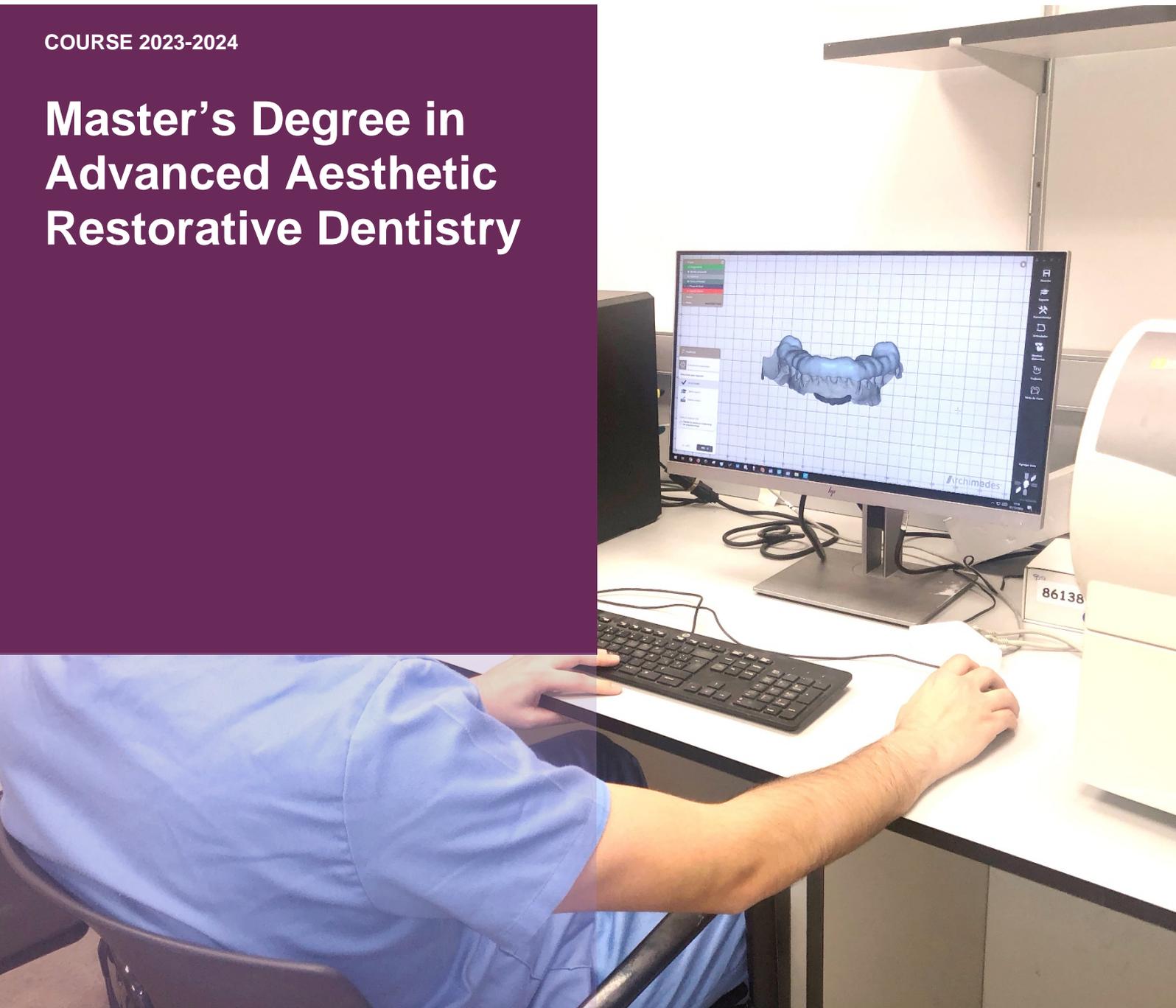


COURSE 2023-2024

Master's Degree in Advanced Aesthetic Restorative Dentistry



Master's Degree in Advanced Aesthetic Restorative Dentistry (MREA) 2023-2026

Presentation of the course

Dentistry is one of the Health Sciences and, as such, the professionals who practice in this field must be trained to prevent, diagnose and treat the different oral diseases suffered by their patients. They also need to take into account the characteristics and needs of the society in which their practice is based.

