Master's Degree

Optical Technologies and Clinical Optometry

tech global university

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Master's Degree
Optical Technologies and Clinical Optometry

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Global University**
- Credits: **60 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/medicine/master-degree/master-optical-technologies-clinical-optometry

Index

01

Introduction to the Program

The evolution of Optical Technologies and advancements in Clinical Optometry have transformed visual care, enabling more accurate diagnoses and personalized treatments. According to the International Agency for the Prevention of Blindness, at least 1.1 billion people worldwide have visual impairments that could have been prevented or treated with proper access to eye care. This scenario highlights the need for highly trained specialists in the use of advanced tools for the assessment and correction of visual problems. In this regard, TECH offers an innovative and 100% online qualification, designed to update professionals with the latest advancements in optical technologies and clinical optometry, providing them with access to cutting-edge knowledge.

Master the latest innovations in Optical Technologies and Clinical Optometry with a practical and up-to-date approach through this Master's Degree"

Advances in Optical Technologies and Clinical Optometry have significantly transformed visual care, enabling more accurate diagnoses and more effective treatments. In a context where visual pathologies affect millions of people worldwide, having highly trained professionals in the latest tools and techniques is essential. Moreover, the constant evolution of this field requires continuous updates to provide care based on the best scientific evidence and to address the challenges in both clinical practice and research.

In this regard, this qualification covers key areas such as the adaptation of special contact lenses, preoperative tests for cataract surgery, biostatistics applied to research in Optics and Optometry, clinical treatment of low vision, pediatric optometry, and visual therapy with an interdisciplinary approach.

Thanks to a faculty composed of active experts, the content is presented from a practical and applied perspective, allowing the development of essential skills to perform in demanding clinical environments. Additionally, this specialization not only optimizes professional performance but also broadens career opportunities in both the public and private health sectors, as well as in research.

Finally, the 100% online methodology provides the flexibility needed to access updated materials anytime, anywhere. This allows the study to adapt to the needs and pace of each professional without interfering with their daily responsibilities, ensuring specialization aligned with the current demands of the optical and optometric sector.

This **Master's Degree in Optical Technologies and Clinical Optometry** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical case studies presented by experts in Medicine
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where the self-assessment process can be carried out to improve learning
- Special emphasis on innovative methodologies in Medicine
- 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

You will delve into advanced diagnosis, specialized contact lenses, visual therapy, ocular rehabilitation, and new digital tools for visual assessment"

Explore the connection between the visual system and the brain, diving deeper into evaluation and rehabilitation techniques for patients with Neurological Disorders affecting vision"

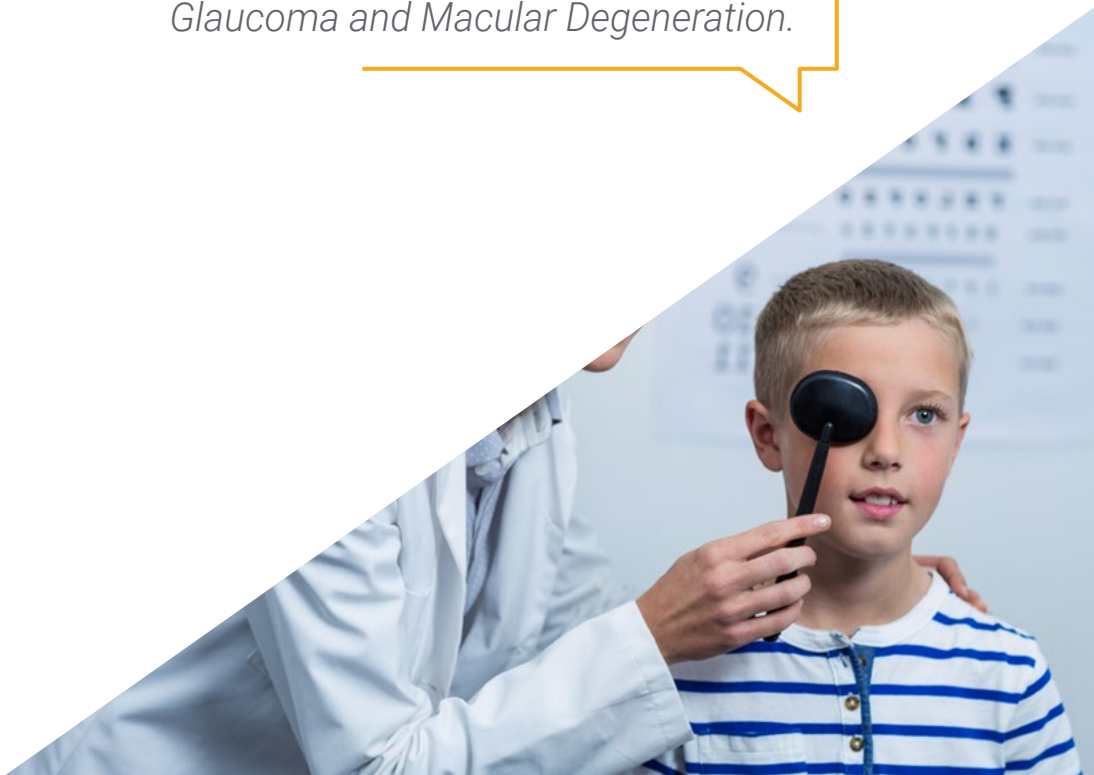
Acquire knowledge on the most innovative strategies for managing myopia, including specialized lenses, medications, and therapies.

Learn the key approaches for visual care in older adults, addressing everything from presbyopia to conditions such as Glaucoma and Macular Degeneration.

The teaching staff includes professionals belonging to the field of medicine, who contribute their work experience to this program, as well as renowned specialists from reference societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive learning experience designed to prepare for real-life situations.

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



02

Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs, available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it has a huge faculty of more than 6,000 professors of the highest international prestige.

Study at the largest online university in the world and ensure your professional success. The future begins at TECH"

The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistuba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.

The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.

Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.

The top-rated university by its students

Students have positioned TECH as the world's top-rated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.

03

Syllabus

This syllabus has been designed with a comprehensive approach, covering everything from advanced visual function assessment to the latest innovations in therapy and ocular rehabilitation. Furthermore, it combines theoretical knowledge with practical application based on the most recent scientific evidence. In this way, it ensures specialization aligned with the current demands of the sector, providing key tools to navigate clinical and research environments.

