The European Council of Optometry and Optics

Accreditation of the Department of Optometry

UPC Terrassa

Against the Knowledge Base, Competencies and Portfolio requirements of the ECOO European Diploma in Optometry

2-4th October 2024

1. Background

The Faculty of Optics and Optometry of Terrassa (FOOT), part of the Universitat Politècnica de Catalunya-BarcelonaTech (UPC), is led by Dean Professor Aurora Torrents. They indicated their wish to undertake the European Diploma in Optometry (EDO) accreditation process in 2021. A new curriculum had been implemented in 2020, with the first graduates in 2024, so the panel visit is aligned with the first cycle of the complete programme. The Accreditation agency chairs had a one-day pre-visit in May/June 2023, and full documentation was received in August 2024. Full details of the accreditation process for the EDO by the Accreditation Agency are available here.

There are approximately 20,000 óptico-optometristas in Spain, and currently there are 11 public academic institutions and 2 private institutions delivering BSc Optics-Optometry programmes. There are approximately 6,000 ophthalmologists in the country. The profession is regulated by law, and the degree qualification is regulated by the Ministry of Science and Innovation of Spain (Ministerio de Innovación, Ciéncia y Universidades) Order CIN/727/2009, of March 18, which established the requirements for the verification of official University degrees, enabling the exercise of the profession of Optometrist in Spain. Since 2003, graduates with a recognised degree in optics and optometry are recognised as a Health Care professional, regulated under the Health Professions Regulation Law in Spain.

At FOOT, the Bachelor's degree in Optometry and Optics programme is 4 years in duration for full-time students (or 7 years if taken part-time) and they also deliver an MSc Clinical Optometry and Vision Sciences programme. As part of FOOT, there is a Centre Universitari de la Visió (CUV), which is open to the public for eye tests, and has an arrangement with social services throughout the Catalonia region to refer people for eye care, many of whom are from under-privileged sectors of society. The CUV also conducts vision screening for local schools.

The BSc programme is periodically reviewed internally, and the current programme curriculum format commenced in 2020. The next UPC internal review will take place in Autumn, 2025.

In 2007, FOOT established a "Patronat" or Board of Trustees, which consists of professional, industry and university representatives, to act as an advisory council to consider both the education and professional development of optometrists in the region. This has grown to be a large network of optical stores and clinics, and is a valuable means to connect students with external placements.

The Visitor Panel consisted of:
Prof Brendan Barrett
Dr Marika Wahlberg-Ramsey
Ms Heidi Buchholt
Prof Julie-Anne Little (Chair of Panel)
Mr Rian Love (Student representative)

2. Overarching analysis of the programme

There are ~33 full-time faculty staff members, along with ~35 part-time/associate teaching staff delivering the BSc and MSc programmes in the FOOT. Many of the adjunct staff have positions in ophthalmology/optometry clinics as other employment. There is an ophthalmologist that attends the CUV on a weekly basis and delivers practical teaching to BSc and MSc students. Four other ophthalmologists deliver lectures for the Pathology module in Year 4.

The Dean of the Faculty of Optica-Optometry is Professor Aurora Torrents, and the Vice-Dean of Undergraduate Studies is Dr Marc Argilés Sans. Dr Valldeflors (Flors) Vinuela Navarro is Head of International relations and was the staff member with whom the Panel liaised in the run up to the accreditation visit. Some of the course team have PhDs and are research active.

Entry to the course is competitive, with students needing a certain score in their general school diploma (Secundaria). In September 2020, 87 students were recruited to the BSc programme, and these numbers have been consistent in subsequent years; with 90, 91 and 88 enrolled in Sept. 2021, 2022 and 2023 cohorts, respectively. The majority (~75%) of students on the course are female. The academic year begins in September and students' complete studies in June. Semesters have 16 weeks of teaching plus 3 weeks of assessment periods. Students mostly come directly from secondary school education, but some have previous degrees or other qualifications. Students pay approximately 1,200 Euros in tuition fees per year, though some fee subsidisation occurs to widen access, depending on student financial circumstances and family size. A total of 44 students will be graduating from the 2020 intake in December 2024. Others have switched to part-time study or have outstanding credits to complete, along with some attrition in the first year of the programme.

