

COURSE 2024-2025

# Master's Degree of Lifelong Learning in Endodontics Online



## Master's Degree of Lifelong Learning in Endodontics Online 2024-2026

### Introduction

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.

The proposal to offer an online Master's degree in Endodontics is due to the high demand in endodontics within the dentistry sector. This master's degree is set out as a top level programme within the university system, although without achieving the highest level of qualification offered by the European Master's Degree in Endodontics. Due to the current economic situation many students who opt for part-time study find areas lacking in module-based or short programmes, since they believe that they will not provide enough work placements or fall short in terms of literature reviews and research methods. Online Master's Degree in Endodontics students will be odontologists who want to increase their knowledge in endodontics, with an education based on evidence, combining clinical placements with scientific knowledge, but who are unable to take a full-time or semi-exclusive three-year master's degree.

### Organising Department

#### Area director

Dr Fernando Duran-Sindreu

#### Programme director

Dr Anais Ramírez

#### Coordinator

Dr Karem Marfisi

### Teaching staff

Dr Maria Moreu, Dr Miriam Teulé, Dr Nathani Tousif Iqbal, Dr Gonzalo Gomez, Dr Rui Pereira, Dr Luis Corté Real, Dr Sergio Quaresma, Dr Javier Pascual Irigoyen, Dr Xavi Ruiz, Dr Victoria Sanroman, Dr Susana de Noe, Dr Gustavo Rodriguez, Dr Sergio Irazusta, Dr Stephanie Fairhurst, Dr Karem Marfisi, Dr Anais Ramírez,

Dr Fernando Durán-Sindreu, Dr Ahmed Seyam, Dr Violeta Visús, Dr Jose Antonio González, Dr Keneth Pineda, Dr Sergio Morelló.

## 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.

## Course 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

- Pulpoperiapical pathology
- Endodontic diagnosis
- Endo-perio lesions
- Vertical fractures
- Reabsorbtions
- Dental traumatology

#### 2- Making decisions in endodontics

- Endodontics prognosis.
- Reendodontics 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
- Reendodontics
- Perforations
- Open apice 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

Undertaking in vitro practicums. Students will be provided with guidelines to undertake preclinical practicums, and through tutorials students should undertake the exercises they have been given. Students will take photographs at specific moments, which must be sent to be evaluated by the lecturers and professors. Practicums in laboratories will also be carried out in the in patient clinic in the university (4 weeks during each academic year).

### 2- Endodontics Clinic

Practicums undertaken at the UIC Barcelona University Dental Clinic (CUO) with patients under the guidance of professors and lecturers from the Department of Endodontics.

For a total of 8 weeks the students will combine practice on patients under an optical microscope. Different treatments will be programmed to be able to face it in daily practice.

## **Final Master's Degree Project**

Students can opt to present a well-documented research project with current supporting literature, or undertake a literature review, always under the supervision of their tutor.

## **Courses and conferences**

Students must attend at least one scientific conference in the field of endodontics (ESE, AEDE or SEOC).

## **Methodology and evaluation**

Students will be evaluated for the different modules and materials, taking the following into account:

- Written tests (exams)
- Acquisition of knowledge of clinical, technological and surgical skills through continuous assessment
- Defence of your final Master's Degree Project and the presentation of cases before a jury

## **Material\***

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

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
- 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.

## **Admissions requirements**

Be in possession of a degree in dentistry

## **Admissions process**

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.

## Facilities

At UIC Barcelona, clinical practices with real patients are fundamental in training high-level professionals.

The UIC Barcelona Faculty of Dentistry has state-of-the-art digital equipment that brings students close to the reality of day-to-day life and prepares them in all theoretical and practical aspects of working in a clinic in the safest and most professional way.

We currently have the following facilities available:

The UIC Barcelona University Dental Clinic has 88 dental booths, all of which are equipped with the most cutting-edge technology: 88 booths for general care, 4 booths for special needs patients and 16 booths for surgery and conscious sedation.

The Clinic attended around 75,000 appointments in the last academic year.