You will design personalized visual treatments for each patient, based on a precise evaluation of their ocular health"

Module 1. Optometric Procedures in Corneal, Intraocular and Cataract Refractive Surgery

1.1. Physical Basis of Refractive Change in the Corneal Plane
- 1.1.1. Solution of the Theoretical Eye
  - 1.1.1.1. Theoretical Emeropic Eye
  - 1.1.1.2. Theoretical Ametropic Eye
- 1.1.2. Change in Refraction Based on Changes in the Anterior Chamber Depth (ACD)
- 1.1.3. Change in Refraction as a Function of Change in Corneal Power

1.2. Corneal Refractive Surgery Techniques
- 1.2.1. Corneal Anatomy and Physiology
- 1.2.2. Optical Foundation
- 1.2.3. LASIK
- 1.2.4. PRK
- 1.2.5. LASEK
- 1.2.6. SMILE
- 1.2.7. PRESBILASIK
- 1.2.8. Restorations

1.3. Types of Laser
- 1.3.1. The Excimer Laser
- 1.3.2. Ablation Profiles
- 1.3.3. Optometrist in the Laser Refractive Surgery Operating Room
- 1.3.4. Surgery Scheduling and Safety Protocols
- 1.3.5. Creation of a Nomogram

1.4. Preoperative Testing for Corneal Refractive Surgery
- 1.4.1. Corneal Topography and Tomography
  - 1.4.1.1. Normal Corneal Topography
  - 1.4.1.2. Corneal Astigmatism vs. Refractive: Application of Javal's Rule
  - 1.4.1.3. Pathological Topographies
  - 1.4.1.4. Suspicious Topographies
- 1.4.2. Pachymetry
  - 1.4.2.1. Normal Values, Limits and Fine Pachymetries
  - 1.4.2.2. Limitations of Surgery Due to Pachymetry
- 1.4.3. Refraction
  - 1.4.3.1. Visual Acuity
  - 1.4.3.2. Subjective Refraction vs. Objective Refraction
  - 1.4.3.3. Cycloplegic Refraction
  - 1.4.3.4. Surgical Indication
- 1.4.4. Test Verification
  - 1.4.4.1. Preoperative Briefing

1.5. Postoperative Period and Complications in Corneal Refractive Surgery
- 1.5.1. Intra-Operative
  - 1.5.1.1. Correction of Programming Errors Using Dioptric Power Vectors 1.5.1.2. Incomplete Lenticule
  - 1.5.1.3. Complete Lenticule
  - 1.5.1.4. Loss of Epithelium
- 1.5.2. Post-Operatives
  - 1.5.2.1. Flap Dislocation
  - 1.5.2.2. Keratitis Sicca
  - 1.5.2.3. Infections
  - 1.5.2.4. Epithelial Growth at the Interphase
  - 1.5.2.5. Interphase Fluid Syndrome
  - 1.5.2.6. Cortico-Dependent Increase in Intraocular Pressure
  - 1.5.2.7. Toxic Anterior Segment Syndrome (TASS)
  - 1.5.2.8. Loss of Visual Quality

1.6. Physical Basis of Refractive Change Induced by Intraocular Lenses
- 1.6.1. Solution of the Theoretical Eye
  - 1.6.1.1. Phakic Lenses
  - 1.6.1.2. Pseudophakic Lenses in Clear Lens and Cataracts

1.7. Preoperative Testing for Intraocular Surgery
- 1.7.1. Phakic Lenses
- 1.7.2. Lens Surgery

1.8. Ocular Biometry and Intraocular Lens Calculation
- 1.8.1. Calculation Formula for Pseudophakic Intraocular Lenses
- 1.8.2. Calculation Formula for Phakic Intraocular Lenses
- 1.8.3. Ultrasonic and Optical Ocular Biometry
- 1.8.4. Intraocular Lens Power Calculation Formulas
- 1.8.5. Calculation in Eyes Undergoing Corneal Laser Refractive
  - 1.8.5.1. Haigis Method
  - 1.8.5.2. Shammas' Method
  - 1.8.5.3. Barrett True-K

1.9. Types of Intraocular Lens
- 1.9.1. Monofocal
- 1.9.2. Multifocal
- 1.9.3. O-rings
- 1.9.4. Accommodating

1.10. Postoperative Period and Complications in Intraocular Refractive Surgery
- 1.10.1. Intra-Operative
- 1.10.2. Early Preoperatives
- 1.10.3. Late Preoperatives

Module 2. Biostatistics for Optics and Optometry Research

2.1. Concept of Biostatistics and Epidemiology
- 2.1.1. Definition of Statistics and Biostatistics
- 2.1.2. Clinical Research
- 2.1.3. Evidence Levels
- 2.1.4. Evidence-Based Optics and Optometry

2.2. A Visual Acuity Measurement Experiment
- 2.2.1. The Teacher's Doubt
- 2.2.2. Random Error and Systematic Error
- 2.2.3. Answering a Question from Intuition or from Science
- 2.2.4. Point or Interval Estimation
- 2.2.5. The Confidence Interval: Concept and Utility
- 2.2.6. The Hypothesis Contrast: Concept and Utility

2.3. Descriptive Statistics
- 2.3.1. Types of Variables
- 2.3.2. Measures of Central Tendency
- 2.3.3. Measures of Dispersion
- 2.3.4. Graphical Representation of Research Project Results
- 2.3.5. Use of Software
- 2.3.6. Examples Applied to Optics and Optometry

2.4. Probability Distributions
- 2.4.1. Concept of Probability
- 2.4.2. Concept of Probability Distribution
- 2.4.3. Binomial Distribution
- 2.4.4. Normal Distribution
- 2.4.5. Concept of Normality and Homoscedasticity
  - 2.4.5.1. Typified Normal Distribution
- 2.4.6. Use of Software
- 2.4.7. Examples Applied to Optics and Optometry

2.5. Confidence Intervals
- 2.5.1. Point or Interval Estimation
- 2.5.2. The 95% Confidence Interval
- 2.5.3. Sample Size Estimation
- 2.5.4. Estimation of an Average
- 2.5.5. Estimation of an Proportion
- 2.5.6. Confidence Interval for a Difference in Means
- 2.5.7. Confidence Interval for a Difference in Proportions
- 2.5.8. Use of Software
- 2.5.9. Examples Applied to Optics and Optometry

2.6. Hypothesis Contrast
- 2.6.1. The P-Value
- 2.6.2. Critical Analysis of P-Value
- 2.6.3. Normality Test
  - 2.6.3.1. Kolmoronov-Smirnov
  - 2.6.3.2. Shapiro-Wilk's Test
- 2.6.4. Homoscedasticity Test
- 2.6.5. Use of Software
- 2.6.6. Examples Applied to Optics and Optometry

2.7. Test for the Comparison of Two Samples and Two Proportions
- 2.7.1. Parametric and Non-parametric Tests
- 2.7.2. Student's T-Test
- 2.7.3. Welch's Test
- 2.7.4. Wilcoxon's Test
- 2.7.5. Mann-Whitney's Test
- 2.7.6. Confidence Interval for the Difference of Means
- 2.7.7. Use of Software
- 2.7.8. Examples Applied to Optics and Optometry

2.8. Test for the Comparison of More than Two Samples or Proportions
- 2.8.1. ANOVA
- 2.8.2. Kruskal-Wallis
- 2.8.3. Post-Hoc Analysis
- 2.8.4. Use of Software
- 2.8.5. Examples Applied to Optics and Optometry

2.9. Regression Analysis
- 2.9.1. Simple Linear
- 2.9.2. Multiple Linear
- 2.9.3. Logistics
- 2.9.4. Use of Software
- 2.9.5. Examples Applied to Optics and Optometry

2.10. Comparison and Concordance Analysis Between Measurement Methods
- 2.10.1. Difference Between Concordance and Correlation
- 2.10.2. Bland-Altman's Graphic Methhod
- 2.10.3. Use of Software
- 2.10.4. Examples Applied to Optics and Optometry

Module 3. Vision Therapy in Clinical Practice

3.1. Medical History
- 3.1.1. Patient's Clinical History
- 3.1.2. Triad: Patient, Family and Optometrist

3.2. Assessment of Sensory and Accommodative Function
- 3.2.1. Sensory Function: Suppression and Stereopsis
- 3.2.2. Accommodative Dysfunctions
- 3.2.3. Necessary Material

3.3. Vergence and Oculomotor Function Assessment
- 3.3.1. Vergenital Dysfunctions
- 3.3.2. Oculomotor Dysfunctions
- 3.3.3. Necessary Material