The BSc degree format is a 4-year programme, consisting of 240 ECTS. This is comprised of:

- 66 ECTS of basic subjects
- 132 ECTS of compulsory subjects
- 18 ECTS of elective subjects
- 18 ECTS of external compulsory placement practice
- 6 ECTS of Final Bachelor Project or dissertation (TFG)

For the purposes of benchmarking against the European Diploma in Optometry, none of the elective subjects were used for self-assessment.

With regard to facilities, FOOT has its own substantial building, and the CUV Terrassa is located in an adjacent building. Within FOOT, spread over four floors there are lecture rooms that can accommodate 90 students, and several practical teaching rooms for optics and dispensing, chemistry etc. In the Dispensing Laboratory, there are two automatic edgers, and range of manual and automatic focimeters. Students gain practical experience of glazing, assembly and repair of spectacles and learn ophthalmic dispensing fitting techniques. There are practical teaching rooms for clinical optometry training in terms of contact lenses, binocular vision and clinical procedures in primary eye care. There are eleven cubicles for optometric practicals (eight in one area + three in another room), and a further four for contact lenses.

Students have access to these for self-practise. There is a canteen and study/relaxation area for students. The library is in another UPC building close by, and contains a good selection of textbooks and electronic resources.

In the CUV there are eight primary eye care clinical test rooms, all equipped with slit lamps and four with video slit lamps. All rooms have keratometers, phoropters, and digital vision charts. There are two non-contact tonometers, as well as a Goldmann tonometer. There is another area for further investigative techniques, vision therapy and low vision assessments, including a Topcon Maestro OCT, Humphrey visual field perimeter, corneal topographers, ocular biometer, and a range of other clinical equipment. There is also a good range of low vision and binocular vision equipment.

There is a well-equipped Dispensing clinic (including a glazing lab), with an adequate frame selection. This is supported by optometric staff and by the students who rotate through the lab and clinic for ophthalmic dispensing experience.

There is also a CUV satellite Contact lens clinic in Barcelona, containing two clinical testing rooms, which were fully equipped with slit lamp, keratometers, phoropter head, retinoscope and ophthalmoscope. There was also an ocular biometer, corneal topographer and a new scleral topographer. Students lead in one examination and observe another. Students who did not take an active part in the patient examination had the possibility to observe thought a glass window and could also listen to the communication via speakers. The Panel had the opportunity to visit this clinic which was set up as a satellite in order to increase the volume of contact lens patients because of an under-supply at CUV. The new satellite clinic was opened 2 years ago.

All clinical information is recorded on electronic care records and available to view by students. Only the student and supervisor undertaking the eye examination can edit the record, and this is closed after the appointment ends.

The structure of the programme across four years builds on knowledge of human anatomy, physiology and pathology, optics and dispensing. Students develop clinical skills in refraction and investigative techniques, and later knowledge of ocular disease, contact lenses, binocular vision, low vision and paediatrics. There are significant credits accumulated for clinical experience in the *Practicum*, and in the final year, students undertake a research project. The research project is 6 ECTS, and students are required to submit a dissertation as well as present a poster of their findings.

The structure of the programme is shown overleaf in this schematic from the Programme booklet supplied by the course team:

First year

Q1	Mathematics for Optics and Optometry	6 ECTS
	Chemistry if vision Sciences	6 ECTS
	Physics	6 ECTS
	Head Anatomy and Histology	6 ECTS
	Geometrical Optics	6 ECTS
Q2	Visual System Anatomy	6 ECTS
	Wave Optics	6 ECTS
	Photometry and Optical Instruments	6 ECTS
	Visual Optics	6 ECTS
	Optical Materials	6 ECTS

Second year

Q1	Binocular Vision Bases	6 ECTS
	Clinical Procedures in Optometry	6 ECTS
	Ophthalmic Lenses	6 ECTS
	Optometric Instruments	6 ECTS
	Physiology and Biochemistry	6 ECTS
Q2	Binocular Vision Dysfunctions	6 ECTS
	Fitting of Spectacles	6 ECTS
	Microbiology	6 ECTS
	Psychology and Public Health	6 ECTS
	Statistics and Epidemiology	6 ECTS

