the Dialysis Fluid
    - 3.9.6.6. Regional Anticoagulation with Prostacyclin
    - 3.9.6.7. Nafamostat Mesylate
  - 3.9.7. Other Methods of Clotting
  - 3.9.8. Antiaggregation and Anticoagulation in HD Patients
- 3.10. Organization of a Dialysis Unit
  - 3.10.1. General Objective
  - 3.10.2. Structure of the Unit
  - 3.10.3. Dialysis Room
  - 3.10.4. Organisation
  - 3.10.5. Patients.
  - 3.10.6. Nursing Staff
  - 3.10.7. Procedures
    - 3.10.7.1. Preventative Medicine Controls
    - 3.10.7.2. Patient Documentation
    - 3.10.7.3. Analytical Controls
    - 3.10.7.4. Nursing Protocol for the Welcoming Patients with CKD
    - 3.10.7.5. Welcome Guide for Nursing Professionals in HD
    - 3.10.7.6. Latest Protocols Needed During the HD Session
- 3.11. Latest Information on Vascular Accesses fro HD
  - 3.11.1. Fistulas
    - 3.11.1.1. Native and Prosthetic Arteriovenous Fistulas. Most Common Locations
    - 3.11.1.2. Pre-surgical Assessment.
    - 3.11.1.3. Surgical Technique
    - 3.11.1.4. Nursing Care Postoperative Controls
    - 3.11.1.5. Nursing Care to Improve Fistula Development and Survival (FAVI)
    - 3.11.1.6. Home Self-Care of Arteriovenous Fistula
    - 3.11.1.7. Home Care of an Extravasation of the Arteriovenous Fistula

- 3.11.1.8. Measures to Follow in Case of Hemorrhage
- 3.11.1.9. Puncture of the AVF. General Rules for Punctures
- 3.11.1.10. Pain in Punctures. Puncture Techniques. Special Considerations in the Puncture of Prosthetic AVF
- 3.11.1.11. Puncture techniques: Unipuncture or Bipuncture. Buttonhole Technique
- 3.11.1.12. Self-Guided Vascular Cannulation (Peripheral and Central)
- 3.11.1.13. Control of Blood Recirculation in an Arteriovenous Fistula
- 3.11.1.14. Complications and Treatment
- 3.11.2. Catheters
  - 3.11.2.1. Types
  - 3.11.2.2. Surgical Technique
  - 3.11.2.3. Catheter Infections
  - 3.11.2.4. Treatment
  - 3.11.2.5. Catheter Care and Complications
- 3.12. General Care Procedures During the HD Session
  - 3.12.1. Monitoring of the Patient During the Sessions
    - 3.12.1.1. Medication in the Hemodialysis Session
    - 3.12.1.2. Nursing Records and Charts
    - 3.12.1.3. Nurse's Actions in the Face of Acute Complications in Hemodialysis Sessions
  - 3.12.2. Physical Complications
    - 3.12.2.1. Hypotension
    - 3.12.2.2. Blood Loss
    - 3.12.2.3. Cramps
    - 3.12.2.4. Air Embolism
    - 3.12.2.5. Hypotension. Causes. Evaluation Methods. Short and Long-Term Treatment. Dry Weight and Ideal Weight
    - 3.12.2.6. Hypertension
    - 3.12.2.7. Nausea and Vomiting
    - 3.12.2.8. Blood Loss
    - 3.12.2.9. Cramps
    - 3.12.2.10. Air Embolism
    - 3.12.2.11. Allergic Reaction to Drugs and Dialysis Material
    - 3.12.2.12. Haemolysis
    - 3.12.2.13. Precordial Pain
    - 3.12.2.14. Seizures
    - 3.12.2.15. Headaches: Most Common Causes and Treatment
  - 3.12.3. Mechanisms
    - 3.12.3.1. Filter Breakage
    - 3.12.3.2. Partial and/or Total Coagulation of the Circuit
    - 3.12.3.3. Blood Extravasation
    - 3.12.3.4. Needle Removal
    - 3.12.3.5. Monitor Malfunction
  - 3.12.4. Chronic Complications of HD
    - 3.12.4.1. Phosphocalcium Metabolism
    - 3.12.4.2. Sexual and Reproductive Dysfunction
    - 3.12.4.3. Left Ventricular Hypertrophy
    - 3.12.4.4. Uremic Pericarditis
    - 3.12.4.5. Uremic Polyneuropathy
    - 3.12.4.6. Anemia in Hemodialysis
- 3.13. Health Education for the Chronic Renal Patient
  - 3.13.1. Promotion of Healthy Lifestyle Habits
  - 3.13.2. Appropriate Nutrition
  - 3.13.3. Fluids and Ions Management
  - 3.13.4. Quality of Life for Dialysis Patients
- 3.14. Home-based Hemodialysis
  - 3.14.1. Definition
  - 3.14.2. Monitor Management
  - 3.14.3. Training the Patient for Homebased Hemodialysis
- 3.15. Managing the Infectious Pathology in Hemodialysis
  - 3.15.1. Hepatitis C Virus
    - 3.15.1.1. Latest Information on the Treatment of Hepatitis in Patients with CKDv
    - 3.15.1.2. Hepatitis B Virus
    - 3.15.1.3. Human Immunodeficiency Virus (HIV)