The Clinic has two prosthetics laboratories with the latest digital imaging technology, which allows students to practice the latest techniques in all areas of dentistry.

The Faculty has a dedicated CAD CAM technology laboratory with the following equipment:

- Four milling machines:
- 13 intraoral scanners (four 3Shape, one 3M, one Cerec Omnicam, two PrimeScan, one Itero, two Carestream, one Medit, one Shinning)
- Three 3D printers
- Design software: nine Exocad, eleven 3shape and two Cerec
- Four Exoplan, one Geomagic, one BlueSky
- One ceramic furnace
- One zirconia sintering furnace
- 2cbct and 1iCat
- One Teckscan
- One SDI Matrix

All dental equipment is fitted with intraoral radiology for additional testing. The centre has two diagnostic imaging rooms for panoramic dental X-rays with two CBCT. 3D iCat imaging machines.

Digital technology and prosthetic-implant planning software programs allow students to learn and work with the latest technologies from day one. We have a design room with 14 computers (CAD) and a new CAM lab (milling machines, printers) for student training.

- Option to stream dentistry treatment live
- Computerized storage for material delivery and collection
- Sterilisation service for medical equipment and instruments

All the resources are current, and the University has agreements with different industries in the sector, thus promoting the relationship between the industry, universities and R+D+I.

The technology available to our students helps them gain awareness of the daily reality at a clinic and for preparing in all theoretical and practical aspects of working at a clinic in the safest and most professional way.

We have six new laboratories, one of which is dedicated to dental research.

We have eight Zeiss Extaro and Zumar OMS 2360 high-resolution microscopes.

Pre-clinical laboratory, a technological laboratory, has 95 dental simulators, with phantom head models, which are oral cavity simulation tools, and X-ray and digital radiology equipment for practising dentistry using

the Simudont virtual reality simulators. This step introduces virtual reality in the student's pre-clinical practicums, enhancing their learning experience and it is also a great tool as a new teaching methodology. It is a step forward in innovation and improvement in student training. This new laboratory allows students to practice real-life-like dentistry before they practice on patients.

**Places in classrooms:**

2,355 places in classrooms  
88 places in clinics (dentistry booths)  
192 places in gyms  
120 places in IT classrooms  
420 places in laboratories  
415 m<sup>2</sup> of laboratory space dedicated to research

**Places in study rooms:**

361 seminars, multifunctional rooms and a library study room

**Places in Libraries:**

The Library on our Sant Cugat campus measures 1,201.53 metres squared.  
374 reading places throughout the library and three study rooms



## Basic Information

### Calendar

September 2024 to July 2026

### 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 intense weeks per academic year at the university.

The exact dates will be informed before the beginning of the program.

### Pre-registration date

From January 2024

### Price

#### First year:

20.594 €\*

#### Second year

20.094 €\*

\*Annual registration fees are included (€494/year).

The price for the second year (2025-2026) has not yet been approved by the University's Board of Governors and is subject to index-linked increases in relation to the CPI.

## Number of places

Participation in this programme is limited.

## Certification

120 ECTS Master's Degree of Lifelong Learning Endodontics (blended programme)

## Admissions process

To start the admission process, you must fill in the program's admission form which can be found on the university's website ([www.uic.es/dentistry](http://www.uic.es/dentistry)), and submit all the required documentation:

- Bachelor's degree\*
- Academic transcript of grades\*
- ID or Passport
- Curriculum Vitae
- Signed document with general terms and conditions
- Letters of recommendation (recommended, not compulsory)

\*For students from outside the European Union, both their qualifications and their degree qualification must be attested via the diplomatic route or carry a Hague Apostille stamp. (The degree qualification does not need to have been officially homologated).

Candidates who are in the last year of their degree program must provide a list of the qualifications they have obtained up until the date they register.

\*\*Not reimbursable for administration fees.

Once all documentation has been received and checked for validity, you must pay the registration fee (€90\*\*) and send the payment receipt sent by mail to: [infodonto@uic.es](mailto:infodonto@uic.es) (UIC Barcelona graduate alumni are exempt from this fee).

## Contact:

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