Third year

Q1	Advanced Clinical Procedures	3 ECTS
	Basic Contact Lens	6 ECTS
	Dispensing and Assembly of Spectacles I	3 ECTS
	Paediatric Optometry and Strabismus	6 ECTS
	Pathology	6 ECTS
	Visual Perception	6 ECTS
Q2	Applied Contact Lens	6 ECTS
	Contact Lens Clinics I	3 ECTS
	Dispensing and Assembly of Spectacles II	3 ECTS
	Geriatric Optometry and Low Vision	3 ECTS
	Optometry Clinics I	9 ECTS
	Pharmacology	6 ECTS

Fourth year

Q1	Contact Lens Clinics II	3 ECTS
	Optical Shop Managing	3 ECTS
	Optometry Clinics II	9 ECTS
	Visual Therapies	3 ECTS
	Optional subjects	*
Q2	Optional subjects	*
	Practicum	18 ECTS
	Bachelor's Thesis	6 ECTS

*= 18 ECTS to choose

The Visitors met with the senior members of the Faculty and Optometry department. The Director of the Department of Optics and Optometry is Jaume Pujol Ramo. There is significant overlap between the Faculty and Department, but the former is focussed on the delivery of programmes and the latter responsible for line management of staff.

The panel observed lectures, practicals and clinics during the visit. Lecture material was available to view at the time of the visit on the Atenea e-learning platform. Lectures are not routinely audio recorded and lecture attendance is not always tracked (this depends on staff member), through attendance at practicals is mandatory. The course team monitor this and if attendance drops below ~80% for practicals without a valid extenuating circumstance, then students are not able to undertake practical assessments (though this may vary between modules). Attendance was moderate-high for the lectures which were observed by the Panel. For the practical sessions, students are split into smaller groups and have set tasks and worksheets to complete.

The CUV and CUV satellite provides optometric services through General eyecare, Contact lenses, Low Vision, paediatric eyecare (including myopia management), Visual Therapy and Dispensing clinics. The CUV clinics are open most days per week by appointments only, during the academic semesters. Around 100 patients per week attend. Students are split into eight groups and distributed across a morning or

afternoon session, once per week. MSc students are prioritised for experience of paediatric and low vision examinations. BSc students also rotate through these but only to observe. Overall, the CUV clinic provides eye care services for approximately 3,000 patients per year, with 2,000 from arrangements with social services, and 1,000 from general community and via vision screening arrangements with local schools.

For the childhood vision screening service, approximately 300 children per year are seen. Vision screening comprises measures of visual acuity, auto-refraction, ocular biometry, colour vision and stereopsis, and 4th year students are scheduled to undertake these on one/two occasions under supervision. If any issues are flagged, children are referred to paediatric eye clinics (with MSc students). Some of the results from measures gathered during these paediatric examinations have been published in peer-reviewed journals of optometry/vision science.

In the primary eyecare clinic, students work on a 1:2 basis with the patient and there is a 1:4 supervisor/patient ratio. One student leads the examination, and is responsible for the patient, while the other observes. Only the responsible student records this as a clinical experience. During the tour of the clinics, we noted that the student who observes is sometimes responsible for recording the results of the examinations conducted.

Students who are in the second semester of the 3rd year and first semester of the 4th year are scheduled into CUV clinics, and these clinical experiences are connected with modules 'Optometry Clinics I and II' and 'Contact Lens I and II'.

On average, students will see 35 patients in the clinic for general eyecare, and they achieve 15 dispensing episodes and 12 contact lens episodes. In terms of time, students have 1.5-2 hours to examine patients in the 3rd year, with expectations of reducing time for examinations in the 4th year.

