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VALUES
FORWARD.

COURSE 2024-2025

Endodontics Program

Universitat
Internacional
de Catalunya
Faculty of
dentistry

uic.es/dentistry

Endodontics Program 2024-2027

The endodontics program is made up of the Master in Endodontics* of 120 ECTS and the Master's Degree of Lifelong Learning in Advanced Endodontics of 60 ECTS.
Throughout this programme the student will acquire the most advanced skills in this area and will know how to perform complex treatments such as non-surgical root canal retreatment, endodontic microsurgery, intentional reimplantation and reconstruction of endodontically treated teeth. At the end of the three years of training, the student will obtain two degrees: "Master's Degree in Endodontics" and "Master's Degree of Lifelong Learning in Advanced Endodontics".

Introduction

Endodontics is a clinical discipline that encompasses teaching microbiology, biology, biomaterials, tissue engineering, epidemiology and clinical techniques to cure or prevent pulpal and pulpoperiapical diseases. The endodontics programme is designed to train professional dentists and stomatologists in the field of endodontics. The programme prepares participants to run clinical practices, teach or undertake research in endodontics.

The course consists of a theoretical module that addresses topics in clinical endodontics, seminars on classical and contemporary literature review and analysis and the relationship between endodontics and other specialised areas of dentistry, and the study of endodontics clinical cases that involve other areas of specialisation. The programme also addresses more complicated clinical cases such as non-surgical root canal retreatments, endodontic microsurgery, intentional replantation, and the reconstruction of endodontically-treated teeth.

The main objective of the program is focused on preparing professionals with the maximum training to diagnose complex problems that have a pulp and paper origin and, at the same time, to find and establish the best solution to solve them. and, at the same time, find and establish the best solution to solve them, the student will also be trained and introduced in the development of research projects and introduce the student to the development of research projects.

Organizing Department

Department of Endodontology
Faculty of Dentistry

Chairman

Dr Fernando Durán-Sindreu

Programme Director

Dr Francesc Abella

Coordinator

Dr Marc García

Academic Board

Dr Francesc Abella, Dr Carla Bóveda, Dr Carlota de España, Dr Susana de Noé, Dr Fernando Durán-Sindreu, Dr Guillermo Doria, Dr Marc Encinas, Dr Marc García, Dr Ana Bárbara Giordano, Dr Adriana Gómez-Rojas, Dr Gonzalo Gómez, Dr José Antonio González, Dr Sergio Irazusta, Dr Patricia Labraca, Dra Mª Jesús López, Dr Carolina Mor, Dr Sergio Morelló, Dr Maria Moreu, Dr Gonzalo Olivieri, Dr. Carles Pressegué, Dr Anaïs Ramírez, Dr Gustavo Rodríguez, Dr Xavier Ruiz, Dr Jordi Tomás, Dr Violeta Visús, Dr João Nuno Campante Moreira Prina, Dr. Lola Vázquez De Sola, Dr. Marta Galtés, Dr. Judit Tona

Academic board cross-disciplinary subjects

Dr. Angela Mayoral, Dr. Josep M.ª Huguet, Dr. Rut Fadó, Dr. Angela Donate, Dr. Andrés Pascual, Dr. Javier Mareque, Dr. Lissethe Peñate, Dr. Guillermo Rocafort, Dr. Héctor Parellada, Dr. Mariana Ponte, Dr. Antoni Parada, Dr. Víctor Gil, Dr. Ana Poveda, Dr. Adrian González, Dr. Jordi Mas, Dr Adaia Valls.

Objectives

The training objectives of the Master in Endodontics are:

- To provide the tools to critically analyze the literature and to adapt to the changes that the profession will experience.
- To provide the ability to apply advanced endodontic techniques in terms of etiology, pathogenesis, epidemiology and treatment of pulpoperiapical diseases.
- Encourage working in conjunction with other areas of dentistry for the realization of a correct global diagnosis (multidisciplinary work).
- To provide the tools to carry out research, especially in endodontics and restoration of the endodontic tooth.
- Promote the review of the different pulp and pulp-periapical entities and therapeutic techniques on the patient where the student has participated directly in the decision making process or has performed the decisions or have carried out the treatments themselves.