Restorative Dentistry is the branch of Dentistry that is responsible for treating occlusal-masticatory function and anatomy, speech and aesthetics related to the stomatognathic system. All of these issues are caused by caries, periodontal disease or trauma, and are treated with dental prosthetics or adhesive dentistry procedures. The incorporation of techniques involving dental adhesion and dental hard tissues has had a significant impact on dentistry. In terms of human prosthetics, a dental prosthesis is a procedure that artificially restores the absence of one, several or even all of the teeth and their adjacent tissues. Dental therapeutics, in traditional terms, refers to restoring areas of the mouth without affecting the teeth as a whole. Procedures relating to adhesive dentistry, dental therapeutics and dental prosthetics consist of using several types of materials that adhere to dental hard tissues (enamel or dentine). Once they have bonded to the tooth surface, the materials and tooth behave as a single unit. Thanks to new adhesion techniques and new dental materials, over the last few years the term Restorative Dentistry has emerged in the dental profession in Europe and the United States of America, as a meeting point between two prosthetics and dental therapeutics, two areas that were initially different and now share the same goals and therapeutics.

Restorative dentistry is a broad subject, and all the knowledge involved in a Dentistry degree is required to understand it fully. It also requires a mastery of many specific techniques involved in both diagnosis and restorative treatment. These techniques mean oral rehabilitation is more comfortable for the patient and ensure a good long-term prognosis. The concept of restorative dentistry is currently integrated within the broad context of the patient as a functional unit who requires integral and multidisciplinary treatment, one facet of which is restorative treatment.

Organising department

Department of Restorative Dentistry
Faculty of Dentistry

Chairman and Programme Director

Dr Miguel Roig Cayón

Coordinator

Dr Pilar Fenoy

Academic Board

D Akram Ali, Dr Pablo Altuna, Dr Josep Cabratosa, Dr Jordi Cano, Dr Oriol Cantó, Dr Santiago Costa, Dr Javier De Medrano, Dr Pilar Fenoy, Dr Oscar Figueras, Dr Pau Galbán, Dr Armando Gil, Dr Rodrigo González, Dr Jaime Guinovart, Dr Luis Jané Chimeno, Dr Luís Jané Noblom, Dr Jose Gabriel Martinez Colmenares, Dr Kilian Molina, Dr Carolina Mor, Dr Sergio Morelló, Dr Antonio Morelló, Dr Miguel Roig, Dr Enric Soler, Dr Juan Torres, Dr Marta Vallés.

Academic Board Cross-Disciplinary Subjects:

Dr Angela Donate, Dr Josep M^a Huguet, Dr Lissethe Peñate.

Objectives

The Faculty of Dentistry at the Universitat Internacional de Catalunya feels that it is necessary to offer the dental profession a Master's Degree in Advanced Aesthetic Restorative Dentistry. Our university would also like students to receive education on a further level, with clear knowledge of dental research in the field of dentistry. This master's programme will therefore provide:

- Scientific training and surgical expertise in the field of aesthetic restorative dentistry.
- An understanding of new materials and technologies related to aesthetic restorative dentistry.
- Training in research methods.