Alongside this clinical experience, students are required to complete 500 hours of external placement in an optometry practice, called the 'Practicum' and this module is worth 18 ECTS. While students are required to organise these placements themselves, they are given guidance regarding the nature of this clinical experience and a list of practices that are part of the FOOT Board of Trustees network. The majority of students work in multiple practices such as "Óptica Universitária", "General Óptica", and "Cottet". Students are allocated an academic tutor from FOOT, along with their external placement supervisor. In the event that a student is not gaining experience in certain specialist areas such as paediatrics, contact lenses or low vision, students are advised to contact the FOOT academic tutor. Students can then be offered the opportunity to attend specialist clinics within the CUV University Clinic.

All external supervisors are required to attend a training session organised by the FOOT regarding the Practicum. This training covers all requirements, duties and responsibilities of external supervisors, along with information about the roles and responsibilities of students. They are given access to the Register of Clinical Activities (RAC). FOOT does not mandate a minimum level of equipment that practices need, but there are rules for optical practices mandated by law in Spain.

The assessment of the Practicum is a split of 70% of the marks from the external supervisor and 30% from the FOOT academic tutor. Assessment consists of completion of 500 hours, and completion of a report at the mid-point and end of the Practicum. These reports are submitted in online format via Google questionnaire. From the mid-placement questionnaire, the FOOT tutor can identify the situations where a student is not achieving an adequate clinical experience.

The course team have established a means for students to log all clinical experiences (130+) and provide 20 detailed case reports in a 'Register of clinical activity' (RAC) online platform. The Panel had access to this register during the visit. As noted, this is also available for the external placement supervisor and the FOOT academic tutor to view. For the 130 cases, there is a random check of two of these cases from the FOOT academic tutor, checking the veracity of the case in the optical practice with the external supervisor. This occurs on two occasions, so for each student, a review of four cases overall is undertaken.

The Practicum will typically commence at the start of 4th year in September, with some students starting in July/August. Students often want to start the Practicum in the summer months before the beginning of the 4th year, but this is not always possible as optical outlets are generally quieter in July and especially in August. The students organise their schedule throughout the 4th year to fit in with university modules.

The use of diagnostic drugs is taught for dilation and anaesthetics by an ophthalmologist in practical sessions in the 4th year of the programme. Students undertake techniques on each other on two occasions, performing indirect ophthalmoscopy and Goldmann tonometry, as well as administration of eyedrops.

Cycloplegic refraction is not part of these practical sessions, and while BSc students may observe this being undertaken in the paediatric eye clinic with MSC students, not all will do so. Furthermore, students do not directly experience cycloplegia themselves, nor have opportunity to undertake cycloplegic refraction.

For Contact lenses, 3rd and 4th year students are scheduled every week in the CUV Contact Lens satellite clinic across 6th and 7th semesters, and should see an average of 12 patients (including aftercares) in total across the programme.

Students will see at least one paediatric patient in the CUV, and perhaps additional paediatric patients in Practicum. For Binocular Vision and Vision Therapy, clinical experience is in the CUV through general eye clinics, but it is possible that a student may not gain experience of seeing a patient with a binocular vision issue.

Students gain applied experience in Dispensing clinics in the second semester of the 3rd year and first semester in the 4th year of the programme, and as part of the Practicum. Four to six students are in each clinic and each of them fits at least 12 patients, including a vocational dispensing experience, as well as multifocals and high-index lenses. The overall number of dispensing episodes approximates 13, (range 10-25) across the programme.

The students gain low vision experience by means of case-studies and simulations, and they undertake practical sessions with low-vision aids and via simulated

impairments. While it is possible that they may see a patient with low vision in the Practicum, it is not clear whether they all meet the minimum requirement. A retired Low Vision lecturer reads the low-vision cases submitted by all of the students.

The Visitors met with a sample of students from 1st/2nd/3rd/4th years of the Bachelors programme. The majority of the undergraduate students come from Catalonia, with some from Galicia region and the Balearic Islands. The language of instruction is Catalan, though in the second year there are some courses taught in English to facilitate Erasmus exchange students. Some of the 3rd year students were working part-time in optometric practice, or making plans to do so in consideration of the upcoming Practicum. The 4th year students had all commenced the Practicum. The views expressed by students about the teaching on the course and the support they receive from staff were very positive. They have two student representatives in every year of the course, and feel that they can feedback issues when they arise.

