@font-face{ font-family:'Glyphicons Halflings'; src:url("/content/assets/fonts/bootstrap/glyphicons-halflings-regular.eot"); src: url("/content/assets/fonts/bootstrap/glyphicons-halflings-regular.eot?#iefix") format("embedded-opentype"), url("/content/assets/fonts/bootstrap/glyphicons-halflings-regular.woff2") format("woff2"), url("/content/assets/fonts/bootstrap/glyphicons-halflings-regular.woff") format("woff"), url("/content/assets/fonts/bootstrap/glyphicons-halflings-regular.ttf") format("truetype"), url("/content/assets/fonts/bootstrap/glyphicons-halflings-regular.svg#glyphicons_halflingsregular") format("svg") }

UNIVERSITAT POLITÈCNICA DE CATALUNYA BARCELONATECH

Master's degree in Optometry and Vision Sciences

TERRASSA SCHOOL OF OPTICS AND OPTOMETRY (FOOT)

The **Master's degree in Optometry and Vision Sciences** (**master's degree website**) allows you to specialise professionally in areas of optics and optometry such as the cornea and contact lenses, paediatric optometry, geriatric optometry, visual therapies, low vision and optometric aspects of refractive surgery. External work placement at public and private health centres offers added value to those who wish to practise as opticians and optometrists and qualifies them to carry out research in vision sciences and applied clinical research. It enables students to improve their applied clinical skills and prepares them for research in the field of vision sciences.

GENERAL DETAILS

Duration and start date

1 academic year, 60 ECTS credits. Starting September-February

Timetable and delivery

Mornings and afternoons (2-3 days per week). Face-to-face

Fees and grants

Approximate fees for the master's degree, **excluding other costs** (does not include non-teaching academic fees and issuing of the degree certificate):
€1,162 (€2,700 for non-EU residents).
More information about fees and payment options
More information about grants and loans

Language of instruction

Spanish

Information on language use in the classroom and students' language rights.

Location

This master's degree is organised by the Universitat Politècnica de Catalunya. It is taught at the Terrassa School of Optics and Optometry in collaboration with public and private health centres where students carry out work placement.

Official degree

Recorded in the Ministry of Science, Innovation and Universities

ADMISSION

General requirements

Academic requirements for admission to master's degrees

Specific requirements

For non-native speakers of Spanish, must provide proof of having attained Level B2

Admission criteria

The admission criteria are as follows:

- The weighting of the candidate's academic record (60%)
- The candidate's professional experience and the suitability of the candidate's prior learning (30%)
- Languages skills (10%)

If you wish to know whether you meet the conditions for admission, submit scanned copies of the following documents on the pre-enrolment website:

1. A brief academic and professional CV.
2. Your academic qualification. If you do not yet have this document in your possession you may scan and submit the provisional degree certificate. In any event, you will have to present the original degree certificate or provisional degree certificate when you enrol.
3. The official transcript(*) issued by your university, which must feature the average weighted mark of the student record on a scale from 1 to 10. If you have not yet completed your degree when you pre-enrol, the transcript must state the subjects you have taken and passed up to that moment. If no supporting documents are provided, a standard mark of 5 will be assigned to the average weighted mark.

(*) If you took your degree at the Terrassa School of Optics and Optometry, all you need to do is state this fact and you will not be required to submit your transcript.

Places

30

Pre-enrolment

Pre-enrolment for this master's degree is currently **closed**. Use the "Request information" form to ask for information on **upcoming pre-enrolment periods**.

How to pre-enrol

Enrolment

How to enrol

Legalisation of foreign documents

All documents issued in non-EU countries must be legalised and bear the corresponding apostille.

CURRICULUM

Subjects	ECTS credits	Type
FIRST SEMESTER		
Advanced Contact Lens Practice	3.5	Compulsory
Advanced Vision Therapy Techniques	3.5	Compulsory
Diagnostic Techniques In Ocular Health	3.5	Compulsory
Low Vision and Visual Rehabilitation Clinics	3.5	Compulsory
Ocular Pathology and Prescribing	3.5	Compulsory
Paediatric Optometry	3.5	Compulsory
Research Methods	3.5	Compulsory
SECOND SEMESTER		
Advanced Contact Lens Clinic	3.5	Compulsory
Advanced Vision Therapy Techniques Clinic	3.5	Compulsory
Diagnostic Techniques in Ocular Health Clinics	3.5	Compulsory
External Academic Internship	6	Compulsory
Low Vision and Visual Rehabilitation Clinics	3.5	Compulsory

Subjects	ECTS credits	Type
Paediatric Optometry Clinics	3.5	Compulsory
Master's Thesis	12	Project

PROFESSIONAL OPPORTUNITIES

Professional opportunities

This master's degree extends and reinforces the professional competencies of opticians and optometrists in the areas of specialisation.