Program of the course

Curriculum

Subjects in course 1
Basic Adhesion Techniques
Basic Aesthetic Diagnosis
Bibliographical Research (Cross-Disciplinary. Research.)
Biostatistics (Cross-Disciplinary. Research.)
Dental Anatomy
Direct Operative Dentistry
Direct and Indirect in Vitro Operative Techniques I
Final Master's Degree Project I
Indirect Adhesive in Vitro Prosthetic Techniques
Indirect Operative Techniques and Adhesive Prostheses
Introduction to Prosthetic Implantology
Laboratory Techniques Applied to Aesthetic Diagnosis
Laboratory Techniques for Fixed Non-Adhesive in Vitro Prostheses
Laboratory Techniques for Fixed Prostheses
Multidisciplinary Clinical Planning. Discussion of Clinical Cases I
Multidisciplinary Restorative Treatment. Clinic I

Oral Restoration, Surgery and Periodontics I
Removable Prosthesis
Research Methodology and Ethics (Cross-Disciplinary. Research.)
Scientific Communication (Cross-Disciplinary. Research.)
Scientific Evidence in Operative Dentistry
Subjects in course 2
Multidisciplinary Clinical Planning. Discussion of Clinical Cases II
Multidisciplinary Restorative Treatment. Clinic II
Optative Module
Subjects in course 3
Direct and Indirect in Vitro Operative Techniques II
Final Master's Degree Project II
Multidisciplinary Restorative Treatment. Clinic III
Oral Restoration, Orthodontics and Occlusion
Oral Restoration, Surgery and Periodontics II
Scientific Evidence in Restorative and Aesthetic Dentistry
Elective subjects offered
Endodontics Module

Implants Module
Periodontology Module
Radiology Module
Surgery Module
TMJ Module

Theoretical – Practical Program

The study plan for the Master's Degree in Advanced Aesthetic Restorative Dentistry is structured over three academic years, during which the student must complete 180 ECTS. The curriculum is designed to offer the student all the necessary skills to become a specialist in advanced aesthetic restorative dentistry.

The current qualification system will be used to assess students.

The 180 ECTS will be distributed over 5 modules. The first two modules will include subjects related to the field of aesthetic restorative dentistry, while the third module will include subjects related to laboratory techniques for oral rehabilitation and the fourth module is dedicated to the Final Master's Degree Project.

Module 1

SCIENTIFIC FOUNDATIONS OF AESTHETIC RESTORATIVE DENTISTRY:

Module 2

ADVANCED AESTHETIC RESTORATIVE DENTISTRY - CLINICAL PRACTICE

Module 3

MULTIDISCIPLINARY AESTHETIC RESTORATIVE DENTISTRY. LABORATORY TECHNIQUES

Module 4

FINAL MASTER'S DEGREE PROJECT

Module 5

OPTIONAL MODULE

Module 1

SCIENTIFIC FOUNDATIONS OF AESTHETIC RESTORATIVE DENTISTRY

This module is made up of two subjects. The first, "Scientific evidence in Aesthetic Restorative Dentistry", is made up of two parts the first brings together all the subjects related to scientific literature on dental pathology and treatments, dental prosthetics, prosthetic implantology, and temporomandibular joint

dysfunction. The subjects will go over both traditional and well-established concepts in the field of aesthetic restorative dentistry, as well as in current scientific literature. The second part will feature scientific methodology, biostatistics, bibliographic research and science communication. The second subject includes topics on studying the new technologies and materials that the industry puts at the disposal of the profession. The UDC and LAB activities will be carried out in the facilities at the University Dental Clinic.

Module 2

AESTHETIC RESTORATIVE DENTISTRY - CLINICAL PRACTICE

This module brings together all the subjects related to clinical practice in aesthetic restorative dentistry that have been covered over the two academic years of the Master's course. The UDC and LAB activities will be carried out in the facilities at the University Dental Clinic. This module also includes the clinical sessions held in the departments of Prosthetics, Pathology, Dental Therapeutics, Periodontics, Orthodontics and Surgery. These are multidisciplinary sessions that will help the student understand their patients' pathologies, prevent new problems and ensure the aesthetic and functional oral rehabilitation of the patient.