3.4. Assessment of Visual Information Processing
- 3.4.1. Relationship Between Vision and Learning
- 3.4.2. Visuospatial Skills
- 3.4.3. Visual Analysis Skills
- 3.4.4. Visuomotor Integration Skills

3.5. Visual Therapy in Non-Strabismic Dysfunctions
- 3.5.1. Intervention in Accommodative Dysfunctions
- 3.5.2. Intervention in Binocular Dysfunctions
- 3.5.3. Intervention in Oculomotor Dysfunctions

3.6. Visual Therapy in Amblyopia and Strabismus
- 3.6.1. Types of Amblyopia Intervention
- 3.6.2. Interventions in Strabismus

3.7. Visual Therapy in Brain Damage with Visual Impairment
- 3.7.1. Classification of Brain Injuries
- 3.7.2. Visual Problems after Acquired Brain Injury
- 3.7.3. Eye Test
- 3.7.4. Prognosis and Intervention Plan

3.8. Vision Therapy in Sports and Other Professions
- 3.8.1. Sport Vision
- 3.8.2. Visual Skills According to Sports Discipline
- 3.8.3. Techniques and Procedures for the Selection and Training of Athletes
- 3.8.4. Vision Therapy in Other Professions

3.9. Vision Therapy in Comorbidity with Neurodevelopmental Disorders, Low Vision, People With Disabilities and Functional Diversity
- 3.9.1. Visual Examination in Neurodevelopmental Disorders
- 3.9.2. Intervention Protocols According to Current Evidence and Clinical Guidelines
- 3.9.3. Visual Therapy in Patients With Low Vision
- 3.9.4. Triad: Student, Family and School

3.10. Transdisciplinary Practice in Vision Therapy
- 3.10.1. Optometric Report Templates
- 3.10.2. Communication With the Family
- 3.10.3. Communication With the Patient
- 3.10.4. Communication With Healthcare Professionals
- 3.10.5. Communication With the school
- 3.10.6. Visual Intervention in the Classroom

Module 4. Metrics and Measures of Visual Quality

4.1. Principles of Aberrometry
- 4.1.1. Wavefront
  - 4.1.1.1. Perfect Wavefront
  - 4.1.1.2. Aberrated Wavefront
- 4.1.2. Perfect Optical System and Diffraction
  - 4.1.2.1. Diffraction Rings
- 4.1.3. Classification of Optical Aberrations
  - 4.1.3.1. High Order
  - 4.1.3.2. Low Order
- 4.1.4. Decomposition Into Zernike Polynomials
  - 4.1.4.1. Zernike Coefficients
  - 4.1.4.2. Normal Values

4.2. Clinically Significant Optical Aberrations
- 4.2.1. Spherical aberration
  - 4.2.1.1. Optical Foundation
  - 4.2.1.2. Positive Spherical Aberration
  - 4.2.1.3. Negative Spherical Aberration
  - 4.2.1.4. Normal Values
- 4.2.2. Coma
  - 4.2.2.1. Normal Values

4.3. Metrics for the Measurement of Visual Quality
- 4.3.1. Zernike Coefficients
- 4.3.2. Strehl's Ratio
- 4.3.3. CSF and MTF
- 4.3.4. RMS

4.4. External Ocular Aberrations
- 4.4.1. Corneal Geometry
- 4.4.2. Asphericity
  - 4.4.2.1. Asphericity Coefficients
  - 4.4.2.2. Aspherical and Spherical Aberration
- 4.4.3. Normal Distribution of Corneal Aberrations
  - 4.4.3.1. Normal Eye Asphericity
  - 4.4.3.2. Normal Eye Coma

4.5. Internal Ocular Aberrations
- 4.5.1. Lens
- 4.5.2. Methods

4.6. Aberrations in the Irregular Cornea
- 4.6.1. Keratoconus
- 4.6.2. Corneal Ectasia

4.7. Induced Aberrometric Changes on the Cornea
- 4.7.1. Orthokeratology
  - 4.7.1.1. Focused Treatment Case
  - 4.7.1.2. Off-Center Treatment Case

4.7.2. Aberrometric Changes Induced by Corneal Refractive Surgery
4.7.2.1. Myopia Surgery
4.7.2.2. Hyperopia Surgery
4.7.2.3. Decentered Ablations
4.8. Aberrometric Changes Induced by Crystalline Lens Surgery and Intraocular Lens Implantation
4.8.1. Intraocular Lens Aberrations
4.8.2. Asphericity and Aberrations in the Pseudophakic Eye
4.9. Instruments for Measuring Visual Quality
4.9.1. Surveyors
4.9.2. Hartman-Shack Aberrometry
4.10. Compensation of Ocular Aberrations
4.10.1. Contact Lenses
4.10.2. Corneal Topography Guided Laser Ablation

Module 5. Latest Advances in Amblyopia Management

5.1. General Information
5.1.1. Visual Acuity Development
5.1.2. Critical Period Vs. Plasticity
5.2. Definition
5.3. Types of Amblyopia
5.3.1. Refractive Amblyopia
5.3.2. Strabismic Amblyopia
5.3.3. Deprivation Amblyopia
5.3.4. Combination Amblyopia
5.4. Visual Alterations
5.4.1. Visual Acuity
5.4.2. Contrast Sensitivity
5.4.3. Accommodation System
5.4.4. Ocular Motility:
5.4.5. Spatial Localization (Spatial Uncertainty and Distortions)
5.4.6. Stacking Effect
5.4.7. Suppression and Stereopsis
5.4.8. Reading Performance
5.4.9. Visuomotor Tasks
5.4.10. Neurological Activity and Pupillary Reaction
5.4.11. Anatomical Changes
5.5. Visual Acuity
5.5.1. Contrast Sensitivity
5.5.2. Accommodation System
5.5.3. Ocular Motility:
5.5.4. Spatial Localization (Spatial Uncertainty and Distortions)
5.5.5. Stacking Effect
5.5.6. Suppression and Stereopsis
5.5.7. Reading Performance
5.5.8. Visuomotor Tasks
5.5.9. Neurological Activity and Pupillary Reaction
5.5.10. Anatomical Changes
5.6. Inclusion and Exclusion Evaluation and Diagnosis
5.6.1. Visual Acuity Evaluation
5.6.2. Refractive Status Evaluation
5.6.3. Binocular System Evaluation
5.6.4. Accommodating System Evaluation
5.6.5. Ocular Motility Assessment
5.6.6. Ocular Health Evaluation
5.7. Treatment with Refractive Status Correction Latest Studies
5.7.1. Optical Correction to Prescribe
5.7.2. Time Required for Effect
5.7.3. Effectiveness
5.8. Treatment with Occlusion and Pharmacological Penalty Latest Studies
5.8.1. Occlusion
5.8.1.1. Types of Occlusion
5.8.1.2. Occlusion Time
5.8.1.3. Effectiveness

5.8.2. Pharmacological Penalty
5.8.2.1. Atropine Dosage
5.8.2.2. Effectiveness
5.8.2.3. Comparison of Treatment with Occlusion vs Pharmacological Penalty
5.8.2.4. Treatment Compliance
5.8.2.5. Treatment Regression
5.8.3. Vision Therapy Treatment Latest Studies
5.8.3.1. Advantages and Disadvantages
5.8.3.2. Monocular Activities
5.8.3.3. Near and Far Vision Activities
5.8.3.4. Antisuppressive Techniques and Binocular Therapy
5.8.4. Other Current and Future Treatments
5.8.4.1. Pharmacological Treatment
5.8.4.2. Acupuncture
5.8.4.3. Other Future Treatments
5.8.5. Comprehensive Management of the Amblyopia Patient
5.8.5.1. Action Protocol
5.8.5.2. Follow-Up Evaluation
5.8.5.3. Check-up Calendar

