



# LIFELONG LEARNING MASTER'S DEGREE IN Endodontics Online



Universitat Internacional de Catalunya Faculty of Dentistry

Preserving teeth is the basis of dentistry. Currently endodontics is one of the specialisations within dental practice that is experiencing increased demand due to the lack of specialised professionals who can manage the high level of difficulty it involves. Knowledge of radicular anatomy and dental pulp states is a challenge to a general dentist. It is important for odontologists to acquire the knowledge and skills that are necessary to tackle endodontic treatment and retreatments independently of the difficulties that these may involve

With this master's degree students will be odontologists who want to increase their knowledge in endodontics, with an education based on evidence, combining clinical placements with scientific knowledge.

#### **PROGRAMME TYPE:**

Lifelong Learning Master's Degree

#### **DURATION:**

2 academic years

#### TYPE:

Online

#### **HOURS:**

Part-time

#### **CREDITS:**

120

#### PRICE\*

1st year: 21.314 € 2nd year: 20.790 €

#### **ACREDITATION:**

Lifelong Learning Master's Degree in Endodontics (blended programme)

#### **LOCATION:**

**Campus Sant Cugat** 

#### PRIMARYLANGUAGE:

**English** 



#### **Chairman**

Dr Fernando Duran-Sindreu



#### **Programme Director**

Dr Anais Ramírez

#### Coordination

Dr Karem Marfisi

#### **Academic Board**

Dr Francesc Abella, Dr Luis Miguel Dr Silva Mendes, Dr Stephanie Glen Fairhurst, Dr Maria Moreu, Dr Tousif Iqbal Nathani, Dr Alejandro Luciano Núñez, Dr Miriam Teulél, Dr Gonzalo Gomez, Dr Rui Pereira, Dr Javier Pascual Irigoyen, Dr Xavi Ruiz, Dra Victoria Sanroman, Dr Susana de Noe, Dr Sergio Irazusta, Dr Artur Filipe Pereira, Dr Karem Marfisi, Dr Anais Ramírez, Dr Fernando Durán-Sindreu, Dr Ahmed Seyam, Dr Violeta Visús, Dr Keneth Pineda, Dr Sergio Morelló, Dr Jordi Tomás, Dr Adriana Gómez-Rojas, Dr Gustavo Rodríguez, Dr José Gaviño, Dr María Dolores Vázquez, Dr Mile Churlinov, Dr Jose Antonio González Sánchez, Dr Guillermo Doria Jaureguizar.

The curriculum of the Lifelong Learning Master's Degree in Endodontics Online is structured to be carried out over 2 academic years.



#### **OBJECTIVES**

This master's degree will provide:

- Training as an expert in the field of endodontics.
- Knowledge of new materials and technologies related to endodontics.

Once students have completed this master's degree, they will be qualified to clinically tackle cases of endodontics or reendodontics in order to understand and value scientific articles on endodontics and be able to undertake a bibliographical review.

It is for that reason that the objectives of this master's degree are:

- To diagnose the problems that concern the periapical pulp complex.
- To acquire the clinical and cognitive abilities to tackle endodontic problems.
- To be able to make decisions when faced with endodontic failure.
- To be able to undertake endodontics and reendodontics.
- To be familiar with apical surgery and intentional reimplantation.
- To be able to deal with orthograde retreatments.
- To understand scientific articles related to endodontics.
- To design a research project.
- To relate endodontics to other areas of dentistry.

### CALENDAR ONLINE PART

Weekly seminars on Mondays and Tuesdays from 9-11 p.m.

The student will organise clinical sessions with their tutor (these are currently being undertaken on the Teams platform) to talk about clinical cases and research work.

Students must complete the weekly programmed laboratory time during the times that suit them best.

#### **ON-SITE PART**

Students will attend four intensive weeks per academic year at the university.

The in-person weeks will always be the first two weeks of January and the last two weeks of each academic year. The exact dates will be provided prior to the start of the program.

#### **CURSE PROGRAMME**

The programme will be implemented based on a series of teaching activities, which we have grouped into the following types:

- Online theoretical learning based on masterclasses
- Preparation of topics based on guided reading of the selected literature
- Preclinical practicums based on tutorials and undertaken at UIC Barcelona
- Clinical practicums at UIC Barcelona

#### THEORETICAL PART

The theoretical concepts of the subject will be transmitted through masterclasses and guided reading. Seminars will be carried out (discussion on the topics read and prepared at home by both professors and students) to help students interpret the available data. In the discussion of cases, these will be presented by students or professors and there will be a discussion of this based on scientific literature.

