Hybrid Professional Master's Degree
Ophthalmic Nursing

tech global university

Hybrid Professional Master's Degree
Ophthalmic Nursing

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

Duration: **12 months**

Certificate: **TECH Global University**

60 + 5 ECTS Credits

Website: **www.techtitute.com/us/nursing/hybrid-professional-master-degree/hybrid-professional-master-degree-ophthalmic-nursing**

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01
Introduction

The World Health Organization states that about 20 percent of the world's population suffers from some visual pathology. Therefore, it is crucial that nurses remain up-to-date on how to provide the best therapeutic care to those patients and can efficiently assist physicians. Aware of this, TECH offers professionals in this field this very complete program where the student will be updated through an exceptional combination of theory and practice. In the first phase, you will study the contents 100% online and then you will carry out a face-to-face and intensive clinical practice in a reference hospital center. Therefore, you will get the best qualification to manage and plan the health activity in Ophthalmology Services.

Don't miss this great opportunity and become an expert professional in Ophthalmic Nursing Service Nursing with the very complete contents of this Hybrid Professional Master's Degree that TECH"

The nursing staff has become indispensable in the care of ophthalmologic pathologies. These professionals are now responsible for more complex procedures and care techniques. They are also responsible for monitoring and disinfection of instruments, among other tasks. For this reason, nurses must constantly stay up to date on the latest guidelines for these specific clinical services and use the most advanced technologies. However, all these innovations have posed a superlative challenge for them as they have difficulties in finding pedagogical programs that delve into the development of specific skills for these tasks.

TECH has identified all these needs and, in response, has created this innovative academic program based on a hybrid learning mode of study. The degree consists of two well-defined educational moments. In the first of these, the student nurse in the Ophthalmology Service will examine the latest developments in the sector in a theoretical way. These subjects will be available on a platform. In this way, each student will be able to self-manage his or her academic progress in a personalized way, over the course of 1,500 teaching hours. At the same time, you will be able to support your preparation with multimedia resources such as videos, infographics and interactive summaries.

At the end of this educational stage, TECH plans to build the practical skills of these graduates 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. This pedagogical moment will facilitate the development of specific competencies based on the use of the best technologies and their application to real patients requiring intervention for visual pathologies. In these entities, the student will be able to discuss procedures with leading experts and will also have the personalized guidance from prestigious adjunct tutor.

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

- More than 100 clinical cases presented by professionals of the Nursing in Ophthalmology Services
- 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
- Presentation of practical workshops on procedures, diagnosis, and treatment techniques in Tumors 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
- All 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

This TECH degree puts in your hands the indispensable contents for your up-to-date on the most modern Nursing procedures in the Ophthalmology Service"
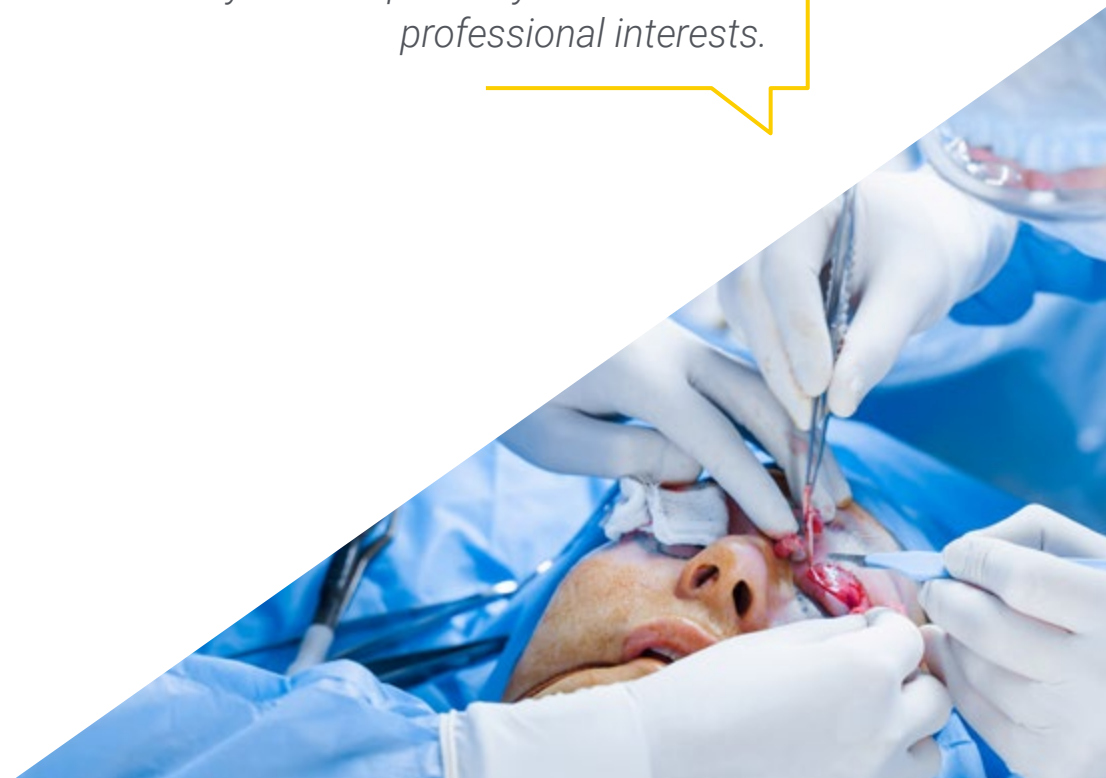
"In addition to the theoretical preparation, you will have the luxury of a 3-week intensive stay where you will acquire all the necessary skills to grow personally and professionally"

Take advantage of this opportunity and acquire a global mastery of nursing techniques in the Ophthalmology Service in only 1,620 hours of learning.

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.

In this Hybrid Professional Master's Degree, with a vocational nature and blended learning modality, the program is aimed at updating nursing professionals who require a high level of qualification. The content is based on the latest scientific evidence and is organized in a didactic way to integrate theoretical knowledge into nursing practice. The theoretical-practical elements allow professionals to up-to-date their knowledge and help them to make the right decisions in patient care.

Thanks to their multimedia content developed with the latest educational technology, they will allow the nursing professional to obtain situated and 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 professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Why Study this Hybrid Professional Master's Degree?