Module 6. Low Vision and Geriatric Optometry

6.1. Low Vision, Definition and Current Classifications
6.1.1. Definition, New Terms and Concepts
6.1.2. What Is a Low Vision Test?
6.1.3. Functional Vision
6.1.4. New Concept of Fragile Vision
6.1.5. Different Classifications, a Single Protocol?
6.1.6. Statistics Related to Visual Impairment of all Types
6.1.7. Concepts and Terminology
6.1.8. Low Vision Statistics
6.1.9. Low Vision Decalogue

6.2. Ocular Pathologies and Other Conditions Causing Low Vision
6.2.1. Degenerative and Non-Degenerative Pathologies
6.2.2. Classification of These Pathologies According to Their Condition
6.2.3. Physiopathogenesis
6.2.4. Risk Factors
6.2.5. Current Evolution of These Pathologies, Epidemiology
6.2.6. Adjustment Process to Visual Impairment
6.2.7. Low Vision in Children and Infants
6.3. Anamnesis in Low Vision and Multidisciplinary Intervention
6.3.1. Preliminary Considerations
6.3.2. Guidelines for Interaction With People With Low Vision
6.3.3. Role of the Patient's Family And/or Companions
6.3.4. How to Communicate the Information?
6.3.5. Accompanying the Person With Low Vision
6.3.6. Patient Selection, Success or Failure, Outcome Prognoses
6.4. Clinical Intervention Protocol for People With Low Vision or Moderate to Severe Visual Loss
6.4.1. WHO Diagram
6.4.2. Individuals Eligible for Low Vision Adaptive Aids and Visual Rehabilitation
6.4.3. Improved Intervention for People with Low Vision, Fragile Vision, or Neurological Injuries
6.4.4. Tips for Professionals to Help Patients and Family Members
6.4.5. Interdisciplinary Referral Protocol
6.4.6. Interaction With People With Visual Impairment
6.4.7. Same Conditions, Different Solutions
6.5. Low Vision Consultation Material
6.5.1. Attitude and Aptitude
6.5.2. Equipment in Low Vision and Geriatrics
6.5.3. Tests Required for Evaluation
6.5.4. Which Commercial Products Are Useful?
6.5.5. Organizing a Low Vision Consultation
6.5.6. Patient and Family Support Reports

6.6. Low Vision and Geriatric Vision Patient Examination
- 6.6.1. Core Values for the Care of Low Vision and Geriatric Patients
- 6.6.2. Dunning-Kruger Syndrome in the Professional
- 6.6.3. Refraction of the Patient With Low Vision
- 6.6.4. Distant Vision
- 6.6.5. Near Vision
- 6.6.6. What Does the Patient Want?

6.7. Visual and Non-visual Aids in Visual Limitation, Low Vision and Geriatrics
- 6.7.1. Optical Aids, Classification
- 6.7.2. Non-Optical Aids Environment in Patients With Low Vision
- 6.7.3. Electronic Aids, Classification and Utilities
- 6.7.4. Latest Technologies and Artificial Intelligence for Low Vision
- 6.7.5. How to Create Positive Circumstances

6.8. Light, Its Importance and Basic Concepts Needed for Low Vision
- 6.8.1. Notions of Light Spectrum
- 6.8.2. Basic Concepts
- 6.8.3. Adaptation to Light and Darkness in Low Vision
- 6.8.4. Glare, a Fundamental Factor in Low Vision and Geriatrics
- 6.8.5. Variable of Objects Influencing Vision
- 6.8.6. Selective Filters: Not Everything Goes

6.9. Training in Low Vision Patient Support, Accompaniment and Follow Up
- 6.9.1. Optimal Choice in Patient Aids
- 6.9.2. Clear and Documented Information About Prescribed Aids
- 6.9.3. Guidelines for Training Aids
- 6.9.4. Specific Training in Distance, Medium and Near Vision
- 6.9.5. Expectations and Perceptions
- 6.9.6. Multidisciplinary Follow-up and Intervention, Training
- 6.9.7. Concepts of TR, and Patient Orientation

6.10. Geriatric Optometry Aging and Vision Problems
- 6.10.1. Pillars of Geriatrics
- 6.10.2. Aging and Visual Impairment
- 6.10.3. Significant Physical Changes
- 6.10.4. Assessment of Personal Autonomy
- 6.10.5. Most Relevant Neuropsychological Characteristics
- 6.10.6. Optometric Examination in Geriatric Patients
- 6.10.7. Appropriate Corrections in Geriatric Patients
- 6.10.8. Welfare Support

Module 7. Ophthalmic Pharmacology

7.1. General Principles of Pharmacology
- 7.1.1. Drug Concept
- 7.1.2. Drug Action Mechanisms

7.2. Pharmacogenetics
- 7.2.1. Routes of Drug Administration
- 7.2.2. LADME Process: Release, Absorption, Distribution, Metabolism and Excretion of Drugs
- 7.2.3. Adverse Reactions of Drugs Administered by General and Topical Ocular Administration

7.3. Anesthetic Drugs in Ophthalmology
- 7.3.1. Pharmacological Effects of Anesthetics Applied at the Ocular Level
- 7.3.2. Use of Anesthetics in Ophthalmology
- 7.3.3. Adverse Reactions

7.4. Drugs That Modify the Diameter of the Pupil
- 7.4.1. Pharmacological Effects of Mydriatics, Miotics and Cycloplegics Applied at the Ocular Level
- 7.4.2. Use of Drugs in Ophthalmology
- 7.4.3. Adverse Reactions

7.5. Ocular Hypotensive Drugs
- 7.5.1. Glaucoma Pathology
- 7.5.2. Drug Action Mechanisms
- 7.5.3. Adverse Reactions

7.6. Anti-infective Drugs
- 7.6.1. Antibiotic Drugs
- 7.6.2. Antiviral Drugs
- 7.6.3. Antifungal Drugs

7.7. Anti-inflammatory Drugs and Antihistamines
- 7.7.1. AINES Drugs
- 7.7.2. Steroid Anti-inflammatory Drugs
- 7.7.3. Antihistamine Drugs

7.8. Antiangiogenic Drugs
- 7.8.1. Pathology of AMD
- 7.8.2. Mechanism of Action of Antiangiogenic Drugs

7.9. Botulinum Toxin
- 7.9.1. Botulinum Toxin Mechanism of Action
- 7.9.2. Use of Botulinum Toxin in Strabismus

7.10. Drugs Used in the Diagnosis of Ocular Surface Disorders. Artificial Tears and Ocular Moisturizers
- 7.10.1. Ocular Dyes
- 7.10.2. Artificial Tears and Ocular Moisturizers

Module 8. Latest Advances in Optical and Optometric Instrumentation

8.1. Characterization of the Tear
- 8.1.1. Characterization of the Meibomian Glands: Indications for Intense Pulsed Light (IPL) Treatment
- 8.1.2. Qualitative and Quantitative Techniques
- 8.1.3. Assessment of Tear Patterns