The panel met with a large number of the staff who teach on the programme, both in two scheduled meetings, and in our observation of the various practical/clinical sessions that were running during our visit. The staff all demonstrated a high level of engagement and understanding of the accreditation process. They were proud of the developments in recent years promoting application of clinical skills and management of patients, especially those with greater socio-economic need, the growth of CUV and the Contact lens experience gained in the satellite clinic.

The panel also met the CUV Clinic Director, Núria Tomás Corominas. She has recently retired, and they are in the process of recruiting a new director, but kindly came in to assist our visit. We also met with the Technical director of the CUV, Enrique Gonzalez Lopez. The Visitors observed general clinics, as well as contact lenses and dispensing clinics, dispensing glazing labs and also childhood vision screening. An electronic patient record, 'Openvisio' is used to capture all details of patient eye examinations, though students have hard copy records that they can complete first, and then transfer this information onto the electronic record later.

The Register of clinical activity (RAC) was available to Visitors during the visit. This has been created to enable students, not only to document clinical experiences, but also submit their 20 detailed case reports. The team at FOOT intend for all students to undertake the requirements of the EDO. These experiences are both from the CUV and Practicum, and this is a different system to the electronic patient record, so the students have to document their cases via this separate system. The students and staff are aware of the minimum numbers of patients/episodes that they are required to undertake to fulfil the requirements of the European Diploma, and the breadth of cases required for the detailed case reports. On inspection of the case reports, the Panel found that while some are detailed and contained supplementary information including OCT imaging and visual fields, others were much more limited, and some did not have any description of posterior segment examination of the eye. As part of the Optometry Clinics I, students write up and present two case reports and get feedback on the content and guidance on improvements. In Optometry Clinics II they undertake further case reports, but the number assessed was not reported in the module description, and unclear during discussions. However, students are free to choose the case reports they finally submit on RAC. In other words, they may not submit cases on which they have received feedback amongst their 20 detailed cases. This is the first

iteration of the new system of requiring students to complete 150 cases (including the 20 detailed cases) aimed at fulfilling the portfolio requirements of the EDO and the team is to be commended for developing this system in the period since the preliminary visit of the ECOO accreditation Visitors, a little more than a year ago. Given that the Register of Clinical Activity has only very recently been developed it Is not that surprising that details of the assessment have not yet been firmly established. As stated, the marks for the portfolio did not contribute to the Practicum marks, but rather inputted into optometric clinics modules. Many of the Panel's questions during the visit were aimed at understanding the mechanics of how the course team evaluated the portfolios and assured themselves that the detailed cases were up to standard and that the other 130 examination met the definition of a full eye examination.

The Visitors observed students undertaking general eyecare clinics. It was noted that while anterior segment examination was routinely conducted with slit lamp biomicroscopy, direct (or indirect) ophthalmoscopy was not always conducted. At the CUV, all patients had an OCT image taken, which includes a retinal photograph. There were no 90D/Volk lenses available in the CUV clinic for students to use. While the panel recognise the value of OCT/fundus photography, this alone does not a provide a sufficient examination of the posterior eye, and going forward students should be encouraged to use direct ophthalmoscopy or indirect slit lamp biomicroscopy with 90D lens on all patients, alongside OCT and fundus photography when the latter procedures are deemed necessary Students need to demonstrate that they are conducting full eye examinations with examination of the posterior segment routinely. Encouragingly, the Visitors observed perimetry being undertaken during clinical observations.

During the visit, the panel went to an external practice and met with the supervisor and student (new) on her Practicum. The Visitors saw the eye exam and contact lens testing facilities. There was a slit lamp and non-contact tonometer but no equipment to permit direct or indirect ophthalmoscopy or to conduct visual fields instrumentation.

The Visitors met a number of recent graduates from the programme. The majority were going on to, or had already undertaken MSc or other postgraduate training, including studying for a PhD in the University. Some were working in community optical practices. They reported that they felt their training was very good and prepared them to a good level. However, while some conducted fundus examination and tonometry routinely, it was clear that not everyone did.