With this Hybrid Professional Master's Degree, the nursing staff will up-to-date their knowledge regarding the scope of action of the Ophthalmology Service. 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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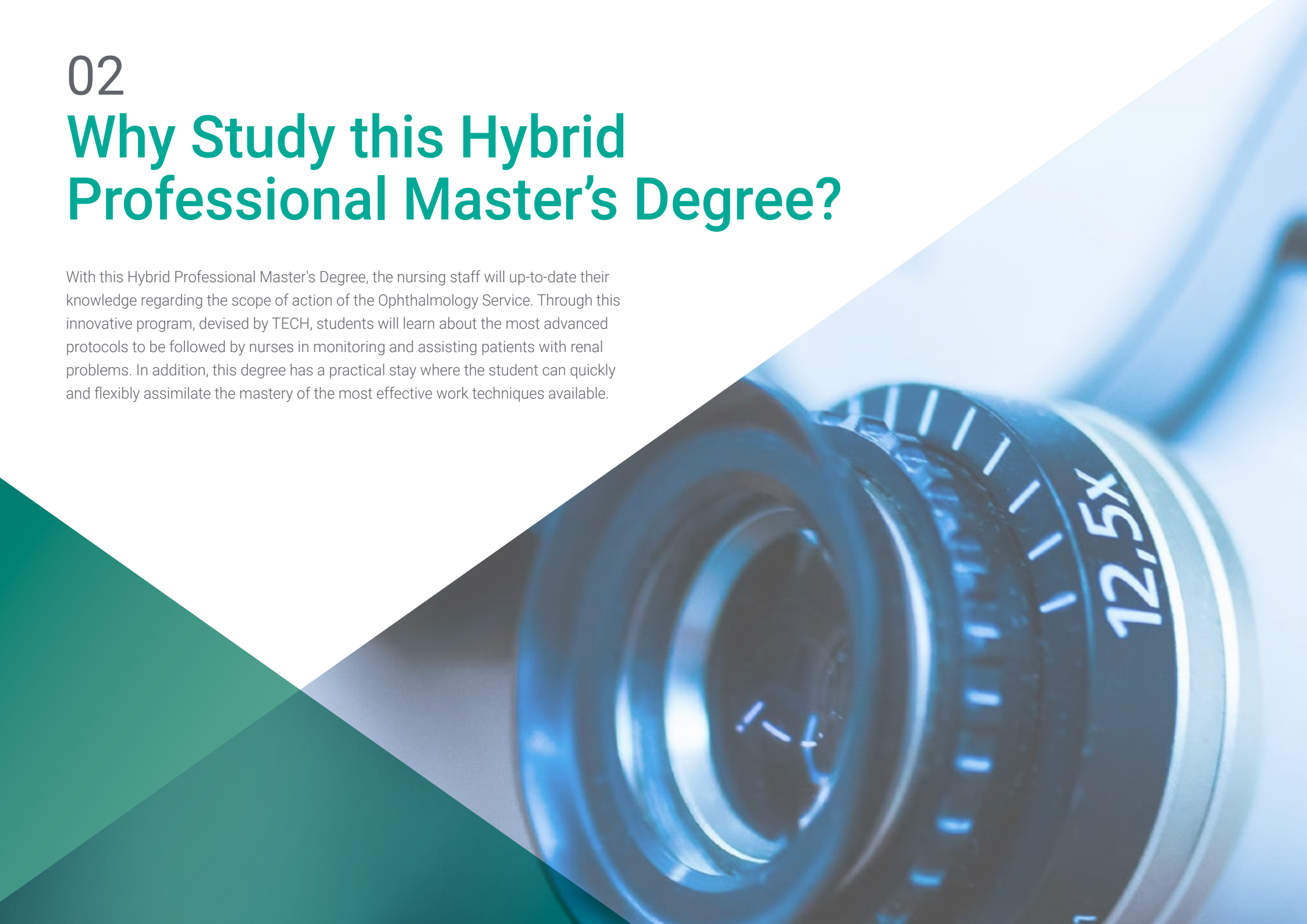
Nursing in the Ophthalmology Service is a professional area under demand on an international scale and through this training you will be able to incorporate competencies for its efficient practice"

1. Updating from the Latest Technology Available

TECH, through this degree, will instruct its students on how to properly handle modern complementary diagnostic equipment for visual problems. They will also examine the surgical instruments that the nursing staff must handle during the removal of organs for Disinfecting.

2. Gaining In-depth Knowledge from the Experience of Top Specialists

Through this Hybrid Professional Master's Degree, nurses 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. Entering First-Class Clinical Environments nursing

For the second stage of this program, TECH has foreseen the needs of its students in terms of handling the complex tools that nurses in the Ophthalmology area must manipulate. For this reason, it has planned a practical on-site stay where they will work with leading experts in this professional field and in hospitals of international importance.
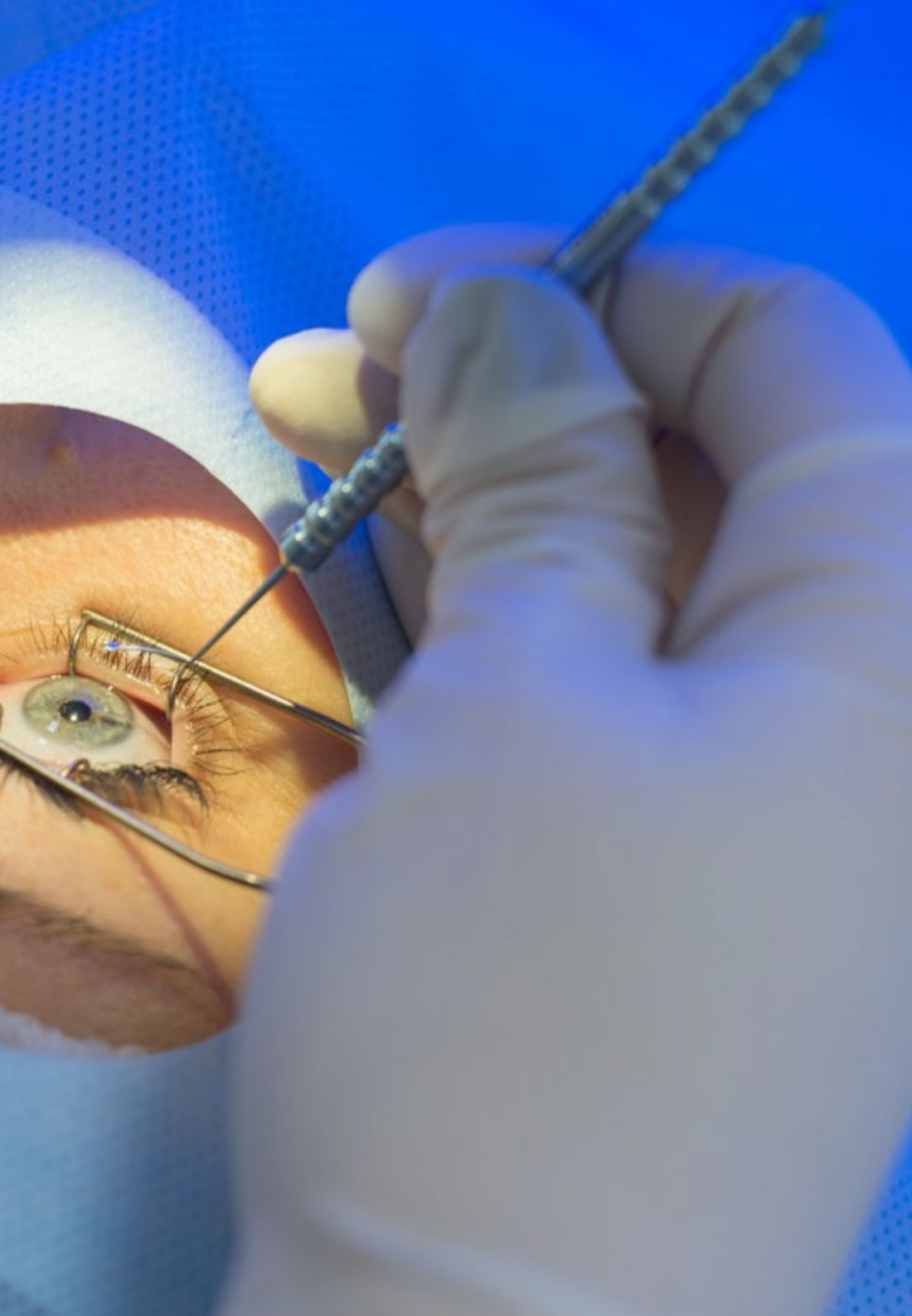
4. Combining the Best Theory with State-of-the-Art Practice