8.2. Characterization of the Cornea
- 8.2.1. Corneal Topography: Placido Systems and Scheimpflug Photography
- 8.2.2. Optical Coherence Tomography (OCT) of the Anterior Segment
- 8.2.3. Endothelial Microscopy
- 8.2.4. Corneal Biomechanics

8.3. Characterization of the Sclera: Scleral Topography

8.4. Evaluation of the Anterior Chamber and Iridocorneal Angle
- 8.4.1. Classic Techniques
- 8.4.2. Anterior Segment OCT
- 8.4.3. Gonioscopy
- 8.4.4. Ultrasonic Biomicroscopy (UBM)

8.5. Tonometry
- 8.5.1. Techniques
- 8.5.2. Instruments

8.6. Evaluation of the Crystalline Lens
- 8.6.1. Techniques
- 8.6.2. Instruments

8.7. Evaluation of the Optic Nerve, Retina (Vascular Tree, Parenchyma and Macular Area) and Choroid
- 8.7.1. Ophthalmoscopy
- 8.7.2. Posterior Segment OCT
- 8.7.3. Retinography
- 8.7.4. Other Techniques

8.8. Visual Field Evaluation
- 8.8.1. Computerized Campimetry

8.9. Systems for Assessing Visual Quality and Light Scattering

8.10. Ocular Biometry
- 8.10.1. Uses in Optometry
- 8.10.2. Ultrasound biometry
- 8.10.3. Optical biometrics

Module 9. Geriatric Optometry

9.1. Introduction
- 9.1.1. Optometric Goals in the Pediatric Population
- 9.1.2. Developmental Scale of the Child in the First Years of Life

9.2. Development of the Visual System
- 9.2.1. The Visual Pathway: Retina-Lateral Geniculate Body-Visual Cortex
- 9.2.2. Other Routes, Structures and Conexions

9.3. Epidemiology and Clinical Guidelines
- 9.3.1. Preliminary Considerations
- 9.3.2. Prevalence of Refractive Errors, Amblyopia, and Strabismus
- 9.3.3. Other Prevalences

9.4. Cabinet Design and Optometrist's Aptitude
- 9.4.1. The Optometrist and the Child
- 9.4.2. Pediatric Practice Design
- 9.4.3. Inclusion From Diversity

9.5. Medical History in the Pediatric Population
- 9.5.1. Anamnesis From 0 to 3 Years Old
- 9.5.2. Anamnesis From 3 to 7 Years Old
- 9.5.3. Anamnesis From 7 to 18 Years Old

9.6. Visual Acuity, Refractive Status and Contrast Sensitivity in the Pediatric Population
- 9.6.1. Development of Visual Acuity in Pediatric Population
- 9.6.2. Refraction and Its Evolution in the Pediatric Population
- 9.6.3. Contrast Sensitivity in Pediatric Population

9.7. Accommodation and Oculomotor Function in the Pediatric Population
- 9.7.1. Accommodation in Pediatric Population
- 9.7.2. Function in Pediatric Population

9.8. Binocular Function and Perceptual Assessment
- 9.8.1. Binocular Function
- 9.8.2. Perceptual Assessment and Other Skills

9.9. Detection of Pathological Alterations in the Pediatric Population
- 9.9.1. Detection of Alterations in the Anterior Pole
- 9.9.2. Detection of Posterior Pole Alterations

9.10. Transdisciplinary Involvement of the Optometrist in Vision Therapy
- 9.10.1. Communication With Other Health Care Providers
- 9.10.2. Communication With Educational Professionals

Module 10. Advanced Contactology

10.1. Cornea and Ocular Surface
- 10.1.1. Cornea
- 10.1.2. Tears
- 10.1.3. Lens-To-Eye Relationship

10.2. Corneal Topography
- 10.2.1. Introduction and Principles
- 10.2.2. Placid Disk-Based and Elevation-Based Topographies
- 10.2.3. Types of Maps and Their Application

10.3. Biomicroscopy
- 10.3.1. Introduction
- 10.3.2. Techniques and Uses
- 10.3.3. Photography and Image Capture

10.4. Fitting of Contact Lenses in Regular Cornea
- 10.4.1. When Is a Cornea Regular?
- 10.4.2. RGP Lenses
  - 10.4.2.1. Materials
  - 10.4.2.2. Designs
- 10.4.3. Custom Fitting of Soft Lenses
  - 10.4.3.1. Introduction
  - 10.4.3.2. Concept of Sagitta
  - 10.4.3.3. Importance of Sagittal Height in Soft Lenses

10.5. Fitting of Contact Lenses in Irregular Cornea
- 10.5.1. Definition of Irregular Cornea
- 10.5.2. Corneal Lenses
- 10.5.3. Scleral Lenses
- 10.5.4. Other Possible Solutions

10.6. Principles of Orthokeratology
- 10.6.1. History
- 10.6.2. Treatment Mecanisms
- 10.6.3. Lens Design
- 10.6.4. Evaluation of the Fluorogram
- 10.6.5. Topography Evaluation

10.7. Advanced Orthokeratology
- 10.7.1. Myopia
- 10.7.2. Astigmatism
- 10.7.3. Hyperopia

10.8. Myopia Control with Contact Lenses
- 10.8.1. Introduction to Myopia
- 10.8.2. Orthokeratology
- 10.8.3. Multifocal Soft Lenses
- 10.8.4. Combined Treatments With Atropine

10.9. Fitting of Multifocal Lenses for Presbyopia
- 10.9.1. Blur Curve and Power Profiles
- 10.9.2. RGP Lenses
- 10.9.3. Soft Lenses

10.10. Complications in Contactology
- 10.10.1. Complications Arising From Adaptation
- 10.10.2. Complications Unrelated to the Adaptation

You will manage the latest optical technologies for the treatment of ocular diseases, such as retinal imaging systems and visual acuity evaluation equipment"