The career opportunities of the master's degree in Optics and Optometry may include the following:

- Technical supervision of opticians' shops and work as an optician/optometrist in public or private healthcare centres (general practice, ophthalmology services, ophthalmology surgeries or clinics, and optometric offices).
- Research in public and private centres and institutions.

Competencies

Generic competencies

Generic competencies are the skills that graduates acquire regardless of the specific course or field of study. The generic competencies established by the UPC are capacity for innovation and entrepreneurship, sustainability and social commitment, teamwork, proper use of information resources, knowledge of a foreign language (preferably English) and gender perspective.

Generic competencies

On completion of the master's degree, graduates will have acquired the following generic competencies:

- They will have learnt the foundations and optical techniques on which advanced assessment of visual function rests and recent advances in the instruments used in the field of vision. They will have acquired specialist knowledge of the operational principles of devices and developments in engineering and the scope of their application.
- They will have assimilated and learnt to follow the necessary vision research methods in clinical and laboratory settings.
- They will have acquired advanced knowledge and specific criteria for clinical intervention for assessment, differential diagnosis and treatment of visual and eye conditions in the optometric field. This enables them to specialise in clinical areas of visual care.
- They will be familiar with the characteristics of the components and determinants involved in public health, particularly primary and specialised healthcare.
- They will be able to use their knowledge of visual conditions stemming from systemic and neurological diseases, ocular adnexa disorders, refractive and ocular surgical procedures and their indications and contraindications, and patient monitoring procedures.
- They will be capable of implementing their knowledge of pharmacovigilance and criteria for clinical intervention in clinical healthcare practice.
- They will have obtained a thorough knowledge of visual perception (spatial, temporal, colour and movement vision) and binocular perception.

Specific competencies

On completion of the master's degree, graduates will have acquired the following specific competencies:

- They will have acquired the specialised clinical skills needed for the provision of care for specific populations.
- They will have acquired the knowledge necessary for pre- and post-surgery optometric management of refractive and eye surgery patients.
- They will be able to carry out optometric monitoring of patients with visual conditions and functional implications caused by ocular, systemic and neurological diseases.
- They will be able to identify the impact of systemic and neurological diseases on the eye.
- They will be able to identify the impact of disorders and diseases of the surrounding structures on the eye.
- They will be familiar with procedures for the most common types of eye surgery, including refractive surgery.

- They will know the indications and contraindications of these procedures and visual aspects of post-surgery monitoring and control.
- They will be able to identify mechanisms of action and tissue and eye involvement in the main adverse visual reactions.
- They will know the potential clinical applications of these mechanisms.
- They will understand the latest advances in visual neuroscience.
- They will be able to apply optical principles of operation and determine the range of use and limitations of instruments used in optometric practice, ophthalmology and advanced eye surgery.
- They will understand and be able to apply the optical metrics used to assess visual function, incorporating recent advances based on the measurement of the wave front, the characterisation of aberrations and quality metrics.
- They will be able to apply the methodology and procedures of scientific research in the field of vision.
- They will understand the behaviour and be able to list the risk factors related to the presentation of different visual dysfunctions in the population, as well as understanding the use of epidemiological techniques in their research.
- They will be able to apply the rules of ethics in scientific studies of living beings, rules which are especially relevant to the design and execution of clinical trials.
- They will have specialised in one of the subject areas of the master's degree.
- They will have applied and complemented their prior learning.
- They will have put their skills to the test in a real working environment.
- They will have received advice on entering the world of work.
- They will have acquired entrepreneurial skills.
- They will have integrated the competencies acquired during the master's degree and have had them assessed.

QUALITY ACCREDITATION

Check the degree’s main quality indicators in the University Studies in Catalonia portal of the Catalan University Quality Assurance Agency. Find information on topics such as degree evaluation results, student satisfaction and graduate employment data.
Further information

ACADEMIC ORGANISATION

UPC school
Terrassa School of Optics and Optometry (FOOT)

Academic coordinator
Juan Carlos Ondategui Parra

Academic calendar
General academic calendar for bachelor’s, master’s and doctoral degrees courses

Academic regulations
Academic regulations for master's degree courses at the UPC

MASTER'S DEGREE WEBSITE