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 in the Ophthalmology Service of the 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 the Ophthalmology Service, through the competencies of the nurse, is essential to offer patients the best health care. Therefore, the purpose of this program is to provide the student with the most exhaustive and innovative information within this professional area. Therefore, they will up-to-date 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 to up-to-date your theoretical knowledge and,, put it into practice in front of real patients and with the Supervision of great experts"

General Objective

• This Hybrid Professional Master's Degree will up to date the nursing staff on the care protocols to follow that are implemented in recent times in the field of Ophthalmology. In addition, this degree is ideal for each professional to develop skills and knowledge in an autonomous manner. From this learning modality, you will achieve your personal growth goals in a faster and more flexible way

TECH will up-to-date the performance of your nursing practice, based on innovative theoretical content and dynamic practical tasks of varying complexity"
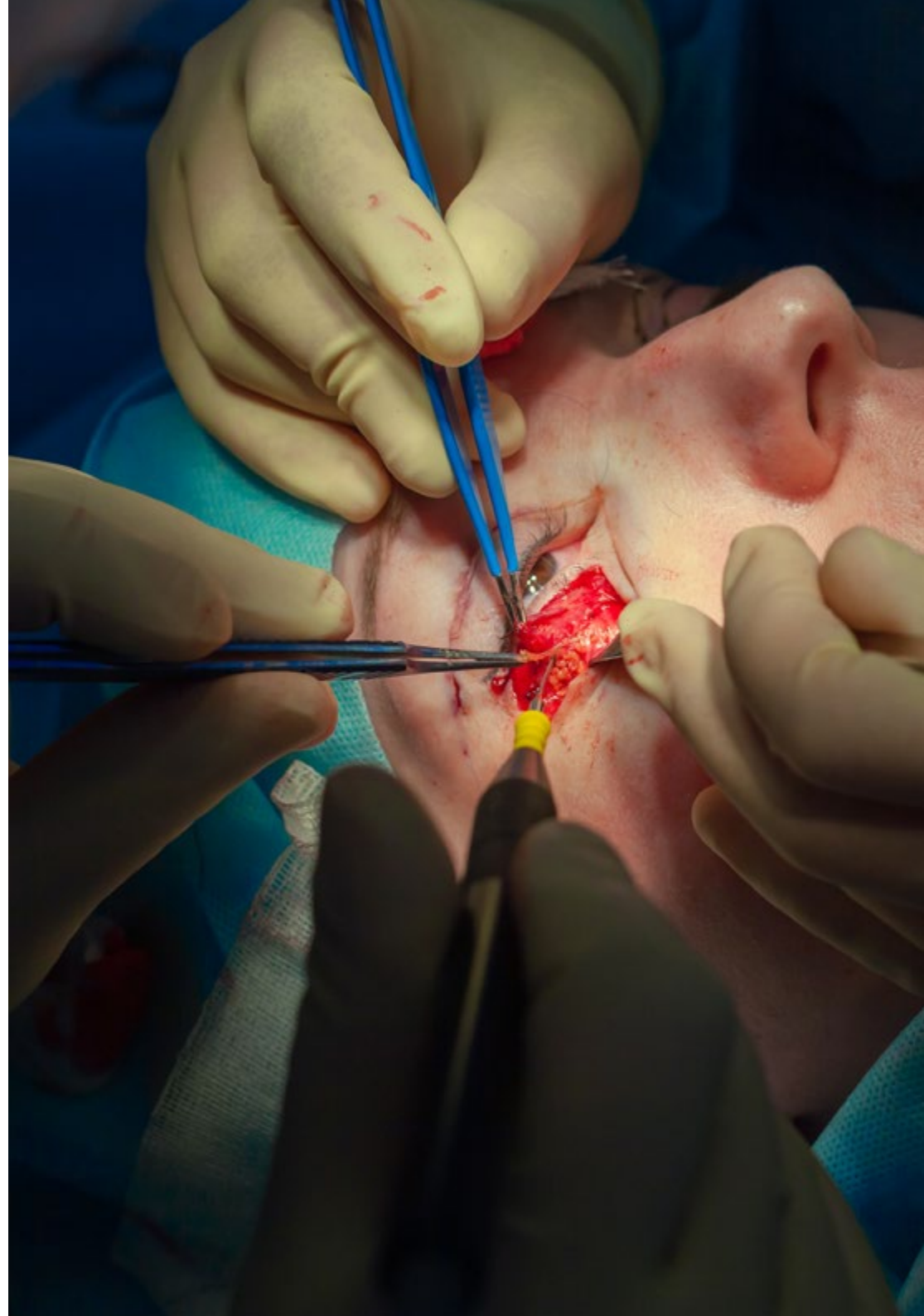
Specific Objectives

Module 1. Ocular Anatomy and Physiology

- Up-to-date students' knowledge of the anatomy and physiology of the eyeball in the master's program
- Know the anatomy, histology, physiology, neurophysiology and biochemistry of the visual system and the process of vision
- Provide and expand on previous knowledge of how the organ responsible for vision functions
- Go through each and every one of the elements that make up our eye in an interactive way, by means of images, photographs and videos

Module 2. Principles of Applied Optics

- Explain in a simple way what optics applied to vision consists of so that the student understands the importance of the concepts in daily clinical practice
- Value and incorporate the technological improvements necessary for the correct development of their professional activity
- Demonstrate understanding of the general structure of optometry and its connection with other specific and complementary disciplines
- Demonstrate the ability to participate effectively in unidisciplinary and multidisciplinary work groups in projects related to optometry

Module 3. Ocular Pharmacology

- Interpret pharmacokinetic, pharmacodynamic and toxicological data of drugs used in the prevention and treatment of ocular conditions, diagnostic tests and visual examinations
- Recognize and characterize the different dosage forms and routes of administration of drugs used in the prevention and treatment of ocular conditions, diagnostic tests and visual examinations
- Describe, justify and apply the clinical criteria governing the rational use of drugs used in the prevention and treatment of ocular conditions, diagnostic tests and visual examinations
- Apply the clinical procedures necessary for the early detection of an ocular adverse reaction Establish lines of action in case of an ocular adverse reaction

Module 4. Clinical Ophthalmic Nursing

- Know and handle the different complementary ophthalmological examination techniques: pachymetry, tonometry, biometry-calculation of intraocular lenses, corneal topography and endothelial count, angiofluoresceingraphy, optical coherence tomography, retinography, campimetry and vision test, chromatic-stereopsis
- Acquire knowledge and practice in the management of the patient who comes to the general ophthalmology practice
- Introduction to the management of the ophthalmologic patient in the different units of the specialty and knowledge of the complementary examinations of each one of them
- Identify the role of nursing in eye care within a multidisciplinary team

Module 5. Surgical Ophthalmic Nursing

- Ensure continuous specialization to raise the level of knowledge and stimulate the self-development and motivation of nursing professionals in the field of ophthalmology
- Acquire specific knowledge of the nurse's performance in the ophthalmology operating room and the pre- and post-operative care of the ophthalmologic patient
- Learn the different types of anesthesia specific to ophthalmology
- Acquire the necessary knowledge for the handling of specific devices in the different ophthalmologic surgeries

Module 6. Ocular Pathology

- Be able to identify the main problems of ophthalmologic pathology Know the theoretical basis of diagnostic methods in ophthalmologic pathology
- Know the diagnosis and medical-surgical therapeutics of the main diseases of the visual apparatus
- Recognize the ocular manifestations of systemic diseases
- Detect and assess the main ophthalmologic disorders in order to refer patients to an ophthalmologist for study and treatment
- Know the epidemiological patterns of the main visual pathologies