04

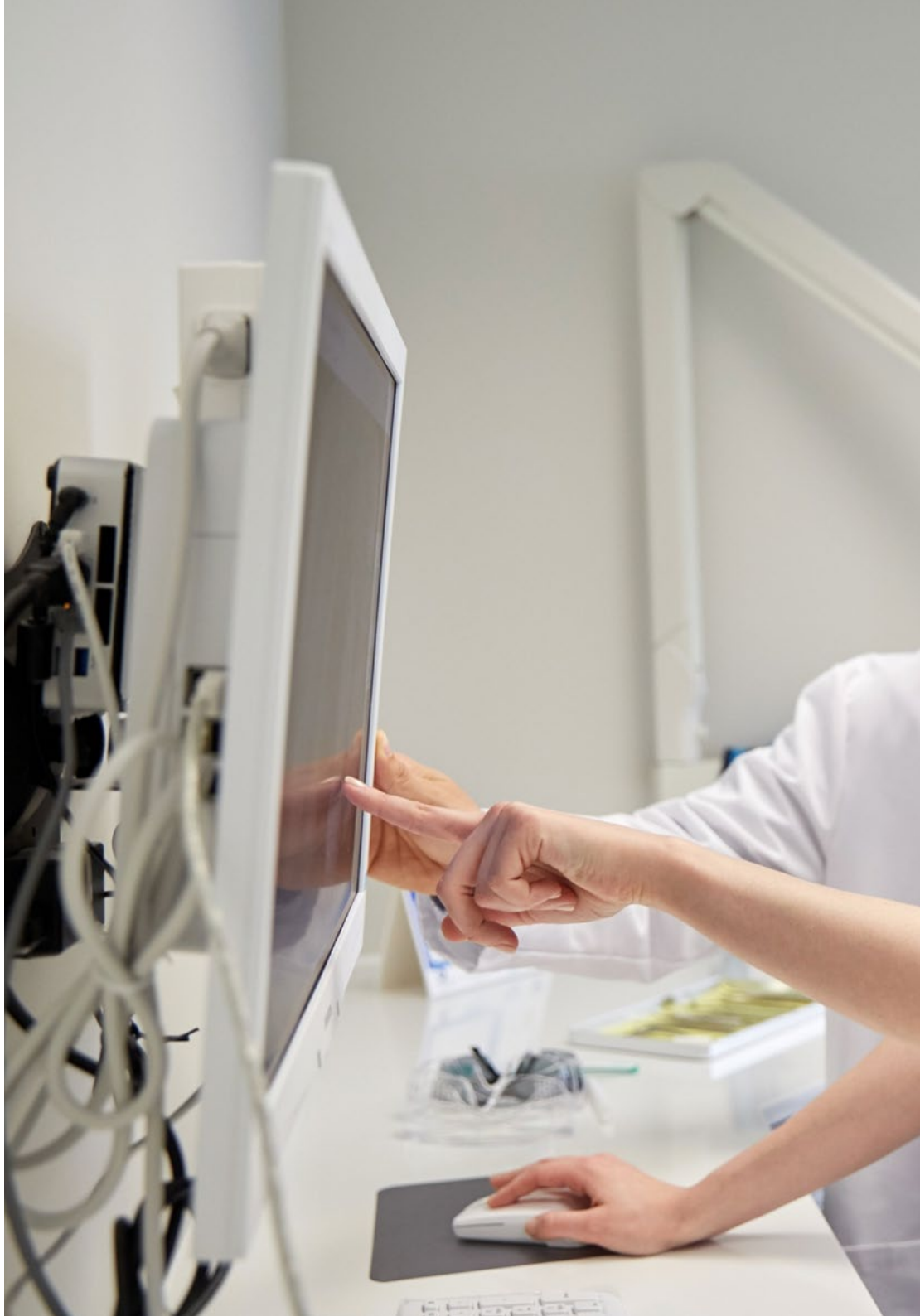
Teaching Objectives

This program has been designed to provide advanced and up-to-date knowledge in Optical Technologies and Clinical Optometry, allowing a deep understanding of the processes of visual health evaluation, diagnosis, and treatment. Through a comprehensive approach, it covers everything from traditional techniques to the latest innovations in imaging, visual therapy, and ocular rehabilitation. Additionally, it fosters the development of analytical and problem-solving skills, essential for decision-making in clinical and research settings.

You will acquire skills in the adaptation of contact lenses and ophthalmic lenses to correct Refractive Errors"

General Objectives

- Gain an in-depth knowledge about the principles and applications of advanced optical technologies, understanding their role in the diagnosis and treatment of various visual disorders in the clinical field
- Develop specialized skills for the clinical evaluation and comprehensive management of patients with complex optometric conditions, applying updated protocols based on scientific evidence
- Apply advanced techniques in contact lens adaptation to correct corneal irregularities, improve visual quality, and treat specific conditions such as keratoconus or presbyopia
- Understand the fundamentals of neuro-optometry and its relationship with visual perception and processing, incorporating rehabilitation strategies for patients with neurological dysfunctions
- Explore innovative approaches for myopia control and the management of refractive pathologies, integrating therapeutic options such as orthokeratology, pharmacology, and modifications to the visual environment
- Integrate specialized knowledge in geriatric optometry to provide optimal visual care for older adults, addressing conditions ranging from presbyopia to diseases such as glaucoma and macular degeneration
- Evaluate the role of optometry in refractive surgery, understanding the most commonly used procedures, pre and post-operative interventions, and the appropriate selection of candidates for these treatments



Specific Objectives

Module 1. Optometric Procedures in Corneal, Intraocular and Cataract Refractive Surgery

- Analyze the different surgical procedures for the correction of refractive errors, including LASIK, PRK, and intraocular lenses
- Evaluate the preoperative optometric tests required to determine the patient's suitability for each type of surgery

Module 2. Biostatistics for Optics and Optometry Research

- Apply statistical tools for data analysis in scientific studies related to optics and optometry
- Interpret results from clinical research using appropriate statistical models

Module 3. Vision Therapy in Clinical Practice

- Understand the fundamentals of visual therapy and its application in binocular and accommodation disorders
- Design personalized treatment plans based on the optometric evaluation of each patient

Module 4. Metrics and Measures of Visual Quality

- Analyze the optometric parameters that determine visual quality and their relationship with patient perception
- Apply advanced techniques for measuring contrast sensitivity, optical aberrations, and light scattering

Module 5. Latest Advances in Amblyopia Management

- Explore new therapeutic strategies for the recovery of visual function in patients with amblyopia
- Design personalized intervention protocols based on the patient's age and the type of amblyopia diagnosed

Module 6. Low Vision and Geriatric Optometry

- Identify the main ocular pathologies associated with aging and their impact on visual function
- Apply advanced visual rehabilitation techniques to improve the autonomy of patients with low vision

Module 7. Ophthalmic Pharmacology

- Analyze the different groups of ophthalmic drugs and their mechanisms of action in the treatment of ocular pathologies
- Evaluate the side effects and contraindications of medications used in optometric practice

Module 8. Latest Advances in Optical and Optometric Instrumentation

- Explore new technologies applied to the evaluation of visual function and the diagnosis of ocular pathologies
- Analyze the functioning and clinical applications of advanced equipment such as OCT, corneal topography, and aberrometry

Module 9. Geriatric Optometry

- Identify the main visual problems in childhood and their impact on academic and motor development
- Apply specific optometric tests for evaluating binocular and accommodative vision in children

Module 10. Advanced Contactology

- Explore the latest innovations in contact lens materials and designs for various visual needs
- Analyze adaptation protocols for scleral, hybrid, and orthokeratology lenses for complex clinical cases

You will design strategies for prevention and treatment of Eye Fatigue Syndrome"

05

Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.

TECH will prepare you to face new challenges in uncertain environments and achieve success in your career"

The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.
The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

"At TECH you will NOT have live classes (which you might not be able to attend)"

The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want"

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.

Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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.