Module 3

MULTIDISCIPLINARY AESTHETIC RESTORATIVE DENTISTRY.LABORATORY TECHNIQUES

Module 3 includes the laboratory practice necessary for students to learn how to perform direct and indirect surgical techniques. Students will also learn how to make the necessary prostheses during the treatments carried out in the clinic. In addition, the module includes theoretical and practical laboratory training for removable prosthesis treatments, as well as treatments for temporomandibular dysfunction. The UDC and LAB activities will be carried out in the facilities at the University Dental Clinic.

Module 4

FINAL MASTER'S DEGREE PROJECT

This module will be carried out by the students on the master's course. It is made up of the "Final Master's Degree Project", based on a clinical or research project idea approved during the 1st semester.

During the 1st semester of the master's degree, Final Master's Degree Project ideas will be submitted for approval from the Master's teaching staff. During the 2nd, 3rd and 4th semesters, students will complete the Final Master's Degree Project. Module 4 is worth 6 ECTS, and students should have learned the

methods required to carry out for the practical part of the research and actively develop their "Final Master's Degree Project".

The content of the FINAL MASTER'S DEGREE PROJECT may have a clinical or research profile depending on each student and with the approval of the Master's teaching staff.

The FINAL MASTER'S DEGREE PROJECT should be carried out throughout the Master's course under the supervision of the corresponding tutor. At the beginning of the course the Master's coordinator will assign each student with a tutor, depending on their chosen study topic.

Module 5

OPTIONAL SUBJECT MODULE

Surgery, implants, periodontics, endodontics.

In Module 5, the student will choose between one of the subjects indicated. Each one of the subjects will be taught by the corresponding department.

Courses and conferences

During their studies, all our students will be expected to attend conferences and courses imparted by renowned specialists in the field of restorative dentistry. They are also expected to attend scientific conferences, such as those organised by the Spanish Stomatological Protheses and Aesthetics Association (Sociedad Española de Prótesis Estomatológica y Estética) and the Spanish Conservative Dentistry Association (Sociedad Española Odontología Conservadora), and to participate with oral communications and posters. Students will be notified with sufficient time to allow them to programme any activities that may be affected by the timing of these courses and conferences.

They are also expected to publish the results of their research in high-impact journals.

Methodology and evaluation

The student will be assessed in a number of different ways. Continuous assessment will be the main method used.

- In the laboratory sessions, students will be assessed on their direct and personal participation in the activity. Students will be assessed on how well they have acquired the knowledge and skills necessary to handle laboratory equipment in terms of dental and biomedicine materials.
- In the seminars, students will be assessed on their direct and personal participation in the seminars themselves. Students will be assessed on their theoretical, technical and clinical knowledge related to

the patient and their pathology. Additionally, students will be evaluated on their ability to solve problems in clinical situations where not all the information is provided, and how clinical cases are presented (ability to communicate, spoken expression and body language, use of bibliographic databases and computer resources, and so on). Clinical cases will be presented in a suitable computer format (like "Microsoft Office PowerPoint Presentation") and will be included on the clinical documentation of each patient. Teaching staff should be able to be consult them at any time.

- After the FMP has been assessed by the Scientific Committee, the student will be able to defend their Final Master's Degree Project before a panel chosen by the Board.

Material*

*provisional list

In order to study for this master's all students must equip themselves with:

- Camera reflex
- Rotary instruments (Contra-angle, Handpiece)
- Surgical instruments
- Electronic spatula for wax modelling
- Semi adjustable articulator (Artex)
- A list of material will be provided at the beginning of the course.

Materials to be purchased by the student:

- Personal protection face shield
- Full protection glasses, except in the case of wearing glasses or magnifying glasses, which will not need full protection glasses.