Module 7. Ocular Emergencies

- Define the different ocular signs and symptoms in emergencies
- Define emergency ocular traumatological pathology and define protocols of action
- Know the diseases of the conjunctiva, cornea, eyelids, orbit, retina and anterior pole in emergencies
- Learn how to perform a complete ophthalmologic examination, both sensorial and anatomical

Module 8. Ophthalmic Sterilization

- Distinguish between the different cleaning, disinfection and sterilization methods
- Describe the sterilization methods according to the type of material and instruments used
- Identify the European standards applicable to the products manufactured by the sterilization center, intended directly for the patient
- Classify the different types of sterilization indicators and to know their recommendations for each type of material
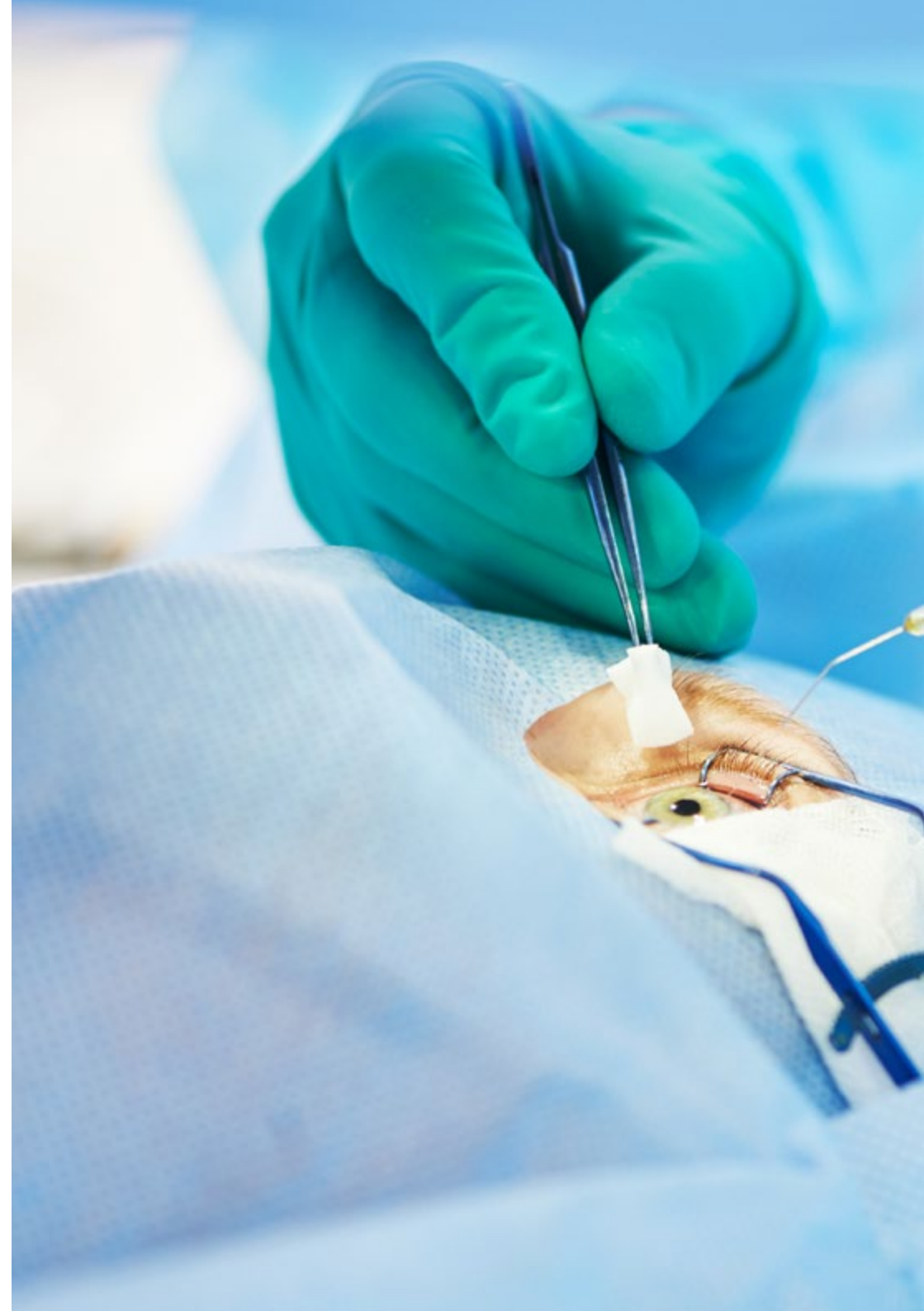
Module 9. Research Principles for Nursing
- Enhance the quality of research in ophthalmology and vision sciences by nursing professionals
- Manage bibliographic references using applications for their individual and collaborative management, for their correct citation according to Vancouver or other styles
- Develop critical reading skills in quantitative and qualitative research designs, using Checklist and according to itineraries for the communication of research results
- Define the basic structure to be developed in a research protocol

Module 10. Nursing Management and Supervision in Ophthalmic Services
- Analyze the specific characteristics of the administration of nursing services in its planning, organization, direction and control aspects
- Assume these characteristics of planning, organization, direction and control and to incorporate them as an important and decisive part of the future nursing work
- Develop interest in Health Systems Research: quality, effectiveness, costs, distribution of resources for care
- Identify the special characteristics of health services and the need and usefulness of their application in nursing

04
Skills

After passing all the stages of this Hybrid Professional Master's Degree, the nurse will have the most requested competences in the field of Ophthalmology Services. This knowledge will enable you to work in hospital dialysis units with greater guarantees of success.

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

- Develop the role of nursing in eye care within a multidisciplinary team

- Develop the basic knowledge of ophthalmology to achieve a systematization of the work through the collection and use of the information obtained in the process of patient care (assessment and identification of problems in those patients likely to present or develop ocular pathology in order to prevent it or if necessary, apply the relevant nursing care)

- Know how to carry out continuous training to raise the level of knowledge and stimulate the self-development and motivation of nursing professionals in the field of Ophthalmology

Specific Skills

- Proper care of the ophthalmic patient
- Contribute to the compliance of the most appropriate and effective medical treatments for each patient
- Participate with the responsibilities of a specialized nurse in surgical activities
- Handle and care for ophthalmic lenses and tools
- Adequately solve the doubts generated to the patient and/or family members
- Develop general knowledge in research and clinical trials in ophthalmology

"*Don't miss the great opportunity and become a successful Nurse by studying this complete training program"*

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 Visual Problem. 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.