#### **Module 4. Up-to-date Information on Other Techniques for Extranrenal Depuration in Hospitals**

- 4.1. Continuous Hemodiafiltration
  - 4.1.1. Equipment Management and Care
- 4.2. Plasmapheresis
  - 4.2.1. Equipment Management and Care
- 4.3. Techniques Combined with Adsorption
  - 4.3.1. Hemoperfusion
    - 4.3.1.1. Equipment Management and Care
  - 4.3.2. Apheresis with Resin
    - 4.3.2.1. Types
    - 4.3.2.2. Equipment Management and Care

#### **Module 5. Pediatric Hemodialysis**

- 5.1. Advances and Innovations in Pediatric Hemodialysis
  - 5.1.1. Indications and Contraindications
- 5.2. Pediatric Vascular Accesses
  - 5.2.1. Care and Assessment of Vascular Accesses
- 5.3. Pediatric Dialysis Equipment
  - 5.3.1. Peritoneal
  - 5.3.2. Hemodialysis
- 5.4. Modalities in Pediatric Dialysis
  - 5.4.1. Peritoneal
  - 5.4.2. Hemodialysis
- 5.5. Administration of Drugs during Pediatric Hemodialysis Sessions
- 5.6. Nursing in the Care of Children on Dialysis
  - 5.6.1. Complication Management in Hemodialysis Sessions
  - 5.6.2. Nursing Care of Pediatric Renal Patients

#### **Module 6. Peritoneal Dialysis**

- 6.1. Update on Peritoneal Dialysis
- 6.2. Indications and Contraindications of Peritoneal Dialysis
  - 6.2.1. Indications
  - 6.2.2. Contraindications
- 6.3. Dialyzing Membrane
  - 6.3.1. Types
  - 6.3.2. Functions
  - 6.3.3. Features
- 6.4. Peritoneal Access
  - 6.4.1. Peritoneal Catheters
  - 6.4.2. Types
  - 6.4.3. Peritoneal Catheter Implantation
- 6.5. Nursing Care
  - 6.5.1. Perioperative
  - 6.5.2. The Operating Room
  - 6.5.3. Post Surgery
- 6.6. Post-surgery Complications
  - 6.6.1. Postoperative Complication Management and Action
- 6.7. Complications in Peritoneal Dialysis
  - 6.7.1. Peritonitis
  - 6.7.2. Exit Wound Infections
  - 6.7.3. Leakage
  - 6.7.4. Hernias
    - 6.7.4.1. Diagnosis and Treatment
- 6.8. Advantage of Peritoneal Dialysis (PD)
  - 6.8.1. Types of Peritoneal Dialysis
- 6.9. Solutions for Dialysis
  - 6.9.1. Features
  - 6.9.2. Types

