

#Driving Careers Forward

LIFELONG LEARNING MASTER'S DEGREE IN Digital Aesthetic and Restorative Dentistry Online



Universitat Internacional de Catalunya Faculty of Dentistry

uic.es/dentistry

This programme aims to provide access to postgraduate training at the highest level for people who do not have the means to physically travel to a distant university centre for two years, but who, on the other hand, are willing to invest the time and dedication necessary to achieve the objectives of this training.

However, given the distinctive nature of dentistry a certain level of attendance at UIC Barcelona is still required.

The programme requires a minimum commitment of approximately 6 hours per week plus weekends. Communication is by videoconference, using Teams, and the sessions with the teaching staff are twice a week in a seminar format.

The overall objective of the programme is to train students in the modern concepts of dental restoration. **PROGRAMME TYPE:** Lifelong Learning Master's Degree

DURATION: 2 academic years

TYPE: Online

HOURS: Part-time

CREDITS: 120 ECTS

PRICE* 1st year: €16.874. 2nd year: €16.514.

ACREDITATION: Lifelong Learning

Master's Degree in Digital Aesthetic and Restorative Dentistry (blended programme)

LOCATION: Campus Sant Cugat

PRIMARY LANGUAGE: English

Application for admission **Chairman** Dr Miguel Roig



Programme Director Dr Marta Vallés

Coordination Dr Luis Carlos Garza

Academic Board

Dr Akram Ali, Dr Ramón Asensio, Dr Bilal Bou, Dr Oriol Cantó, Dr Lucas Caponi, Dr Pablo de la Cuadra, Dr Alba del Val, Dr Natalia Demyanco, Dr Edgar García, Dr Rocío de la Paz García, Dr Adrián Garita, Dr Luis Carlos Garza, Dr Armando Gil, Dr Álvaro Giner, Dr Víctor Henarejos, Dr Luis Jané Chimeno, Dr Luis Jané Noblom, Dr Beatriz Jareño, Dr Paola Cristina Laguarda, Dr André Filipe Lopes da Silva, Dr José Gabriel Martínez Colmenares, Dr Kilian Molina, Dr Javier Mora, Dr Jorge Pérez-Alarcón, Dr Pau Quintana, Dr Anaïs Ramírez, Dr Miguel Roig, Dr María Teresa Salagaray, Dr Jordi Tomás, Dr Marta Vallés, Dr Carla Vidal. Each student will be individually monitored according to their needs.

THE FOLLOWING SPECIFIC OBJECTIVES WILL BE PURSUED:

- Have an in-depth knowledge of the anatomy and physiology of the dental organ.
- Distinguish the different pathologies that affect the dental organ, establishing their aetiopathogenesis.
- Learn about the properties of the different materials used in dental restoration.
- Gain in-depth knowledge of the basics of dental adhesion to different tissues and materials.
- Know the basics of aesthetic diagnosis.
- Learn how to handle the techniques for the preparation of restorations in the laboratory.
- Learn to use the latest CAD-CAM techniques in prosthetics and dental restoration.
- Know and use the different clinical techniques of direct and indirect dental surgery.
- Establish criteria for case selection and dental restoration treatment planning.
- Know the properties of the different materials used in prosthetics on implants.
- Establish criteria for case selection and treatment planning for prosthetics on implants.
- Learn how to use dental restoration training and information systems.
- Know the basics of teeth whitening and learn how to use clinical and outpatient techniques
- Relate dental restoration to dental orthodontics for integrated patient treatment.
- Relate dental restoration to periodontics for integrated patient treatment.
- Distinguish the different pathologies that affect the temporomandibular joint, establishing its etiopathogenesis.
- Introduction to dental restoration research

SCHEDULE:

ON-CAMPUS:

4 weeks each year. Dates to be specified

From Monday to Thursday from 8 a.m. to 7 p.m.

Friday from 8.00 a.m. to 2 p.m. (depending on the presentations, the schedule can be extended to Friday afternoons and / or Saturday mornings).

ONLINE

Approximately 6 hours of weekly live online connection via the Teams platform Tuesdays and Wednesdays from 10 p.m. to 12 a.m. and Thursdays from 8.30 to 10 a.m. Mondays from 10 p.m. to 12 a.m. sporadically (Connection times and days will be confirmed at the beginning of the course)

This programme lasts two academic years. Most of the theoretical workload and a large part of the pre-clinical and clinical work can be carried out by students at home or at their practices.

Each student will be individually monitored according to their needs.