TECH and their professors will provide you with access to academic guidance, customized to your interests and educational needs"

Management

Mr. Medina Andana, Francisco Javier

- Ophthalmology and Operating Room Nurse Practitioner
- Nurse at São Paulo Hospital
- Responsible for the Refractive Unit at Tumors Virgen de Luján Clinic
- Nurse at the Virgen del Rocío University Hospital in Seville
- Nurse in the Surgical Area of the Women's Hospital of the Virgen del Rocío University Hospital in Seville
- President of the Spanish Society of Ophthalmic Nursing
- Diploma in Nursing from the University of Seville

Professors

Dr. Castellano Santana , Pedro Raúl

- Nurse Practitioner in Neuroscience and Ophthalmology Services
- Rheumatologist at the Insular University Hospital of Gran Canaria
- Nurse in the Neonatology Unit Materno Infantil de Gran Canaria Hospital
- Nurse of the Radiology Unit at the Maternity Hospital of Gran Canaria
- Doctor Cum Lauden at Jaume I University
- Master's Degree in Nursing Sciences, Jaume I University
- President of the Spanish Association of Degree in Neurosciences Nurses
- Secretary and founder of the Canarian Ophthalmological Nursing Association

Dr. Lopez Muñoz, Alfredo

- Specialist in Optics and Optometry
- Responsible for the Refractive Unit at Miranza Virgen de Luján Clinic
- Associate Professor in the Dept. of Condensed Matter from Physics - Degree in Optics and Optometry at the University of Seville
- D. in Optometry, Pharmaceutical Technology and Drug Sciences from the University of Seville
- Degree in Optics and Optometry from the European University of Madrid
- Official Master's Degree in Clinical Optometry and Research at Camilo José Cela University, Madrid
- Diploma in Optics from the Complutense University of Madrid

Dr. Molina Lepe, Esteban
- Ophthalmology Area Specialist at the Public Health Agency of Bajo Guadalquivir
- Responsible for the Refractive Unit at Miranza Virgen de Luján Clinic
- Member of the Integral Diabetes Plan of the Ministry of Health of the Regional Government of Andalusia
- Author of publications for and book chapters
- Member of: SEO, SECOIR, SAO and ESCRS

Ms. Escalona Conejo, Loida
- Specialist in Optics and Optometry Clinical Symptoms
- Optometrist in Miranza
- Optics and optometry. University of Granada
- FDA-approved degree for the fitting of CRT therapeutic lenses
- Course on pediatric optometry and ocular health given by San Pablo University
- Scientific-technological high school education in Stockholm (Sweden)

Mr. López-Brea Sica, Israel
- Responsible for Surgery, sterilization and maintenance of the Institute of Advanced Ophthalmology (Madrid)
- Technician of *Excimer Laser Technolas* by Hospital Oftalmológico Internacional de Madrid
- Degree in Nurses from the European University of Madrid
- Law degree from Universidad Complutense de Madrid
- Ophthalmology Courses on Technical Specialization and Ophthalmic Nursing

06
Educational Plan

This degree is distinguished from others in the academic market by its innovative educational curriculum. It includes the most modern instruments and procedures that the nurse must handle in the context of an Ophthalmology Service. At the same time, it delves into the activity guidelines of these healthcare personnel when caring for transplant patients and their donors. It also examines the latest management, leadership and planning strategies that will be the responsibility of these professionals. All these theoretical contents will be available on a 100% online learning platform and as , a complement to the assimilation of knowledge, give access various multimedia resources such as infographics, videos and interactive summaries.

"

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. Ocular Anatomy and Physiology

1.1. Eyeball
    1.1.1. Outer Layer
        1.1.1.1. Cornea
        1.1.1.2. Sclera
        1.1.1.3. Sclerocorneal Limbus
    1.1.2. Middle or Vascular Layer
        1.1.2.1. Iris
        1.1.2.2. Ciliary Body
        1.1.2.3. Choroid
    1.1.3. Inner or Neurosensory Layer
        1.1.3.1. Retina
        1.1.3.2. Vitreous humor
1.2. Lens
    1.2.1. Description and Characteristics
    1.2.2. Morfoligical
    1.2.3. Phenomenon of Accommodation
1.3. Conjunctiva
    1.3.1. Description and Characteristics
    1.3.2. Layers of the Conjunctiva
1.4. Eyelids
    1.4.1. Description and Characteristics
    1.4.2. Description of the Layers of the Eyelids
1.5. Lacrimal System
    1.5.1. Secretory Lacrimal System
    1.5.2. Excretory Lacrimal System
1.6. Ocular Orbit
    1.6.1. Description
    1.6.2. Orbital Openings
    1.6.3. Structure of the Orbital Bone
1.7. Eye Muscles
    1.7.1. Description
    1.7.2. Different Eye Muscles
    1.7.3. Muscle Action

1.8. Optical Route
    1.8.1. Optic Nerve
    1.8.2. Optic Chiasm
    1.8.3. Optical Ribbons
    1.8.4. Visual Centers
    1.8.5. Optical Radiation
    1.8.6. The Visual Cortex
1.9. Vascularization of the Eyeball
    1.9.1. Eyeball Arteries
    1.9.2. Eyeball Veins
1.10. Eyeball Innervation
    1.10.1. Description
    1.10.2. Different Ocular Nerves
    1.10.3. Neuro-Ophthalmology
    1.10.4. Image Formation

Module 2. Principles of Applied Optics

2.1. Refractive Status of the Human Eye
    2.1.1. Normal Eyes Description
    2.1.2. Refractive Defects or Ametropias
2.2. Myopia
    2.2.1. Description
    2.2.2. Types of Myopia
    2.2.3. Causes and Symptoms
    2.2.4. Correction of Myopia
2.3. Hyperopia
    2.3.1. Description
    2.3.2. Types of Hyperopia
    2.3.3. Causes and Symptoms
    2.3.4. Correction of Hyperopia

Module 3. Ocular Pharmacology

Module 4. Clinical Ophthalmic Nursing

4.1. Introduction to Clinical Nursing
- 4.1.1. Ocular Medical History
- 4.1.2. Medical History
- 4.1.3. Organic Law on the Protection of Personal Data
- 4.1.4. Informed consent

4.2. Visual Acuity
- 4.2.1. Visual Acuity Exploration
- 4.2.2. Visual Acuity Measurement Systems

4.3. Refractive Power Measurement Systems
- 4.3.1. Use of the Autorefractometer

4.4. Exploration of the Lacrimal Duct
- 4.4.1. Definition
- 4.4.2. Tearing and Epiphora
- 4.4.3. Types of Obstructions

4.5. Performance of Ocular Biometry
- 4.5.1. Contact technique
- 4.5.2. Optical biometrics
- 4.5.3. Introduction to Intraocular Lens Calculation

4.6. Performing Various Ophthalmic Examinations
- 4.6.1. Performance of Corneal Topography
- 4.6.2. Performing Angiography
- 4.6.3. Visual Field Examination
- 4.6.4. Intraocular Pressure Measurement
    - 4.6.4.1. Contact Tonometers
    - 4.6.4.2. Non-Contact Tonometers
- 4.6.5. Performance of Confocal Specular Microscopy
- 4.6.6. Use of the Frontophocometer

4.7. Performing Optical Coherence Tomography
- 4.7.1. Definition
- 4.7.2. Test Execution

4.8. Slitlamp Handling
- 4.8.1. Definition
- 4.8.2. Slitlamp Use

4.9. Ocular Electrophysiology
- 4.9.1. Electroretinogram
- 4.9.2. Electrooculogram
- 4.9.3. Visual Evoked Potentials

4.10. Ophthalmology Nurse Consultation
- 4.10.1. Nursing Care for Patients with Visual Problems Related to Diabetes Mellitus
- 4.10.2. Nursing Care for Patients with Low Vision

Module 5. Surgical Ophthalmic Nursing

5.1. Definition Perioperative Surgical Process
- 5.1.1. Pre-Surgery Surgical Process
- 5.1.2. Intraoperative Surgical Process
- 5.1.3. Post-Surgery Surgical Process

5.2. Ophthalmic Surgical Equipment
- 5.2.1. Description of Equipment
- 5.2.2. Explanation of the Use of Equipment
- 5.2.3. Basic Maintenance of the Equipment

5.3. Ophthalmic Anesthesia
- 5.3.1. Types of Anesthesia
- 5.3.2. Ophthalmic Anesthesia
- 5.3.3. Ophthalmic Anesthesia Consumables