The Visitors also met with employers. They were all satisfied with the level of knowledge of the students coming into practice and reported that UPC graduates have good knowledge of ocular pathology, and have good communication and clinical skills. All practices are equipped with slit lamps. However, they noted that fundus examination was not conducted routinely, but at the discretion of the optometrist if there was deemed a clinical need to do so. The other employer reported that OCT/fundus photography was routinely used. A number of the employers were keen to stress to the Panel that, in their view, the graduates from UPC compared very favourably with the graduates they had encountered from other Optometry training programmes in Spain.

Prior to the visit, there were some difficulties in cross-referencing the information in the self-assessment document with the information provided in the module descriptors. Additional communication with the course team ensured access to Atenea VLE ahead of the visit, along with further information regarding portfolios and other details, including access to translated Module descriptions. It was noted that module descriptions varied in depth and consistency of content. During the visit, the Visitor panel had several opportunities to meet with the course team and were supplied with additional information requested. Through these efforts, the panel were able to view in detail the content and assessment for modules and to gain a good understanding of how the programme is delivered. This enabled the vast majority of the Knowledge Base of the European Diploma in Optometry to be satisfactorily mapped to UPC's BSc Optometry curriculum. However, there was a gap noted in deliver of content to students for Part C Subject 20, "General pathology and medical disorders". There is a module entitled 'Pathology' in the 5th semester (3rd year) of the programme, consisting of 6 ECTS, and the Panel spoke with one of the four ophthalmologists who teach on this module. In the self-assessment document, this module is supposed to deliver all the learning for Subject 20 and 24 (Abnormal Ocular conditions) of the European diploma, but the module really only focused on Ocular pathology, and there was a marked absence of learning material in the area of general pathology.

Areas for Improvement

- There is a need to ensure that posterior segment examination of the eye is embedded as part of a routine eye examination. These clinical skills, particularly slit lamp biomicroscopy + 90D, are vital to learn during training, serving to embed these for future practice as optometry in Spain seeks to move towards being primary eyecare providers.

- There is a need for students to gain experience of undertaking cycloplegic refraction.

- Development of assessment criteria by the course team for evaluating portfolios to include details of how 20 detailed cases will be assessed and by whom with FOOT.

- There are a number of occasions in the self-assessment document clinical/practical competencies, where the phrase 'if applicable' is used, such as for Part B, Subject 10, Low vision experience. However, in accordance with nature and breadth of the 20 detailed case reports, each student then did appear to have a Low vision Case report written up – so in this case, it seems as though all students do in fact see at least 1 patient? But it is not clear that this occurs every time the phrase 'if applicable' has been documented. Thus, the course team need to consider methods and opportunities for all students to experience a real-life example to cover all of these clinical/practical competencies. In recognition that some types of experiences are not likely to be opportunistically gained, some other institutions undertake this using a 'grand rounds' format, though other possibilities may also be suitable for

providing students with clinical exposure of this nature. The panel are open to further discussions regarding the different ways this may be achieved.

- The course team need to ensure that the learning outcomes for Part C Subject 20 “General pathology and medical disorders” are covered in the curriculum.

- The Course team need to examine ways to enable greater reflective practice from students and embed the principles of evidence-based practice into student learning, especially in their write-up of clinical cases and in the Portfolio. Currently, student reflection was limited/not available in the case reports for the Portfolios that the Visitor panel viewed. Perhaps there is an opportunity to capture student reflection in the mid-term and final questionnaires which the students complete for their Practicum.

- On scrutiny of the content and learning material for optics and ophthalmic dispensing in the Knowledge base of Part A, it was noted that some of the EN standards were outdated and have been superseded, e.g. EN 1836. We suggest the programme team update these.

3. Summary analysis of the self-assessment document

Part A

A number of modules, chiefly in years 1 and 2 of the BSc Optics-Optometry programme, support the subject areas and learning outcomes for Part A with sufficient depth. Practical competencies for subjects 5 and 6 are achieved through successful completion of assessments, apart from Subject 6, LO 2, regarding ability to dispense protective eye wear.