A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

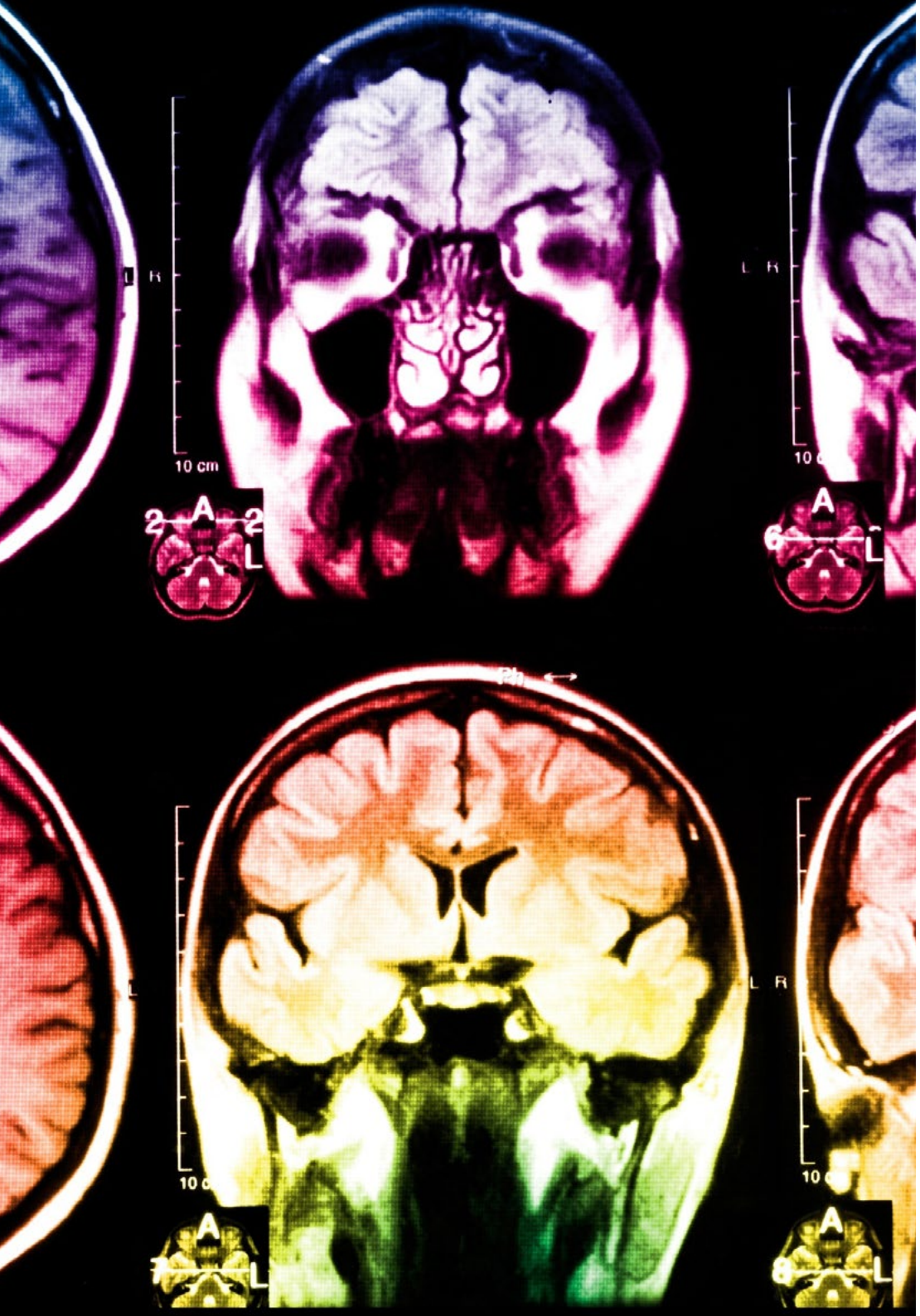
In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.

The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

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

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



The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.

As such, the best educational materials, thoroughly prepared, will be available in this program:

Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.

Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.

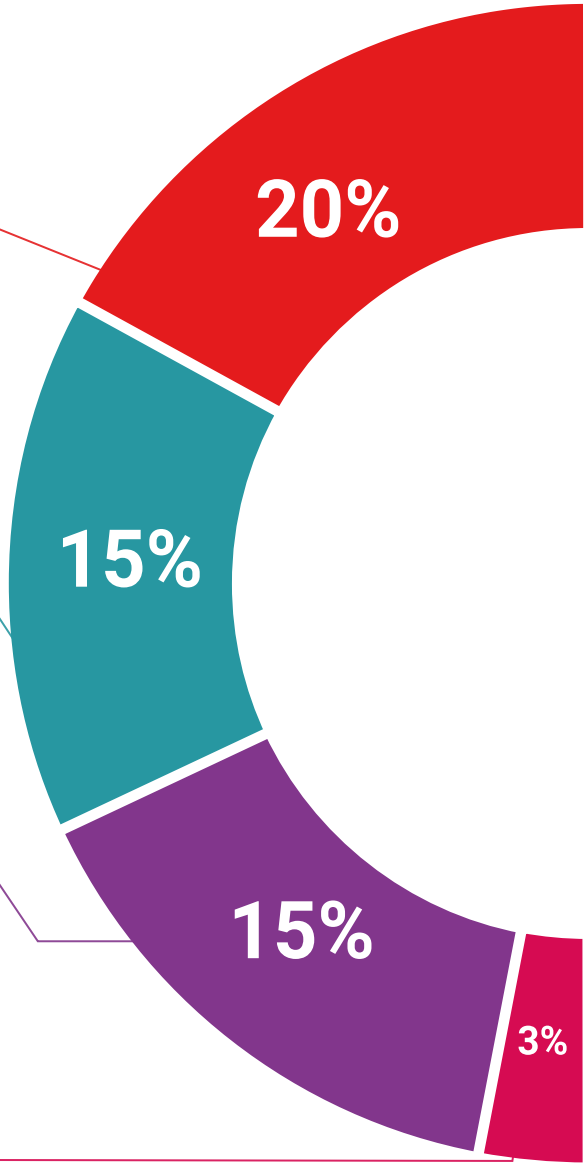
Interactive Summaries

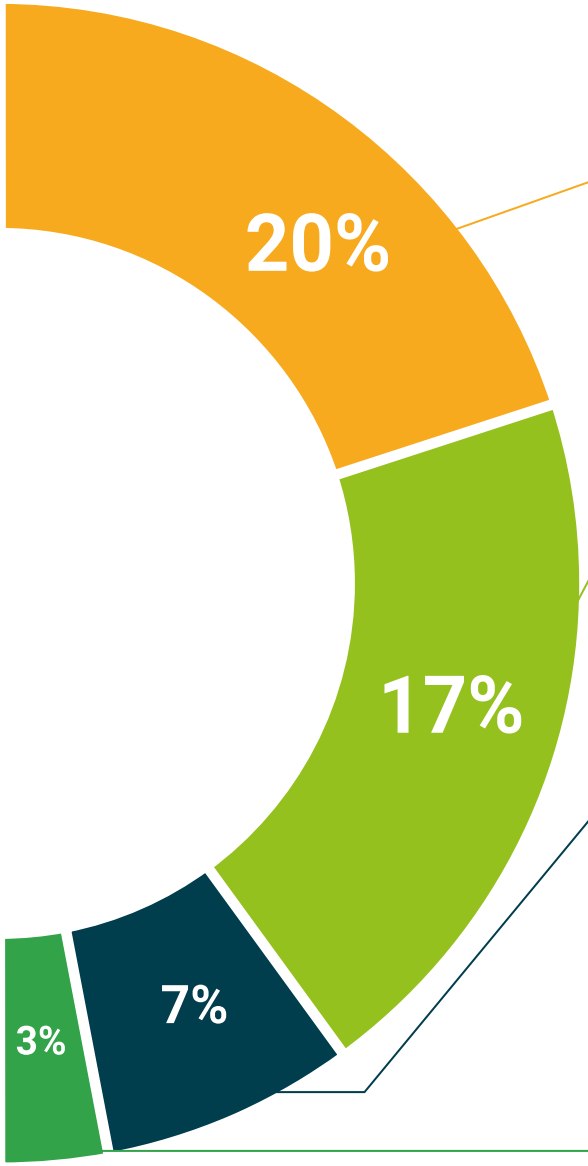
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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

Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





Case Studies

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.

Testing & Retesting

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.

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 for future difficult decisions.

Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.