- 6.10. Catheter and Exit Wound Care
  - 6.10.1. Update on Catheter Care
- 6.11. Equipment Management
  - 6.11.1. Cyclor
  - 6.11.2. Manual Peritoneal Dialysis
- 6.12. Protocol for Teaching the Patient PD
  - 6.12.1. Training and Teaching the Patient and their Carer
- 6.13. Protocol for Monitoring the Patient on PD
  - 6.13.1. Nurse House Visit
- 6.14. Administration of Drugs in PD
  - 6.14.1. Use, Dosage and Administration Routes

### Module 7. Comprehensive Care: The Wellbeing of the Chronic Renal Patient

- 7.1. Psychological Support for the Dialysis Patient
  - 7.1.1. Factors that Change the Response to the Disease
  - 7.1.2. Psychological Stages of the Renal Patient
  - 7.1.3. Psychological Adaptation Processes
  - 7.1.4. Most Common Psychological Problems in Renal Patients
  - 7.1.5. Hospitalization
  - 7.1.6. Fears of the Patient about the Disease
  - 7.1.7. Renal Patient Information
  - 7.1.8. Health Education for Patients and Their Family
  - 7.1.9. Support Sources for Renal Patients
  - 7.1.10. Psychosocial Aspects of the Renal Patient in the Nursing Care Process
  - 7.1.11. Meaning of the First Dialysis for the Renal Patient and Factors that Influence their Life
- 7.2. Interventions which Promote the Wellbeing of the Patient in the Dialysis
  - 7.2.1. Music Therapy
  - 7.2.2. Current State
  - 7.2.3. Scientific Evidence on Music Therapy
  - 7.2.4. Current Situation
  - 7.2.5. Physical Exercise in the Dialysis Room
  - 7.2.6. Current State
  - 7.2.7. Scientific Evidence
  - 7.2.8. Current Situation

### Module 8. Nursing Process Involved in Dealing with the Chronic Renal Patient NANDA, NIC NOC

- 8.1. Care Models
- 8.2. Nursing Process
- 8.3. The Language Used by Nurses
- 8.4. Care Plans for Renal Patients
  - 8.4.1. Hemodialysis Patient
  - 8.4.2. Peritoneal Dialysis Patient
  - 8.4.3. Renal Transplant Patient
  - 8.4.4. Renal Patient in Primary Attention
- 8.5. Records and Clinimetrics in the Care Model

### Module 9. Renal Transplant

- 9.1. Current Status in Transplantation
  - 9.1.1. Benefits
  - 9.1.2. Contraindications
- 9.2. Inclusion in Transplantation Waiting List
  - 9.2.1. General Aspects
  - 9.2.2. Requirements
- 9.3. Diagnostic Aspects of Death
  - 9.3.1. Diagnostic Tests
  - 9.3.2. Maintenance of Cadeveric Donor
- 9.4. Donor Interview
  - 9.4.1. Interview Sequence
  - 9.4.2. The Negative Family
  - 9.4.3. Causes and Strategies
- 9.5. Kidney Removal
  - 9.5.1. Surgical Procedure
- 9.6. Types of Transplantation
  - 9.6.1. Cephalic Death
  - 9.6.2. Asystole
  - 9.6.3. Crusader
  - 9.6.4. Samaritan
  - 9.6.5. Living Donor Transplant.

- 9.7. Transplantation Operating Room Protocol
  - 9.7.1. Performance and Follow-up in the Operating Room
- 9.8. Nursing Care of Renal Transplantation Recipients
  - 9.8.1. Latest Information on the Specific Nursing Care Required by the Transplantation Recipient
- 9.9. Compication in Renal Transplantation
  - 9.9.1. Types
  - 9.9.2. Complication Management and Action
- 9.10. Medication
  - 9.10.1. Immunosuppressants
- 9.11. Sytoms of Rejection
  - 9.11.1. General Care.