Course programme

Theoretical Programme

We will analyse and critically discuss the traditional and modern literature through seminars on the following topics:

- Dental pulp biology
- Pulpoperiapical pathology
- Dental pulp regeneration
- Endo-perio lesions
- Resorption
- Pain management
- Vital pulp therapy
- Relationship between pulpal and systemic diseases
- Non-odontogenic pain
- Perforations
- Instrumentation
- Root anatomy
- Anatomy of the head
- Microbiology
- Root canal irrigation
- Intracanal medication
- Dental traumatology
- Endodontic microsurgery
- Reconstruction of endodontically treated teeth
- Management of teeth with open apex
- Working length
- Prognosis
- Diagnosis
- Immunology
- Obturation
- Non-surgical root canal retreatment
- Management of complications in endodontics
- Dental radiology
- Pharmacology

Practical Programme

Laboratory Programme

Students must perform 100 root canals *ex vivo* in the first trimester, before attending to patients.

Clinical Practice

Students must perform 250 treatments throughout the three-year programme, with a minimum of 50 non-surgical root canal retreatments, 15 microapical surgeries and 2 intentional reimplantations.

Courses and conferences

Students must attend and present a paper at two national conferences (AEDE or SEOC) and at an international congress (ESE, AAE or IFEA).

Methodology and evaluation

The main learning activities carried out in the mandatory subjects are:

- Master Classes
- Case method for the analysis and resolution of clinical cases
- Laboratory
- Preparation of cases and/or simulations
- Self-study activities
- External internship
- Master's final project

The evaluation systems used in the mandatory subjects are:

- Continuous evaluation
- Theoretical exam
- Case portfolio
- Case portfolio defense
- Evaluation of the practices
- Evaluation of the Master's final project

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 Zumax 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^2 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

Material needed*

*provisional list. The final list will be provided to the students before the start of the classes.

Students must own the following:

- Electronic root apex locator. It can be individual (for example Propex Pixi, Dentpsly) or integrated into an endodontic micromotor.
- Electric endodontic micromotor with torque control. Must have the option to be used in continuous rotation and reciprocation motion.
- Rotary material: turbine, micromotor, adaptor (*) and contra angle
- Reflex Camara + Macro Lens 90mm – 100mm + Macro flash anular. The camera must have the option to record video.
- Laptop (minimum requirements for network connection 10/100)
- Dental periapical radiovisiography (Kodak 6000 or similar)
- Obturation unit
- Intraoral mirrors
- X-ray positioning devices
- Ultrasonic tips for endodontics
- To access the CUO every student will be expected to wear aprotective 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.

(*) Brand and type of adaptor must be previously confirmed.

Basic information

Calendar

September 2024 to July 2027

Timetable

First year:

Full time program (the schedule will be sent prior to the start of the program.)

Second year:
Full time (the schedule will be sent prior to the start of the program.)

Third year:

Full time (the schedule will be sent prior to the start of the program.)

The second and third years of the program will be composed by subjects of the Master in Endodontics and "Master's Degree of Lifelong Learning in Advanced Endodontics".

Pre-registration date

From January 2024

Fees

First year:
21.470 € *

Second year:
20.237 € *

Third year:
15.688 € *

*Annual registration fees are included (€480/year). The annual registration fees have not yet been approved by the University's Board of Governors.
The price for second and third year (2025-2026 and 2026-2027) has not yet been approved by the University's Board of Governors and is subject to an index-linked increase.

Places available

The seats available are limited.

Accreditation

120 ECTS, "Master in Endodontics" *
60 ECTS, "Master's Degree of Lifelong Learning in Advanced Endodontics"

** Specific name pending of approval by Board of Governors.*

Admission profile

The admission of the students to the Endodontics Program at the Universitat Internacional de Catalunya is governed by its own selection process that includes the passing of a series of admission tests and the submission of explicit documentation, always taking into account the provisions of established in article 18 of Royal Decree 822/2021.

- Hold a Bachelor's degree in Dentistry (or equivalent).
- A level of English B2 of the Common European Framework of Reference for Languages or equivalent is recommended. Languages or equivalent, which will be verified during the interview with the candidate.

Admission Criteria

The admission tests consist of a balanced evaluation of the academic record, personal profile, motivations and aptitudes, which will have the following criteria:

- Personal interview
- Academic record
- Curriculum Vitae

It is mandatory to complete the three years of the program.

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), 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 (UIC Barcelona graduate alumni are exempt from this fee).

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