5.4. Ophthalmic Surgery Eyelids, Conjunctiva, Orbit
- 5.4.1. Definition and Types of Eyelid, Conjunctiva, Orbit Surgery
- 5.4.2. Types of Anesthesia
- 5.4.3. List of Surgical Equipment
- 5.4.4. List of Surgical Consumables
- 5.4.5. List of Surgical Tools
- 5.4.6. Surgical Instrumentation Protocol

5.5.   Ophthalmic Surgery Cataracts

    5.5.1.   Definition and Types of Cataract Surgery

    5.5.2.   Types of Anesthesia

    5.5.3.   List of Surgical Equipment

    5.5.4.   List of Surgical Consumables

    5.5.5.   List of Surgical Tools

    5.5.6.   Surgical Instrumentation Protocol

5.6.   Ophthalmic Surgery Glaucoma

    5.6.1.   Definition and Types of Glaucoma Surgery

    5.6.2.   Types of Anesthesia

    5.6.3.   List of Surgical Equipment

    5.6.4.   List of Surgical Consumables

    5.6.5.   List of Surgical Tools

    5.6.6.   Surgical Instrumentation Protocol

5.7.   Ophthalmic Surgery Retina

    5.7.1.   Definition and Types of Retina Surgery

    5.7.2.   Types of Anesthesia

    5.7.3.   List of Surgical Equipment

    5.7.4.   List of Surgical Consumables

    5.7.5.   List of Surgical Tools

    5.7.6.   Surgical Instrumentation Protocol

5.8.   Ophthalmic Corneal Surgery

    5.8.1.   Definition and Types of Corneal Surgery

    5.8.2.   Types of Anesthesia

    5.8.3.   List of Surgical Equipment

    5.8.4.   List of Surgical Consumables

    5.8.5.   List of Surgical Tools

    5.8.6.   Surgical Instrumentation Protocol

5.9.   Ophthalmic Surgery Refractive Surgery

    5.9.1.   Definition and Types of Refractive Surgery

    5.9.2.   Types of Anesthesia

    5.9.3.   List of Surgical Equipment

    5.9.4.   List of Surgical Consumables

    5.9.5.   List of Surgical Tools

    5.9.6.   Surgical Instrumentation Protocol

Module 6. Ocular Pathology

6.1.   Lens. Cataracts

    6.1.1.   Definition

    6.1.2.   Types of Cataracts

    6.1.3.   Treatment

6.2.   Macular and Retinal Pathology

    6.2.1.   Definition of Macular and Retinal Pathology

    6.2.2.   Types of Macular and Retinal Pathology

    6.2.3.   Treatment

6.3.   Glaucoma

    6.3.1.   Definition

    6.3.2.   Types of Glaucoma

    6.3.3.   Treatment

6.4.   Strabismus

    6.4.1.   Introduction

    6.4.2.   Types of Strabismus

    6.4.3.   Treatment

6.5.   Eyelids and Eyelashes

    6.5.1.   Introduction

    6.5.2.   Types of Eyelid Pathologies

    6.5.3.   Treatment

6.6.   Conjunctiva and Sclera

    6.6.1.   Introduction

    6.6.2.   Types of Conjunctivitis

    6.6.3.   Episcleritis Scleritis

    6.6.4.   Treatment

6.7.   Orbit

    6.7.1.   Introduction

    6.7.2.   Types of Diseases

6.8.   Uveitis

    6.8.1.   Introduction

    6.8.2.   Types of Uveitis

    6.8.3.   Treatment

Module 8. Ophthalmic Sterilization

8.1.   General Information on the Cleaning, Disinfection and Sterilization Process
    8.1.1.   Cleaning of Surgical Material and Instruments
    8.1.2.   Receiving and Washing of the Equipment
    8.1.3.   Classification of Materials Subjected to Sterilization Processes
    8.1.4.   Packaging Equipment Preparation
8.2.   Sterilization Controls
    8.2.1.   Definition
    8.2.2.   Physical Controls
    8.2.3.   Chemical Indicators
    8.2.4.   Equipment Control
    8.2.5.   Biological Indicators
8.3.   Choosing the Sterilization Procedure
    8.3.1.   Definition
    8.3.2.   Types of Sterilization
        8.3.2.1. Heat Sterilization
        8.3.2.2. Gas Sterilization
        8.3.2.3. Liquid Sterilization
8.4.   Traceability of the Sterilization Process
    8.4.1.   Definition
    8.4.2.   Traceability of the Process
8.5.   Storage of Sterile Material and Distribution of Sterile Equipment
    8.5.1.   Definition
    8.5.2.   Manipulation
    8.5.3.   Transport
    8.5.4.   Storage
8.6.   Single-Use Equipment Reuse the Product
    8.6.1.   Definition
    8.6.2.   Advantages
    8.6.3.   Risks of Reuse of Single-Use Medical Equipment
    8.6.4.   Legislation

8.7.   Cleaning and Disinfection in Ophthalmology
    8.7.1.   Definition
    8.7.2.   Features
    8.7.3.   Procedures
    8.7.4.   Decontamination of Material Possibly Contaminated with Prions
    8.7.5.   Toxic Anterior Segment Syndrome
8.8.   Sterilization in Ophthalmology Practices
    8.8.1.   Definition
    8.8.2.   Features
    8.8.3.   Procedures
8.9.   Sterilization in the Ophthalmic Surgical Area
    8.9.1.   Definition
    8.9.2.   Features
    8.9.3.   Procedures
8.10.   UNE Standards for Sterilization
    8.10.1.   Definition
    8.10.2.   UNE Standards

Module 9. Research Principles for Nursing

9.1.   The Research Process and Nursing Research
    9.1.1.   Introduction
    9.1.2.   La investigación en enfermería
    9.1.3.   Sources of Knowledge
    9.1.4.   Research Paradigms
    9.1.5.   Characteristics of Quantitative and Qualitative Research
9.2.   Objectives and Stages of Research in Nursing
    9.2.1.   Definition
    9.2.2.   Stages in the Research Process
9.3.   Information Search
    9.3.1.   Introduction
    9.3.2.   Objectives of the Bibliographic Search
    9.3.3.   Classification of Information Sources
    9.3.4.   Methods for Performing a Bibliographic Search
    9.3.5.   Search Strategy
    9.3.6.   Management of Bibliographic References
    9.3.7.   Research Bases in Health Sciences

Module 10. Nursing Management and Supervision in Ophthalmic Services

10.1. Care Management
- 10.1.1. Care Management as Clinical Management
- 10.1.2. Nursing Division Management Model
- 10.1.3. Strategic Lines in Care Management
- 10.1.4. Nursing Product
- 10.1.5. Portfolio of services
- 10.1.6. Care Plans

10.2. Human Resource Management
- 10.2.1. Leadership and Management
- 10.2.2. Motivation at Work
- 10.2.3. Negotiation
- 10.2.4. Decision-Making Tools
- 10.2.5. Task Delegation
- 10.2.6. Teamwork
- 10.2.7. Job Analysis and Description
- 10.2.8. Estimated Payroll Requirements and Weight Endowment Requirements
- 10.2.9. Levels of Dependency
- 10.2.10. Recruitment of Personnel
- 10.2.11. Recruitment and Reception of Personnel

10.3. Management of Material Resources
- 10.3.1. Material Resources Units
- 10.3.2. Classification of Logistic Activities
- 10.3.3. Determination of Need and Consumption Agreements
- 10.3.4. Management of Clinical Equipment
- 10.3.5. Supplier Selection
- 10.3.6. Order Issuance and Tracking
- 10.3.7. Inventory Management
- 10.3.8. Stock Control