## Module 10. Palliative Care of Chronic Renal Patients

- 10.1. Current Status of Palliative Care of Renal Patients
- 10.2. Renal Support Care
  - 10.2.1. Pain Management for Renal Patients
  - 10.2.2. Symptom Control in Kidney Disease
- 10.3. Anticipated Wishes
- 10.4. Grief Management
  - 10.4.1. Communication Skills Counseling
- 10.5. Referrals to Specialist Units in Palliative Care and Bereavement Support
- 10.6. Dialysis Withdrawal
  - 10.6.1. Clinical Aspects
  - 10.6.2. Ethics



**Module 11. Use of ICT in Chronic Renal Patients.**

- 11.1. Use of Technology
  - 11.1.1. Use of Technology Applied to Health
- 11.2. Communication in the Digital Era
  - 11.2.1. Social media
- 11.3. Active Patient
  - 11.3.1. Definition
  - 11.3.2. Features
  - 11.3.3. Empowerment
  - 11.3.4. Active Patient Initiatives
- 11.4. Digital Resources for Chronic Renal Patients
  - 11.4.1. Blogs
  - 11.4.2. Didactic Websites
  - 11.4.3. Health Apps

**Module 12. Research in Renal Patient Care**

- 12.1. Research in Renal Patient
  - 12.1.1. Quantitative Research
  - 12.1.2. Qualitative Research
    - 12.1.2.1. Phases and Stages of Qualitative Research
    - 12.1.2.2. Qualitative Research Techniques
      - 12.1.2.2.1. Data Analysis
      - 12.1.2.2.2. Reporting
  - 12.1.3. Resources
  - 12.1.4. Know the ICT resources used for care research in renal patients

07

# Clinical Internship

After passing the online learning period, the program includes a practical training period in a reference clinical center. The student will have at their disposal the support of a tutor who will accompany them during the whole process, both in the preparation and in the development of the clinical practice.







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*Do your clinical internship in one of the best hospital centers and open yourself to the possibility of expanding your learning frontiers to an international scenario"*

The Practical Training period of this intensive care nursing program consists of a 3-week clinical internship, from Monday to Friday with 8 consecutive hours of work, with an assistant tutor. This stay will allow to see real patients alongside a team of professionals of reference in the area of intensive care nursing, applying the most innovative diagnostic procedures and planning the latest generation of therapy for each pathology.

In this training proposal, completely practical in nature, the activities are aimed at developing and perfecting the skills necessary for the provision of healthcare in areas and conditions that require a high level of qualification, and which are oriented to the specific training for the exercise of the activity, in a safe environment for the patient and a high professional performance.

It is undoubtedly an opportunity to learn by working in the innovative hospital of the future where real-time health monitoring of patients is at the center of the digital culture of its professionals.

The practical part will be carried out with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of teachers and other training partners that facilitate teamwork and multidisciplinary integration as transversal competencies for nephrological nursing praxis (learning to be and learning to relate)

The procedures described below will be the basis of the practical part of the training, and their implementation will be subject to the center's own availability and workload, the proposed activities being the following:





Module	Practical Activity
<b>More advanced protocols for the implementation of of Predialysis in patients with renal impairment</b>	Use of pharmacological treatment in advanced chronic kidney disease (ACKD) consultation
	To apply Nutrition in Predialysis Program and SelfCare Patients
	Role of Nurses in Decision-Making in Replacement Kidney Treatment
<b>Techniques and strategies for the application of renal replacement therapy by hemodialysis</b>	Team of High-flow Hemodialysis and Connective Techniques
	Apply the principles of organization of a dialysis room
	Use the Latest Protocols Needed During the Hemodialysis Session
	Manage nursing care to improve the development and survival of native and prosthetic arterio-venous fistulae
	Deploy hygienic and medication management, as well as the promotion of self-care in the hypertensive patient and the management of comorbidities
<b>Trends for integral care and and wellness of the chronic renal chronic renal</b>	Practice Psychological Support for the Dialysis Patient
	Apply Interventions which Promote the Wellbeing of the Patient in the Dialysis
	Implement measures for pain management in renal patients and bereavement management techniques
<b>Nursing professional competencies and protocols for the transplanted patient</b>	Gain skills in donor interviewing
	Apply Nursing Care of Renal Transplantation Recipients
	Intervene in the treatment of complications in renal transplant recipients.
<b>Use of ICT in Chronic Renal Patients</b>	To implement the use of ICT in the health and recovery process of patients with chronic kidney disease
	Training in teaching the peritoneal dialysis patient and caregiver
	Use the Records and Clinimetrics in the Care Model

## 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 entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the 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 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?

