

# Bachelor's degree in Optics and Optometry

In the **bachelor's degree in Optics and Optometry**, you will study both medical and technology-related subjects, developing the knowledge and skills needed to diagnose, prevent and treat vision problems. In optics, you will receive the theoretical training needed to understand how images are formed by lenses, the fundamentals of optical instruments, and the causes of visual impairments, while your studies of optometry will allow you to develop the knowledge and skills needed to treat non-medical vision problems.

## GENERAL DETAILS

### Duration

4 years

### Study load

240 ECTS credits (including the bachelor's thesis). One credit is equivalent to a study load of 25-30 hours.

### Delivery

Face-to-face

### Language of instruction

Check the language of instruction for each subject (and timetable) in the course guide in the curriculum.

Information on [language use in the classroom and students' language rights](#).

### Fees and grants

Approximate fees per academic year: €1,107 (€2,553 for non-EU residents). [Consult the public fees system based on income \(grants and payment options\)](#).

### Location

[Terrassa School of Optics and Optometry \(FOOT\)](#)

### Official degree

[Recorded in the Ministry of Education's degree register](#)

## ADMISSION

### Places

90

### Registration and enrolment

[What are the requirements to enrol in a bachelor's degree course?](#)

### Legalisation of foreign documents

All documents issued in non-EU countries must be [legalised and bear the corresponding apostille](#).

## PROFESSIONAL OPPORTUNITIES

### Professional opportunities

- Detection, diagnosis, prevention and treatment of visual health problems.
- Adaptation of glasses and contact lenses.
- Vision rehabilitation and consulting in vision care and ergonomics.
- Measurement and diagnostic testing for surgery.
- Medical-technical establishments related to optics.
- Hospitals, health centres and primary care centres.

- Ophthalmology centres and surgeries.
- Optical industry: technical, commercial and management positions.

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## ORGANISATION: ACADEMIC CALENDAR AND REGULATIONS

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### Academic calendar

[General academic calendar for bachelor's, master's and doctoral degrees courses](#)

### Academic regulations

[Academic regulations for bachelor's degree courses at the UPC](#)

### Language certification and credit recognition

Queries about [language courses and certification](#)

Terrassa School of Optics and Optometry (FOOT)

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## CURRICULUM

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Subjects	ECTS credits	Type
<b>FIRST SEMESTER</b>		
Chemistry for Vision Sciences	6	Compulsory
Geometrical Optics	6	Compulsory
Head Anatomy and Histology	6	Compulsory
Mathematics for Optics and Optometry	6	Compulsory
Physics	6	Compulsory
<b>SECOND SEMESTER</b>		
Optical Materials	6	Compulsory
Photometry and Optical Instruments	6	Compulsory
Visual Optics	6	Compulsory
Visual System Anatomy	6	Compulsory
Wave Optics	6	Compulsory
<b>THIRD SEMESTER</b>		
Binocular Vision Bases	6	Compulsory
Clinical Procedures in Optometry	6	Compulsory
Ophthalmic Lenses	6	Compulsory
Optometrics Instruments	6	Compulsory
Physiology and Biochemistry	6	Compulsory
<b>FOURTH SEMESTER</b>		
Binocular Vision Dysfunctions	6	Compulsory
Fitting of Spectacles	6	Compulsory
Microbiology	6	Compulsory
Psychology and Public Health	6	Compulsory
Visual Perception	6	Compulsory

Subjects	ECTS credits	Type
<b>FIFTH SEMESTER</b>		
Advanced Clinical Procedures	3	Compulsory
Basic Contact Lens	6	Compulsory
Dispensing and Assembly of Spectacles I	3	Compulsory
Paediatric Optometry and Strabismus	6	Compulsory
Pathology	6	Compulsory
Statistics and Epidemiology	6	Compulsory
<b>SIXTH SEMESTER</b>		
Applied Contact Lens	6	Compulsory
Contact Lens Clinics I	3	Compulsory
Dispensing and Assembly of Spectacles II	3	Compulsory
Geriatric Optometry and Low Vision	3	Compulsory
Optometry Clinics I	9	Compulsory
Pharmacology	6	Compulsory
<b>SEVENTH SEMESTER</b>		
Basics of Hearing Aids	3	Optional
Children Visual Screenings	3	Optional
Contact Lens Clinics II	3	Compulsory
Digital Image Processing	3	Optional
Interactions Between Microorganisms and Contact Lenses	3	Optional
Intraocular Lenses: Optics & Optometry Assessment	3	Optional
Introduction to Biophotonics	3	Optional
Low Vision Management	3	Optional
Marketing in the Optical and Optometric Environment	3	Optional
Optical Shop Managing	3	Compulsory
Optometry Clinics II	9	Compulsory
Photography	3	Optional
Professional Communication in Healthcare: Effective Patient-Clinician Interaction	3	Optional
Refractive Surgery	3	Optional
Sportsvision: Eye-Tracking Application	3	Optional
Surface Treatments in Contact and Ophthalmic Lenses	3	Optional
Visual Accessibility	3	Optional
Visual Ergonomics	3	Optional
Visual Therapies	3	Compulsory
<b>EIGHTH SEMESTER</b>		
Practicum	18	Compulsory
Bachelor's Thesis	6	Project