Decision: Standard Met Subject to Fulfilment of condition 1 [conditions listed below]

Part B

A range of modules, across years 1, 2 and 3 of the BSc Optics-Optometry programme support the subject areas and learning outcomes for the Knowledge Base of Part B. These include modules on Clinical Procedures in Optometry, Foundations of Binocular vision and Binocular vision anomalies, A & B, Advanced Optometry A & B, Paediatric Optometry, Visual Perception, Contact Lens Basics, Advanced Clinical Procedures, Ocular pathology, Geriatric Optometry and Low Vision, Optometry Clinics I and II.

For the Practical/Clinical competencies in Part B, the Panel note that a number of the clinical experiences are stated “if Applicable” in Subjects 8, 10, 12 and 14. The Course team need to establish mechanisms to adequately ensure that all students gain experience in relation to these learning outcomes. For example, evidence needs to be gathered that all students gain: experience of conducting cycloplegic refraction, have exposure to binocular vision problems and undertake examination of the anterior and posterior segment of the eye through un-dilated means.

Decision: Standard Met Subject to Fulfilment of Conditions 2 & 3 [conditions listed below]

Part C

A range of modules, chiefly across years 1, 2 and 3 of the programme, support the subject areas and learning outcomes for Part C. These include Head Anatomy and Histology, Chemistry, Ocular Anatomy and Physiology, Microbiology, Statistics and Epidemiology, Pharmacology. However, for Subject 20 of the EDO (General pathology and General Medical Disorders), the panel did not see evidence that this is taught in sufficient depth. This is also relevant to Subject 24 LO17 regarding systemic diseases affecting the eye.

For the Practical/Clinical competencies in Part C, the panel note that a number of the clinical experiences are stated “if Applicable” in Subjects 12C and 24. The Panel need

to establish mechanisms to adequately ensure that all students gain experience in relation to learning outcomes. For example, further experience of testing individuals with ocular conditions and examination of the posterior segment of the eye through un-dilated means will address this. This is connected to Condition 2 described for Part B.

Decision: Standard Met Subject to Fulfilment of Conditions 2, 3 and 4 [conditions listed below]

<u>Part D</u>

Learning outcomes for professional conduct and communication are delivered in years 3 and 4 of the programme to a sufficient level through the Psychology and Public Health and Optical, Business and Regulatory affairs for the Knowledge base aspects of Part D. For the clinical/practical competencies, these are achieved through Clinical experience based on performance in dealing with patients in the CUV.

Decision: Standard Met

4. Analysis of the Clinical Portfolio

The Visitors accessed a number of case reports from a variety of students through the RAC online system. While there were positive aspects to the cases presented in that clinical details were listed, generally the case reports lacked detail. Although there was evidence of the inclusion and embedding of relevant clinical research literature, there was little evidence of student reflection. There were some examples of fundus, OCT, and corneal topography images supporting the case records, as well as visual field plots, but examination of the posterior pole was not generally conducted for examinations in the Practicum. The Contact lenses case reports need to also contain information regarding their general eye examinations (i.e. clinical details from the primary care eye examination undertaken before contact lens fitting).

As discussed above, students need to demonstrate that they are conducting full eye examinations with examination of the posterior segment routinely. Improved QA procedures to develop the completion of the Portfolios of clinical experience to a satisfactory standard will help to evidence this as the new systems are embedded.

While the course team noted that an assessment rubric was developed for the case reports, it was clear that not all reports are viewed/graded by the academic tutor/course staff. While we understand the students do have some assessment and feedback of the write up of some of their case reports in modules Optometry Clinics I and II, and therefore are guided in how to develop and write such case reports. However, students are free to choose the case reports they finally submit on RAC, and these are not necessarily cases that have been viewed/assessed by anyone again. Thus, there was not a clear process to ensure portfolios meet the standard of the EDO, and that a plagiarism check, arrangements for final sign off, and a means to check the veracity and eligibility of the 130 cases is needed. Hence, there is a need to establish an assessment structure to reassure the Accreditation Panel that all students' Portfolios of Clinical experience are evaluated for their adequacy to meet the requirements for the Standard of the European diploma, as set out in the ECOO Guidelines Part III: Portfolio Guidance. While it is appreciated that the course team seek for all students to be eligible to acquire the European Diploma on graduation, it may be that the Course Team will decide that not all students achieve this goal if they do not produce a Portfolio of sufficient clinical standard.