To ensure that the learning process is fully effective, TECH has made sure to select the best clinical centers to carry out these internships. Therefore, the Students will be able to up-to-date his or her knowledge in a real and prestigious environment, receiving advice and guidance from great experts in this area of nursing. For this reason, this experience can have a positive impact on the career of the professional, who will have acquired the necessary skills to work based on the latest advances in the discipline.





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*You will be able to spend your stay in a center of great international prestige, where you will meet real patients and carry out several practical activities"*



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



Nurses

### Hospital Fuensanta

Country	City
Spain	Madrid

Address: C. de Arturo Soria, 17, 28027 Madrid

Clinical center with medical services in multiple specialties

**Related internship programs:**  
- Nursing Management  
- Nursing in the Digestive Tract Department



Nurses

### Hospital HM Modelo

Country	City
Spain	La Coruña

Address: Rúa Virrey Osorio, 30, 15011, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**  
- Anaesthesiology and Resuscitation  
- Palliative Care



Nurses

### Hospital Maternidad HM Belén

Country	City
Spain	La Coruña

Address: R. Filantropía, 3, 15011, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**  
- Update in Assisted Reproduction  
- Hospitals and Health Services Management



Nurses

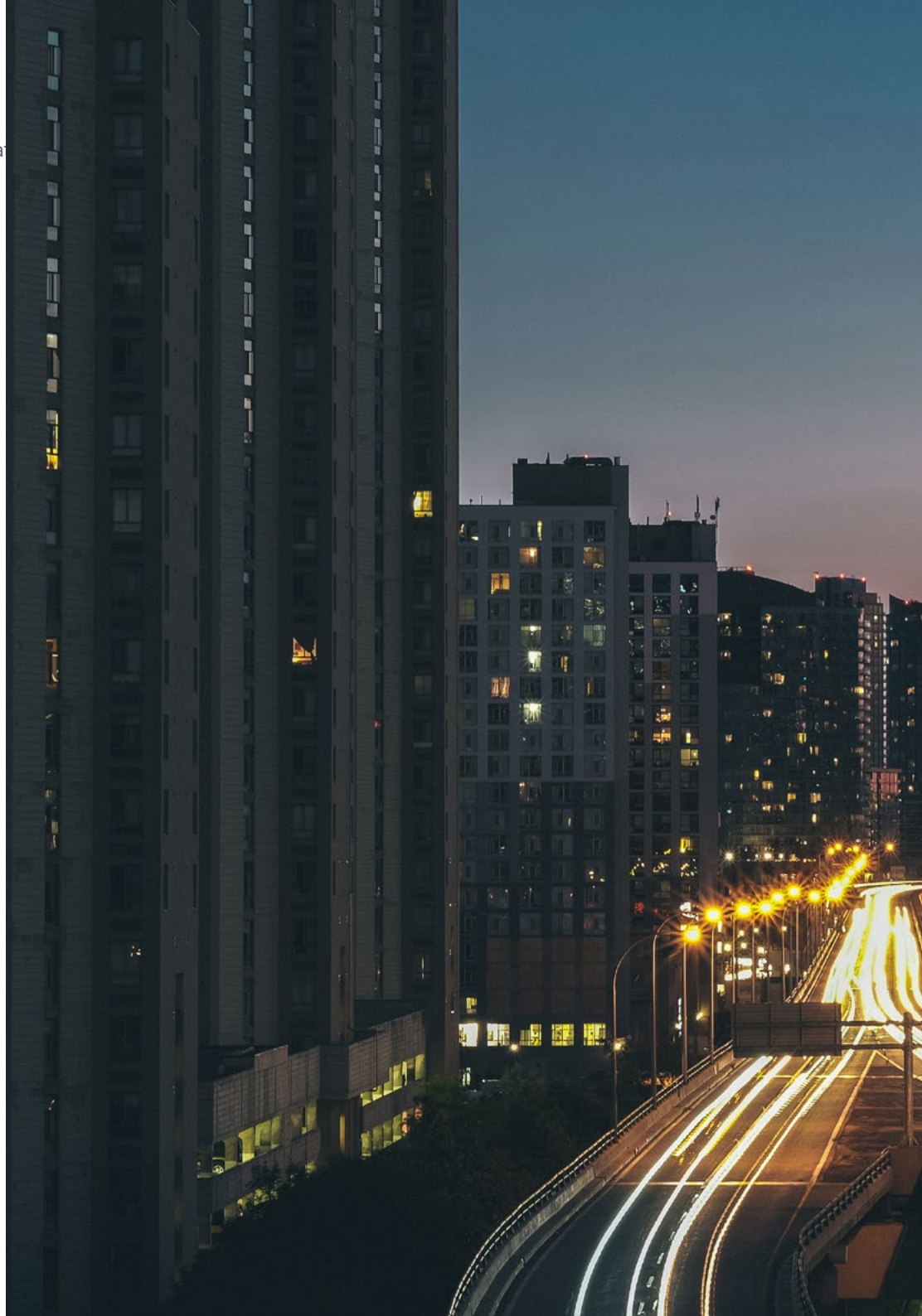
### Hospital HM Rosaleda

Country	City
Spain	La Coruña

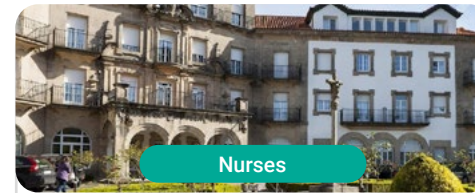
Address: Rúa de Santiago León de Caracas, 1, 15701, Santiago de Compostela, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**  
- Hair Transplantation  
- Orthodontics and Dentofacial Orthopedics