#### 1 - Basic endodontics

- Pulpo Periapical pathology
- Endodontic diagnosis
- Endo-perio lesions
- Vertical fractures
- Resorptions
- Dental traumatology

#### 2- Making decisions in endodontics

- Endodontics prognosis.
- Retreatment prognosis.
- Apical surgery prognosis and intentional reimplant
- Endo versus implants.
- Endodontics treatment plan.

#### 3- Clinical concept in endodontics

- Pulp chambers
- Determination of the length of the project
- Tools in endodontics
- Disinfection in endodontics
- Obturation
- Endodontic emergencies
- Anaesthetics in endodontics
- Vital pulp therapy

#### 4 - Advanced Endodontics

- Managing endodontic problems
- Re-treatments
- Perforations
- Open apex management
- Periapical surgery and intentional reeimplant
- Autotransplantation
- Reconstructing a tooth after root canal treatment

#### 5- Treatment Planning: Discussion of practical cases

#### PRACTICAL PART

#### 1. Clinical Techniques

This module combines theoretical knowledge with essential preclinical practice, allowing students to build foundational skills in endodontics. Students will undertake in vitro practicums, following comprehensive guidelines provided by faculty, to familiarize themselves with endodontic techniques in a controlled setting.

Through online tutorials, faculty members will guide students step-by-step, ensuring they thoroughly understand each exercise before advancing. During these practicums, students will be required to document their progress with photos at specific points, which they will submit for personalized evaluation by instructors. This allows detailed feedback tailored to each student's needs, focusing on areas that need improvement or further practice.

n addition to these home practicums, students will also participate in laboratory sessions at the university and in patient clinics for four intensive weeks each academic year. These in-person sessions in UIC Barcelona's laboratories provide the opportunity to apply and refine the skills developed in the online environment.

#### 2. Endodontics Clinic

In this portion of the program, students gain hands-on experience treating real patients at the UIC Barcelona University Dental Clinic (CUO) under the direct supervision of professors and experts from the Department of Endodontics. For eight weeks of clinical practice, students will apply advanced endodontic techniques using high-precision optical microscopes, integrating technology into their daily practice.

These practicums are designed to expose students to a variety of endodontic treatments and clinical cases, helping them develop the confidence and skill to manage complex cases in their professional careers. During this time, students will tackle various procedures, including root canal treatment and retreatment, instrumentation, obturation techniques, and the management of clinical complications

The clinic experience at UIC Barcelona also provides students the invaluable opportunity to interact directly with patients, honing their communication skills while learning the importance of accurate diagnosis and comprehensive, individualized patient care.

#### FINAL MASTER'S DEGREE PROJECT

#### **Clinical Case Report and Journal Submission**

For the final project, students will undertake a clinical case report based on a patient treated during the program. This report should include a detailed description of the patient's background, the diagnostic process, treatment planning, the step-by-step procedures performed, and post-treatment evaluation. The aim is to demonstrate the student's ability to apply endodontic principles and practices in a real-world scenario.

Students will prepare their case report in a format suitable for submission to a peer-reviewed, high-impact journal. Throughout the process, students will receive guidance from their tutor to ensure the report adheres to academic and publication standards. This project offers an opportunity for students to contribute to the scientific community and gain experience in the professional publication process.

#### **COURSES AND CONFERENCES**

Attendance at relevant European and international conferences is mandatory for all students. These conferences provide invaluable opportunities to engage with the latest advancements in endodontics, network with professionals from around the world, and gain exposure to diverse clinical practices and research.

Given that most conferences will be held in Spain and the majority will be conducted in Spanish, students will be encouraged to attend those, but the focus will be on European and global events to ensure a broader understanding of the global landscape of endodontics. Participation in these events will enhance the students' academic experience and help them stay up-to-date with the latest developments in the field.

# MATERIAL

#### **MATERIAL NEEDED (\*)**

\*Provisional list. The final list will be provided to students before the start of the program.

Material which the student must supply:

- Laptop (minimum requirements for network connection 10/100).
- Reflex Camera + Macro Lens 90mm 100mm + Macro flash anular. The camera must have the option to record video.
- Rotary material: turbine, micromotor, adaptor and contra angle.
- Electric endodontic micromotor with torque control. Must have the option to be used in continuous rotation and reciprocation motion.
- Dental periapical radiovisiography /phosphore paques
- Elements obturation unit or similar.
- To access the CUO every student will be expected to wear a protective face screen and use total protection goggles, except if they are wearing prescription glasses or magnifying loupes, in which case the total protection glasses will not be necessary.

#### **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 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"