Students will also be required to participate in the online discussion sessions that will take place each week.

Theoretical part

Dental anatomy

Dental morphology Dental anatomical terminology Anatomical tooth carving

Introduction to dental pathology

Dental histology Tooth decay Destructive dental processes Pulpal and periapical pathology

Introduction to surgery

Isolation of the operating field Basics of dental adhesion Occlusion in dental surgery Dental materials Characteristics and reconstruction of the endodontic tooth Direct surgery Indirect surgery Dental traumatology

Laboratory techniques

Dental waxing Preparation of temporary teeth

Introduction to aesthetic diagnosis

Aesthetic analysis Tooth colour Mock-up diagnostic waxing

Introduction to rehabilitation

Face bow registration and assembly in the articulator Technique of taking impressions Preparation of CAD/CAM fixed prosthesis

Dental adhesion

History of dental adhesion Adhesion to enamel Adhesion to dentin Adhesion to porcelain, zirconium, metal, composite Laboratory test of dental adhesion

Teeth whitening

Dental discolouration Dental whitening agents Whitening at home Whitening in the clinic Over-the-counter products Internal bleaching

Rehabilitation

Vertical dimension, incisal line and occlusal plane Occlusal therapy Complex impressions. Provisionalisation. Clinical cases Timing. Clinical cases Intermaxillary records Preparation of a treatment plan Timing Cost estimate of a treatment

Prosthesis on implants

Concept of implantology General information about prostheses on implants Planning Presentation of cases Attachments and taking of impressions Biomechanics in prostheses on implants Cement-retained vs screw-retained prosthesis Unitary prosthesis Provisionals in prostheses on implants Partial prosthesis Overdentures Occlusion in prosthesis on implants Maintenance Materials Complications Immediate implants and immediate loading CAD/CAM in implantology Multidisciplinary treatment plans Rehabilitation of subsequent implants Implants in aesthetic zone Prosthetic management of particular situations

Multidisciplinary rehabilitation

Rehabilitation and orthodontics Periodontic rehabilitation Rehabilitation and ATM

Basic techniques

- -Recognition of operative dentistry materials and instruments
- -Preparation and filling of class I, II, III, IV and V cavities for composites
- -Special cavity preparation
- -Aesthetic inlays
- –Porcelain veneers
- -Provisional restorations
- -Porcelain veneers: cementation
- -Maryland bridges
- -Occlusion in dental surgery
- -Model studies
- -Aesthetic make-up test
- -Case planning
- -Creation of guide to anterior composites
- -Direct resin veneers and resin make-up
- -Vertical preparation for crowns (BOPT)
- –Waxed
- -CAD CAM and digital flow in dentistry

PRACTICAL PART

The student will perform clinical practices on their own patients. Records will be taken, planning will be made and presented to the teachers of the discipline. Once these have been discussed and agreed, the student will proceed to carry out the treatment, which will then be presented in a clinical session.

Presentation of cases

The students will present the treatments carried out (in vivo or in vitro) to the teacher(s) in charge, as well as to the other students. These sessions will be complemented by the weekly clinical sessions of the Restorative Dentistry discipline.

Pre-clinical practice

The student will attend UIC in person for one intensive week per term (4 weeks/course). During this week the student will carry out pre-clinical practical sessions (hands on), putting into practice all the theoretical knowledge acquired during the term. Students will also attend lectures by national and international guest lecturers.

Clinical seminars

Discussion of clinical cases of interest, prepared by the teaching staff or the master's degree students.

Literature review sessions

Sessions in which students will discuss and evaluate, under the guidance of a supervising teacher, articles of interest, recent or old, with a view to developing students' criteria so that they will be able to judge the work they receive in the future. At the same time, the student will be introduced to the latest trends in clinical practice and research.

Introduction to research

Students must carry out a bibliographic review work under the supervision of a teacher in the area of Restorative Dentistry. Upon completion, they must present it before a UIC Barcelona panel and at a national or international congress in their speciality.

Tutored education

Participation in teaching forces the student to a more in-depth analysis and a better understanding of concepts. It also helps them to learn to share their knowledge with the community, which is an essential element in the practice of their speciality.

Single-subject courses

Throughout the programme, students will attend several individual courses on specific aspects of dental surgery and aesthetics taught in our centre by external teachers.

MATERIAL NEEDED (*)

*Provisional list. The final list will be provided to students prior to the start of the programme.)