Nurses

### Hospital HM La Esperanza

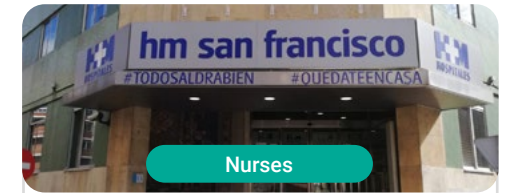
Country	City
Spain	La Coruña

Address: Av. das Burgas, 2, 15705, Santiago de Compostela, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Oncology Nursing
- Clinical Ophthalmology



Nurses

### Hospital HM San Francisco

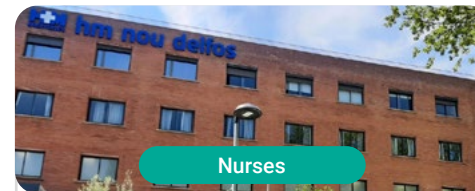
Country	City
Spain	León

Address: C. Marqueses de San Isidro, 11, 24004, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Update in Anesthesiology and Resuscitation
- Nursing in the Traumatology Department



Nurses

### Hospital HM Nou Delfos

Country	City
Spain	Barcelona

Address: Avinguda de Vallcarca, 151, 08023 Barcelona

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Aesthetic Medicine
- Clinical Nutrition in Medicine



Nurses

### Hospital HM Madrid

Country	City
Spain	Madrid

Address: Pl. del Conde del Valle de Súchil, 16, 28015, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Palliative Care
- Anaesthesiology and Resuscitation



Nurses

### Hospital HM Montepríncipe

Country: Spain  
City: Madrid

Address: Av. de Montepríncipe, 25, 28660, Boadilla del Monte, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Palliative Care
- Aesthetic Medicine



Nurses

### Hospital HM Torrelodones

Country: Spain  
City: Madrid

Address: Av. Castillo Olivares, s/n, 28250, Torrelodones, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Anaesthesiology and Resuscitation
- Palliative Care



Nurses

### Hospital HM Sanchinarro

Country: Spain  
City: Madrid

Address: Calle de Oña, 10, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Anaesthesiology and Resuscitation
- Palliative Care



Nurses

### Hospital HM Puerta del Sur

Country: Spain  
City: Madrid

Address: Av. Carlos V, 70, 28938, Móstoles, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Palliative Care
- Clinical Ophthalmology