Decision: Not currently met, see condition 5

5. Conclusions

The EDO standard for Part D is met and the standard for Parts A, B and C are also met subject to fulfilment of Conditions 1-5[see below]. In relation to the Portfolios, the standard is not presently met.

The Visitors would like to thank Prof Aurora Torrents, Dr Flors Vinuela Navarro, Dr Marc Argilés Sans, the course team and the whole Faculty and Department for their accommodation and organisation of the Accreditation visit. We recognise the dedicated efforts required to prepare for and undertake accreditation for the EDO, and we are aware of the significance of this for Spanish optometry.

The Visitors recognise the significant developments in clinical experience students now receive compared to the previous programme at UPC, and also the elements that have been put in place since we began engaging in the accreditation process and acknowledge the strides made even in the short period since the pre-visit by two of the Panel members in May 2023. During the recent visit, we were also pleased to hear very good feedback from employers on the quality of graduates. We were also very pleased to note the positive comments from students and graduates of the programme. We especially note the dedication of staff creating a supportive environment for students.

Based upon our observations, below we list five **conditions** that would need to be met in order for Full Accreditation to be achieved. The course team should also pay careful attention to the recommendations and other areas for improvement noted in the narrative above.

Should these conditions be met, we would conclude that Full Accreditation be granted for a period of 5 years. The timeframe for awarding accreditation will depend on when the University can fulfil the conditions set out below, but the Panel believe that it would not be impossible to achieve this for the at least some of next cohort who graduate, i.e. in December 2025.

CONDITIONS

1. Ensure that all students gain experience of prescribing and dispensing spectacles for eye protection/safety eyewear
2. Ensure that all students gain experience and are assessed on their “ability to..” in relation to each of the practical/clinical learning outcomes in Part B: Subjects, 8, 10, 12B, 14 and Part C: Subject 12C and 24.
3. Ensure that posterior segment examination and assessment of the eye is embedded as part of a routine eye examination beyond using fundus photography. This should be reflected in the OpenVisio case records at CUV and in the Portfolios of clinical experience.
4. Implement teaching and learning for General pathology and general medical disorders to cover the Knowledge base of the EDO for Subject 20, Part C.

5. European Diploma in Optometry Portfolio of Clinical Experience.
    a. Students need to demonstrate that they are conducting full eye examinations with examination of the posterior segment routinely for all 150 cases.
    b. The feedback mechanisms for students as they develop case reports in modules 'Optometry Clinics I and II' should be clearly documented, and also guidance should be given to students on the expected balance of case reports written up from CUV compared to Practicum experience. Whilst in their Practicum, students need to have access to, and use, equipment to examine the posterior pole of the eye in any patients who they will included in their Portfolio, whether as a detailed case or one of the non-detailed cases.
    c. The course team need to establish a system for holistic assessment of case reports against the requirements of the ED portfolio of clinical experience, ensuring the standard for the 20 detailed case reports is met in accordance with the UPC criteria, and that the mechanism in place for establishing the veracity and quality of the other 130 examinations is sufficient.
    d. Students need to consistently add further self- reflection in the 20 detailed case reports.

RECOMMENDATIONS

We recommend that the course team should:

1. Post-pandemic, and reflective of the change in optometric education, we would encourage the routine adoption of Slit lamp biomicroscopy+Volk, with direct ophthalmoscopy as a secondary technique.
2. Ensure students have access to a 90D loupe (i.e. Volk lens or equivalent)
3. Consider the weighting and nature of the Practicum assessment, to include more student reflection on their experience, rather than evaluation of time served.
4. Enhance opportunities for BSc students to observe practical sessions of MSc students

COMMENDATIONS

We commend the Course team on:

1. The diversity and volume of patient experience, with the impressive CUV facilities, the CUV CL satellite facility, and the provision of important public eye health services to vulnerable and childhood populations
2. Cultivating and utilizing links with ophthalmology to produce a broad range of learning opportunities for students.
3. The long-term development of the FOOT Board of trustees and the value that brings to have a network of practices
4. The dedication and positivity of both staff and students