10.4. Quality Management
- 10.4.1. Concept of Quality of Care
- 10.4.2. Quality Evolution and Improvement Tool
- 10.4.3. Structure, Process and Result
- 10.4.4. The EFQM Total Quality Model

10.5. The ISO 9001 Standard in Ophthalmology Units
- 10.5.1. Definition
- 10.5.2. Identifying Processes
- 10.5.3. Benefits

10.6. *Joint International Commission* Hospital Accreditation
- 10.6.1. Definition
- 10.6.2. Standards

10.7. Management of Nursing Services
- 10.7.1. Definition
- 10.7.2. Management of the Outpatient Area
- 10.7.3. Management of the Hospitalization Area

10.8. Management of Ophthalmic Surgical Units
- 10.8.1. Definition
- 10.8.2. Description of Surgical Unit
- 10.8.3. Surgical Organization
- 10.8.4. Organization of the Work Team
- 10.8.5. Human resources

10.9. Management of the Ophthalmology Practice
- 10.9.1. Definition
- 10.9.2. Types of Practices
- 10.9.3. Organization of the Work Team
- 10.9.4. Human resources

10.10. Social Networks and Health
- 10.10.1. Definition
- 10.10.2. Most Used Social Networks
- 10.10.3. Use and Utilities
- 10.10.4. Quality and Social Networks

Clinical Internship

After passing the online learning period, the program includes a practical training period the student will have the opportunity to in a prestigious transfer center. Therefore, and with the support of a tutor who will accompany you throughout the process, you will develop the skills most in demand in the field of ophthalmic nursing.

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 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 allow you to deal with real patients with a team of reference professionals in the of Nursing field, applying the most innovative diagnostic procedures and planning the latest generation Therapeutics in each pathology.

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 fellow trainees that facilitate teamwork and multidisciplinary integration as transversal competencies for nursing practice (learning to be and learning to relate).

Receive specialized education in an institution that can offer you all these possibilities, with an innovative academic program and a human team that will help you develop your full potential"

The procedures described below will form the basis of the practical part of the internship, and their implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:

Module	Practical Activity
Ocular Pathology for Nursing	Identify the main problems of ophthalmologic pathology based on a nurse's own clinical recognition and the most updated theoretical bases
	Handle the different complementary ophthalmologic examination techniques such as pachymetry, tonometry and others
	Apply different techniques for the management of ophthalmologic patients in the different units of the specialty
Pharmacology Ocular Pharmacology for Nursing	To know how to interpret pharmacokinetic, pharmacodynamic and toxicological data of drugs used against ocular conditions
	Characterize the different dosage forms and routes of administration of drugs used in the prevention and treatment of ocular conditions, diagnostic tests and visual examinations
	Transfer to the medical staff the results and data on the patient's evolution after the use of specific pharmaceuticals after the use of specific pharmaceutical products against ocular pathologies
Operating room and ophthalmologic disinfection for Nursing	Incorporate specific knowledge nurse's performance in the ophthalmology operating room and the pre- and post-operative care of the these patients
	Use specific devices and technologies to assist the surgeon in different ophthalmic surgeries
	Distinguish Implement the different cleaning, disinfection and sterilization methods
	Classify the different types of sterilization indicators and to know their recommendations for each type of material
Nursing Management and Supervision in Ophthalmic Nursing	Assume the planning, organization, direction and control of procedures in the Ophthalmology Service in the Ophthalmology Service
	Recognize the different types of specific anesthesia for Ophthalmology, its adequate protection and application
	Demonstrate the ability to participate effectively in unidisciplinary and multidisciplinary work groups in projects related to optometry

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.
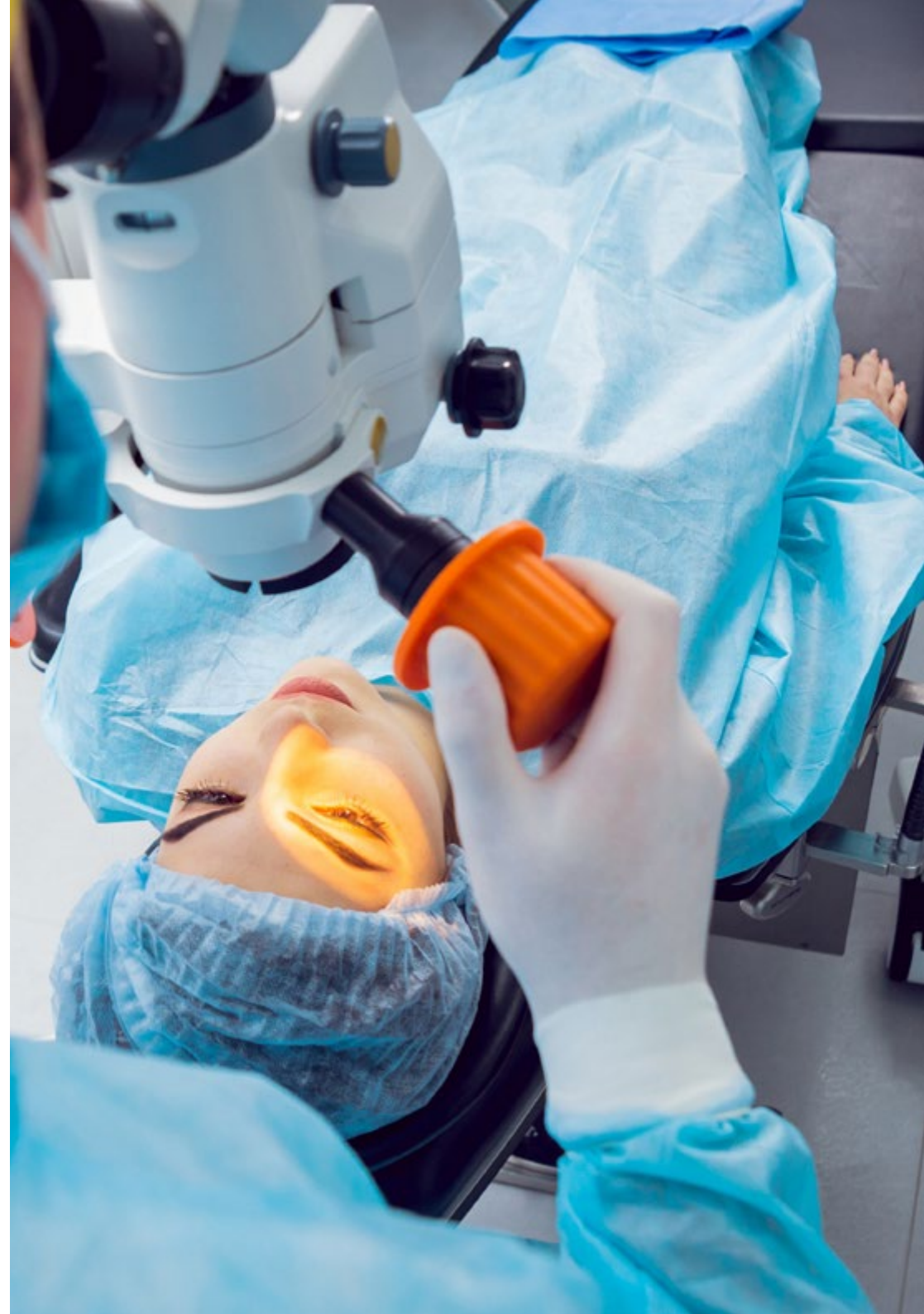
General Conditions of the Internship Program

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 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.