06

Teaching Staff

This academic program is supported by a faculty team composed of professionals with extensive experience in Clinical Optometry, who have worked in hospitals, specialized clinics, and leading institutions. Their expertise in managing complex cases and applying advanced technologies allows for a practical and up-to-date approach. Additionally, the study of real cases and exposure to challenging clinical situations ensure a thorough update of knowledge, aligned with the current demands of professional practice.

You will have access to a university program designed by renowned specialists in the use of Optical Technologies and Clinical Optometry"

Management

Dr. Calvache Anaya, José Antonio

- Optometrist at Clínica Baviera in Palma de Mallorca
- Professor in courses on Biostatistics, Keratometry and Corneal Topography and Ocular Biometry
- Degree in Optics and Optometry from the University of Alicante
- Doctor in Optometry and Vision Sciences from the University of Valencia
- Master's Degree in Advanced Optometry and Vision Sciences from the University of Valencia
- University Expert in Statistics Applied to Health Sciences by the UNED
- Diploma in Optics and Optometry from the University of Alicante

Professors

Dr. Fernádez-Baca, Macarena

- Specialist in Pediatric Optometry, Vision Therapy and Neuro-Optometry
- Optometrist in private practice
- Vice-Chair of the American Academy of Optometry Admissions Committee
- Assistant Director and Coordinator of the Boston Optometric Center
- Clinical Practitioner at The New England College of Optometry
- Assistant Professor at the University of Houston
- Doctor of Optometry from the University of Houston College of Optometry, Texas
- Diploma in Optics from the Complutense University of Madrid

Dr. Pérez Cambrodí, Rafael

- Technical Director at Cambrodi Ópticos
- Specialist in Low Vision Project at ONCE (Spanish National Organisation for the Blind)
- Specialist in the Optometry and Refractive Surgery Unit of OFTALMAR
- Optometrist at the Medimar International Hospital
- Director of the Optometry Unit of Hospital Internacional Medimar
- Doctor in Optometry and Vision Sciences from the University of Valencia
- Diploma in Optometry from the University of Alicante
- Master's Degree in Optometry and Intraocular Lenses from the European University of Madrid

Dr. De Lamo Requena, Mercedes

- Technical Director of IVOP Institut Valencià d`Optometría
- Optician-Optometrist at Centro CIOC and Visió-Teràpia E. Santolaria
- Optician-Optometrist at Multiópticas Pérez Setien, Óptica Mercedes and Vissum Oftalmología
- Graduate in Optics and Optometry from the University of Valencia
- Graduate in multiple specialties from the Pacific University College of Optometry

Dr. Escutia Puig, María Oreto

- Optometrist at the University Hospital of La Ribera
- Technical Director at Óptica Parc, Alzira
- Technical Director at Óptica Lucena
- Graduate in Pharmacy from the University of Valencia
- Diploma in Optics and Optometry from the University of Valencia
- Master's Degree in Advanced Optometry and Vision Sciences from the University of Valencia
- Master's Degree in Advanced Visual Health Care from the University of Valencia

Dr. Just Martínez, María José

- Community Pharmacist at Aquamarina Pharmacy
- Technical Director Private Optician in Valencia
- PhD in Pharmacy from the University of Valencia
- Diploma in Optics and Optometry from the University of Valencia
- University expert in pharmacotherapeutic monitoring from the University of Granada
- Diploma in Health

Dr. Roca Fernández Villar, Ricardo

- Optometrist in CASAÑA ROCA SL
- Specialist in Low Vision in the Ophthalmology Service of Quirón Málaga
- Manager and Founder of Óptica
- Graduate in Technological and Instrumental Optics from the Complutense University of Madrid
- Diploma in Optics from the Complutense University of Madrid

Dr. Berbegal García, Vicente

- Specialist in Optics and Optometry
- Contact lens specialist in the team of optometrists at Teixido Óptiques de Reus
- Graduate in Optics and Optometry from the University of Alicante
- Master's Degree in Optometry and Vision Therapy offered by the International Optometry Center
- Member of: International Academy of Orthokeratology and Myopia Control (FIAMOC)

Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"

07

Certificate

The Master's Degree in Optical Technologies and Clinical Optometry guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University..

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

This private qualification will allow you to obtain a**Master's Degree in Optical Technologies and Clinical Optometry** endorsed by **TECH Global University**, the world's largest online university.

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

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

Title: **Master's Degree in Optical Technologies and Clinical Optometry**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**


tech global university

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

Master's Degree in Optical Technologies and Clinical Optometry

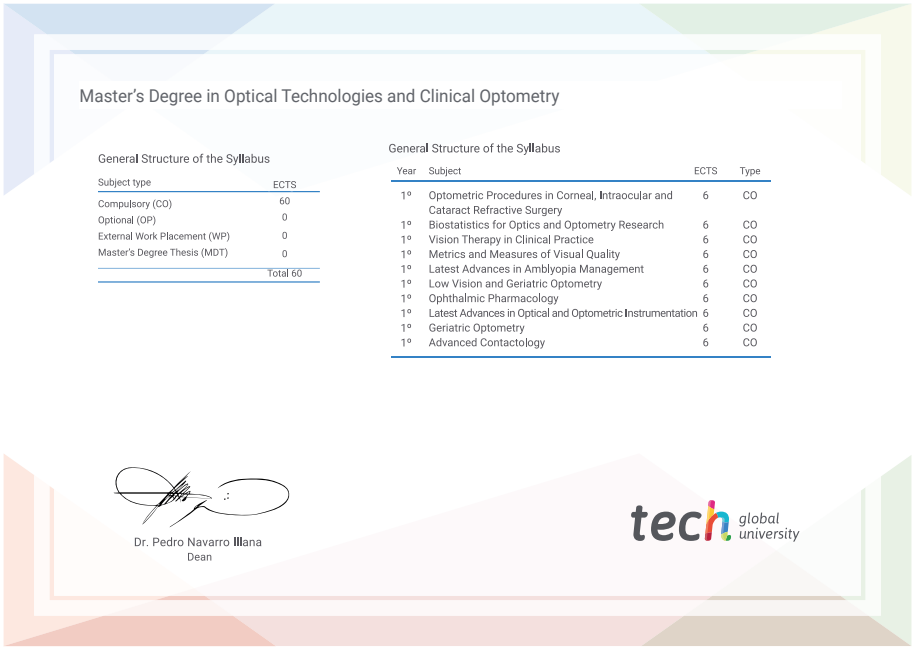
This is a private qualification of 1,800 hours of duration equivalent to 60 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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
Dean

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


Master's Degree in Optical Technologies and Clinical Optometry

General Structure of the Syllabus

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

General Structure of the Syllabus

Year	Subject	ECTS	Type
1º	Optometric Procedures in Corneal, Intraocular and Cataract Refractive Surgery	6	CO
1º	Biostatistics for Optics and Optometry Research	6	CO
1º	Vision Therapy in Clinical Practice	6	CO
1º	Metrics and Measures of Visual Quality	6	CO
1º	Latest Advances in Amblyopia Management	6	CO
1º	Low Vision and Geriatric Optometry	6	CO
1º	Ophthalmic Pharmacology	6	CO
1º	Latest Advances in Optical and Optometric Instrumentation	6	CO
1º	Geriatric Optometry	6	CO
1º	Advanced Contactology	6	CO

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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.

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Master's Degree
Optical Technologies and Clinical Optometry

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Global University**
- Credits: **60 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Master's Degree

Optical Technologies and Clinical Optometry

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