- Camera for digital reflex photography, Macro lens 60 to 120 mm, Ring flash (required, optional spot flash). Recommended cameras: Canon 400 D; Nikon – D80 and – D100.
- Magnifying glasses At least 2.5x.
- Turbine, adapter (*), micromotor, contra-angle and handpiece.
- Personal computer, preferably a laptop.
- Electric waxer.
- Composite spatulas box
- The book Odontología estética adhesiva. Manual de prácticas.
 Natalia Perez-Maldonado, Alvaro Ferrando. Editorial Edra
- SAED DENTAL phantoms (indicated by the director of the master).

In addition to their usual equipment, each student must have a personal protective face shield and safety goggles, except in the case of wearing corrective glasses or magnifying glasses, in which case safety goggles are not necessary.

(*) In the case of the adapter, please specify the model and the compatibility.

(**) On request.

If the material listed is not available, it is better to wait until the beginning of the Master's course to make the purchases at the same time.

ADMISSION'S PROFILE

Be in possession of a degree in dentistry

ADMISSION'S CRITERIA

Students must hold a qualification that equips them to exercise dentistry-oral surgery in their country or origin or residence.

Interview with the programme director or coordinator via online where they will evaluate the students' academic and personal skills, as well as their ability to work in a team. To start the admission process, you complete the **admission form** and submit all the required documentation:

- Bachelor's degree*
- Academic certificate of qualifications (transcript)*
- ID or Passport
- Curriculum Vitae
- General Terms and Conditions document signed.
- Letter(s) of recommendation (recommended, not compulsory)

*For students from outside the European Union, both their qualifications and their degree qualification must be attested through diplomatic route or carry a Hague Apostille. (The degree qualification does not need to have been officially homologated). Candidates who are in the last year of their degree programme must provide an academic certificate o the qualifications they have obtained at the time they register.

Once all documentation has been received and checked for validity, the registration fee (€90**) must be paid (former UIC Barcelona graduates alumni are exempt from this fee).

**Non-refundable administration fees.

¿HOW CAN WE HELP YOU?



Paola Lago / Marta Utset: infodonto@uic.es

Application for admission



UIC Barcelona's facilities are of a high standard, particularly its University Dentistry Clinic, where students have outstanding and up-to-date equipment and computer/digital resources at their disposal. The centre is renowned for its use of new technologies such as CAD-CAM, 3D and conscious sedation.

The University Dental Clinic (CUO) has **88** cubicles for dental practice and receives about **75,000 visits per year.**

It also has 2 prosthetic laboratories with the latest in CAD-CAM digital imaging technologies; laboratories focused on dental research and a pre-clinical laboratory with dental simulators, X-ray machines and digital radiology on state-of-the-art simulators.



Universitat Internacional de Catalunya has students of over **59 nationalities,** collaboration agreements with industry, company chairs, and agreements signed with health centres and social services.

The Faculty of Dentistry at UIC Barcelona is one of the most internationally renowned.

Top rankings 2023-2024:

- CYD 1st position nationally
- El Mundo 2nd position nationally
- QS World University Ranking 2nd position nationally
- Shanghai Global Ranking 3rd position nationally









UIC Barcelona is the first national university to be accredited by the **American Dental Association's** as Continuing Education Provider Recognition Program (**ADA CERP**).



Universitat Internacional de Catalunya, Fundació Privada is an ADA CERP Recognized Provider. ADA CERP is a service of the American Dental Association to assist dental professionals in identifying quality providers of continuing dental education. ADA CERP does not approve or endorse individual courses or instructors, nor does it imply acceptance of credit hours by boards of dentistry. Concerns or complaints about a CE provider may be directed to the provider or to the Commission for Continuing Education Provider Recognition at CCEPR.ada.org.



The Faculty of Dentistry has once again been recognised this year with the inclusion of four of its lecturers in Stanford University's Ranking of the World Scientists: World's Top 2% Scientists, an international benchmark that lists the top 2% of the world's most cited researchers.



The Faculty of Dentistry has completed the 3rd year of the programme and has been awarded the certificate of the Association of Dental Education in Europe in recognition of dedication and continuous improvement in the quality of dental education.



The 2030 Agenda on Sustainable Development adopted by the UN has 17 Sustainable Development Goals (SDGs), which aim to achieve equality among people, protect the planet, ensure prosperity, promote peace and build partnerships. In the SDGs, UIC Barcelona has found a roadmap for the implementation of the University's mission and vision.



Dr. Lluís Giner, dean of the Faculty of Dentistry.

"You have to specialise if you want to stand out from the croud"