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 nurse 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. 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.

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

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

Nursing
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

Nursing
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
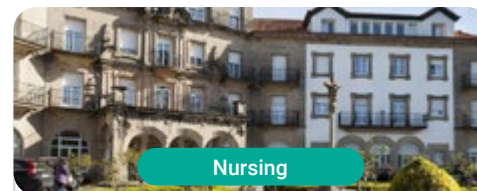
Nursing
Hospital HM La Esperanza

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
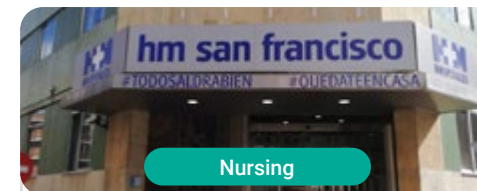
Nursing
Hospital HM San Francisco

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

Nursing
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

Nursing
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

Nursing
Hospital HM Montepríncipe

Country	City
Spain	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

Nursing
Hospital HM Torrelodones

Country	City
Spain	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

Nursing

Hospital HM Sanchinarro

Country	City
Spain	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

Nursing

Hospital HM Puerta del Sur

Country	City
Spain	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
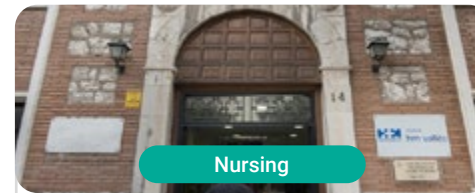
Nursing

Hospital HM Vallés

Country	City
Spain	Madrid

Address: Calle Santiago, 14, 28801 , Alcalá de Henares, Madrid

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

Related internship programs:
- Gynecologic Oncology
- Clinical Ophthalmology

Nursing

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

Nursing

Policlínico HM Distrito Telefónica

Country	City
Spain	Madrid

Address: Ronda de la Comunicación, 28050, Madrid

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

Related internship programs:
- Optical Technologies and Clinical Optometry
- General and Digestive System Surgery
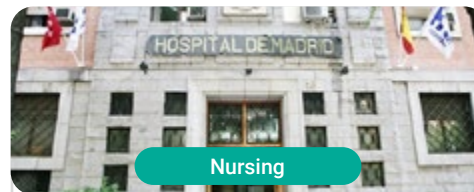
Nursing

Policlínico HM Gabinete Velázquez

Country	City
Spain	Madrid

Address: C. de Jorge Juan, 19, 1° 28001, 28001, Madrid

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

Related internship programs:
- Clinical Nutrition in Medicine
- Aesthetic Plastic Surgery

Nursing

Policlínico HM Moraleja

Country	City
Spain	Madrid

Address: P.º de Alcobendas, 10, 28109, Alcobendas, Madrid

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

Related internship programs:
- Rehabilitation Medicine in Acquired Brain Injury Management
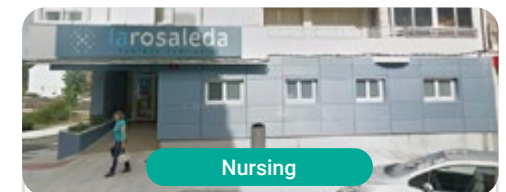
Nursing

Policlínico HM Rosaleda Lalín

Country	City
Spain	Pontevedra

Address: Av. Buenos Aires, 102, 36500, Lalín, Pontevedra

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

Related internship programs:
- Advances in Hematology and Hemotherapy
- Neurological Physiotherapy

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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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.

20%

15%

15%

3%

20%

17%

7%

3%

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

This Hybrid Professional Master's Degree in Ophthalmic 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 Global University.

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

This program will allow you to obtain your **Hybrid Professional Master's Degree diploma in Ophthalmic Nursing** endorsed by **TECH Global University**, the world's largest online university.

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

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.
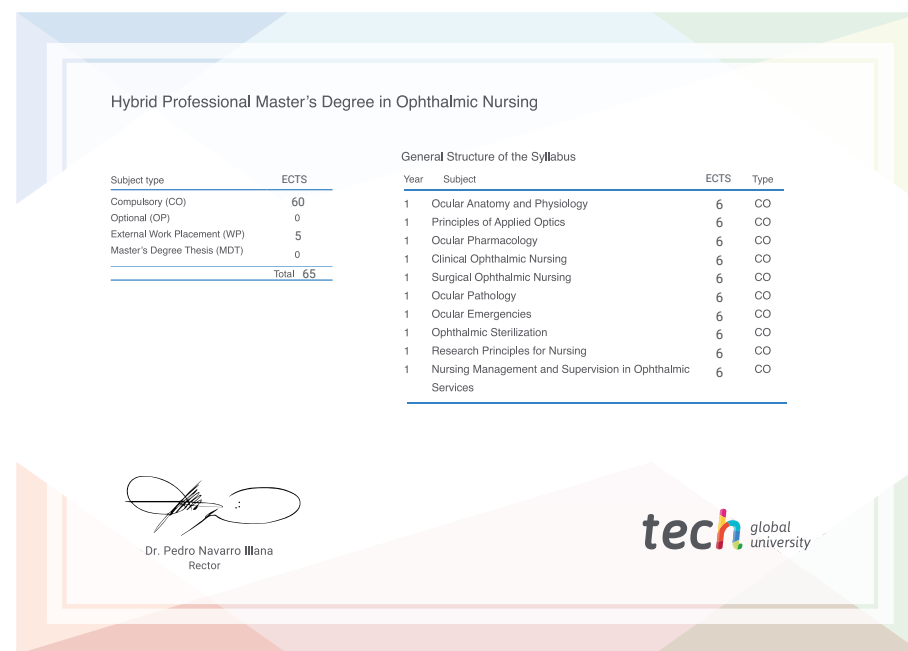
Title: **Hybrid Professional Master's Degree in Ophthalmic Nursing**

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

Duration: **12 months**

Certificate: **TECH Global University**

Recognition: **60 + 5 ECTS Credits**

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tech global university

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

Hybrid Professional Master's Degree in Ophthalmic Nursing

This is a program of 1,620 hours of duration equivalent to 65 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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

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

Dr. Pedro Navarro Illana
Rector

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.   Unique TECH Code: AFW0RD23S   techtitute.com/certificates

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Hybrid Professional Master's Degree in Ophthalmic Nursing

General Structure of the Syllabus

Subject type	ECTS
Compulsory (CO)	60
Optional (OP)	0
External Work Placement (WP)	5
Master's Degree Thesis (MDT)	0
Total	65

Year	Subject	ECTS	Type
1	Ocular Anatomy and Physiology	6	CO
1	Principles of Applied Optics	6	CO
1	Ocular Pharmacology	6	CO
1	Clinical Ophthalmic Nursing	6	CO
1	Surgical Ophthalmic Nursing	6	CO
1	Ocular Pathology	6	CO
1	Ocular Emergencies	6	CO
1	Ophthalmic Sterilization	6	CO
1	Research Principles for Nursing	6	CO
1	Nursing Management and Supervision in Ophthalmic Services	6	CO

Dr. Pedro Navarro Illana
Rector

tech global university

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*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.

Hybrid Professional Master's Degree
Ophthalmic Nursing

Modality: **Hybrid (Online + Clinical Internship)**
Duration: **12 months**
Certificate: **TECH Global University**
60 + 5 ECTS Credits

Hybrid Professional Master's Degree
Ophthalmic Nursing

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