

BSc IN OPTICS AND OPTOMETRY

Duration: 4 years full time. 60 ECTS per year.

Language: Spanish.

Program aims:

The objectives of the degree that allows the practice of the Optician-Optometrist profession are explicitly defined in the governmental order CIN/727/2009, of March 18th, establishing as functions for optical-optometrists the activities aimed at: detection of defects in ocular refraction through instrumental measurement; the use of visual re-training, prevention and hygiene techniques; and the adaptation, verification and control of optical aids.

Moreover, the high demand for surgical procedures for vision improvement, either cataract surgery or refractive surgery techniques, has meant a momentous change regarding professional activities in the area of vision. Thus, the growing practice of these surgical procedures is creating the need for ophthalmologist-surgeons' activities to be complemented by optician-optometrist professionals specialized in pre- and post-surgical exams.

It should also be mentioned the role of optician-optometrists in those technological fields related to the design of optical systems for visual enhancement and optometric measurement.

To sum up, this degree allows the practice the optician-optometrist profession, enabling graduates to work in optician's shops/ health establishments, health centers, primary care centers and public hospitals, ophthalmology centers and offices and companies in the optical sector.

Structure:

Year 1. In the first year, students must enroll in the following subjects:

Subject	ECTS	Semester
26800 - Anatomy and Histology	9	YL
26801 - Physics	9	YL
26803 - Mathematics	9	YL
26804 - Visual Optics I	12	YL
26805 - Chemistry and Optical	9	YL
26802 - Ocular and Visual	6	S1
26806 - Optical Technology I	6	S2

S1: Semester 1. Mid-September to mid-January

S2: Semester 2. Beginning-February to end-May

YL: Year-long. Mid-September to end-May

Year 2. In the second year, students must enroll in the following subjects:

Subject	ECTS	Semester
26807 - Optical and Optometric	12	YL
26808 - Optometry Laboratory	12	YL
26809 - Optical Physics	6	S1
26810 - Visual Optics II	6	S1
26811 - Optometry I	6	S1
26812 - Biology	7	S2
26813 - Statistical Methods for Optics and	6	S2
26814 - Optometry II	6	S2

Year 3. In the third year, students must enroll in the following subjects:

Subject	ECTS	Semester
26815 - Ocular Pathology and	10	YL
26816 - Clinical Optometry	10	YL
26817 - Contactology	16	YL
26818 - Optical Technology II	6	S1
26819 - Visual Therapy and	6	S2

In the first semester of the third year, they must also select three subjects from the list of optional subjects below.

Year 4. In the fourth year, students must enroll in the following subjects:

Subject	ECTS	Semes
26821 - Optometric Actions in Ophthalmic Surgery	8	YL
26822 - Pediatric Ophthalmology	6	YL
26820 - Optical Technology III	6	S1
26823 - Low Vision	6	S2
26824 - External Optometry Practicum	17	YL
26825 - Undergraduate Dissertation *	9	YL

In the fourth year, they must also select one subject from the list of optional subjects.

Subject	E	Seme
26826 - Expansion of Geriatric Optometry	6	S1
26829 - Management, Business Initiative and Marketing	6	S1
26832 - Materials for the Optical and Ophthalmic	6	S1
26833 - Ocular Prevention and Ergonomics at Work and in Sports	6	S2
26834 - Radiometry, Photometry, Color and Photography	6	S1
26828 - Audiometry and Auditory Prostheses	6	S2
26830 - Graphical Tools and Optical Design	6	S2

Not all the optional subjects are available every year. A list of the available subjects for the following year (starting in September) is published in June. The subjects with ** in the Semester column are not being offered in 2021/2022.

***Undergraduate Dissertation**

The Undergraduate Dissertation (UD) is a 225 hours project on any of the subjects of the Degree. It is undertaken in the 4th year. Students are supervised by a professor who defines the objectives of the Project and guides them along the work. Students must write a report and make a public defense of it.