### Policlínico HM Cruz Verde

Country	City
Spain	Madrid

Address: Plaza de la Cruz Verde, 1-3, 28807, Alcalá de Henares, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Advanced Clinical Podiatry
- Optical Technologies and Clinical Optometry



### Policlínico HM Sanchinarro

Country	City
Spain	Madrid

Address: Av. de Manoteras, 10, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Gynecological Care for Midwives
- Nursing in the Digestive Tract Department



### Policlínico HM Imi Toledo

Country	City
Spain	Toledo

Address: Av. de Irlanda, 21, 45005, Toledo

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Electrotherapy in Rehabilitation Medicine
- Hair Transplantation

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 Nursing School we use the Case Method

In a given situation, what should a professional do? 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. Nurses learn better, faster, and more sustainably over time.

*With TECH, nurses can experience a learning methodology 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, in an attempt to recreate the real conditions in professional nursing 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. Nurses who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
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 case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.



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



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 we have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical workload. 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 really 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.



### Nursing Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All 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 them as many times as you want.



### 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 suggesting that observing third-party experts can be useful.  
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 for Nephrology and Dialysis Nursing guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid Professional Master's Degree 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 **Hybrid Professional Master's Degree's Degree in Nephrology and Dialysis Nursing** contains the most complete and up-to-date program on the professional and educational field.

After the student has passed the assessments, they will receive their corresponding Hybrid Professional Master's Degree certificate issued by **TECH Technological University** via tracked delivery\*.

In addition to the diploma, students will be able to obtain an academic transcript, as well as a certificate outlining the contents of the program. In order to do so, students should contact their academic advisor, who will provide them with all the necessary information.

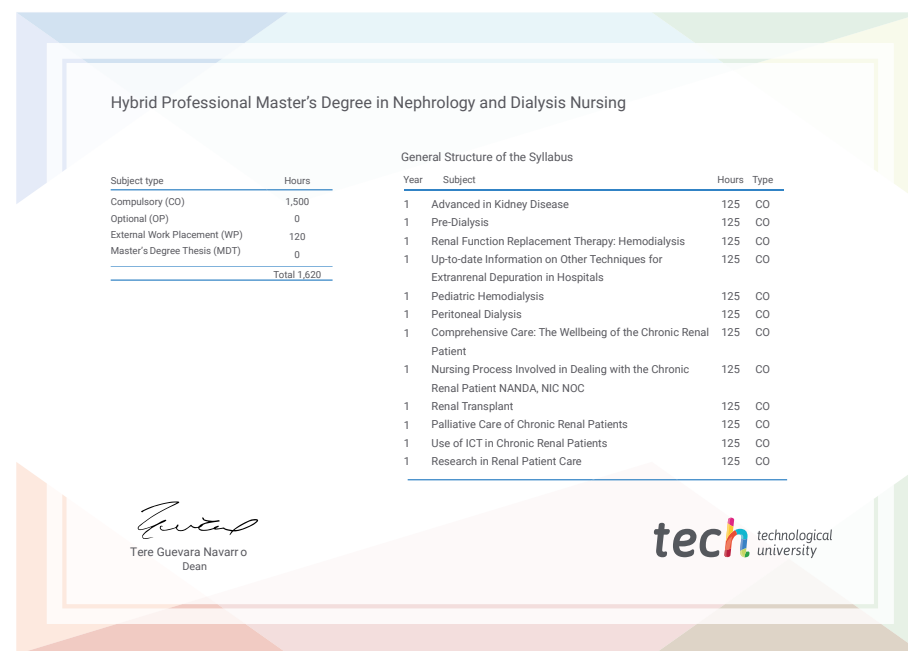
Title: **Master's Hybrid in Nephrology and Dialysis Nursing**

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

Duration: **12 months**

Certificate: **TECH Technological University**

Teaching Hours: **1,620 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.



## Hybrid Professional Master's Degree

Nephrology and Dialysis Nursing

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1,620 h

# Hybrid Professional Master's Degree Nephrology and Dialysis Nursing