General admission requirements

To be accepted onto the Master's Degree in Advanced Aesthetic Restorative Dentistry, you will require the following:

1. Either a degree in Dentistry, or a degree in Medicine specialising in Dentistry.
2. To be enrolled on or have complied the MUORE course (Master's Degree in Aesthetic Restorative Dentistry). The access routes are as follows:
 - a) Enrolled on MUORE*: (Must be enrolled on MUORE part time from the 2nd year onwards)
1st year: 60 ECTS MUORE
2nd year: 40 ECTS MUORE + 20 ECTS MREA
3rd year: 20 ECTS (2nd year of MUORE) + 40 ECTS MREA
 - b) If you have completed MUORE: The 120 ECTS for MUORE will be validated, with the student completing the remaining 60 ECTS for MREA.

All the ECTS completed and passed in the MUORE will be accepted as part of the MREA study plan.

Similarly, applicants may be accepted if they hold a degree from education institutions outside the European Area of Higher Education without their degrees being officially approved, if the University deems that the applicant has received an education that is equivalent to official Spanish university degrees and that provides access to postgraduate learning in the country that issued the degree. Access by this means shall not, in any way, imply the recognition of the applicant's previous degree, nor its recognition for any purpose other than studying for the Master's degree. This is all without prejudice to the other entry requirements set out in current legislation or established later with regard to being accepted to study on an official Master's degree course.

3. A personal interview: The personal interview will be carried out with the Master's Coordinator and Director. Academic merits will be valued, as well as the ability to work in a team and professional experience.
4. English test: An oral/written exam (B2 level recommended)

Admission process:

The admission tests consist of a balanced assessment of your academic record, personal profile, motivations and skills.

Body responsible for admission.

The body responsible for admission is made up of the director of the Master's course, the Master's coordinator and the director of the department. The admission's body decides which students will be admitted based on the considerations detailed above.

Facilities

UIC Barcelona believes that clinical practice on patients is crucial for training high-level professionals. The differentiation of our programs is marked by practice on patients.

The University Dental Clinic has 88 dental boxes, all of them equipped with state-of-the-art dental technology: 88 generalist booths, including 4 booths used for special patient care and 16 booths for surgeries and for conscious sedation.

The University Dental Clinic made approximately 82.000 visits in the last year.

The Clinic has two prosthetic dental laboratories, with the most up-to-date CAD/CAM units that allow students to apply the latest techniques in all areas of dentistry.

The equipment that this laboratory includes are:

- 4 milling machines: Lyra, Cerec, Roland and VHF K5
- 11 intraoral scanners (2 Carestream and 2 Trio Move), 1 Cerec yielded by Henry Schein, 1 3M yielded by 3M, 1 Trios 3Shape yielded by ETK Implants Iberia, 1 Trios 3Shape by Straumann, 1 Primescan by Dentsply, 1 Medit by Klockner and 1 Itero by Align.
- 1 3D printer
- 6 exocad design programs, 1 of 3shape and 2 of Cerec.

We have created **6 new laboratories**, one of them focused on dental research.

1 pre-clinical laboratory with **95 training simulators** and **digital radiology**. This facility allows students to train with augmented reality techniques before treating patients. With this step, virtual reality is introduced into the preclinical practices of students, helping to improve their training and it is also a great tool as a new teaching methodology. It is one more step in the innovation and improvement of the training of students. We also have a scanner and digital printer in the same laboratory.

UIC Barcelona also has 1 dental research laboratory.

2 diagnostic imaging rooms for taking panoramic dental X-rays and latero-lateral and posterior-anterior telerradiographies, periapical radiographs and CBCT scans.

Digital technology and implant-prosthetic planning programs allow students to train and work from the beginning with the latest technologies.

- Possibility of broadcasting dental interventions live.
- Smart storage room for delivery and collection of material.
- Sterilization unit for medical materials and instruments.

All resources are up-to-date and the university has agreements with different industries in the sector, thus strengthening ties between industry, universities and RDI.

The technology available to our students brings them closer to the reality of the day to day and prepares the student in all theoretical and practical aspects to be able to work in the clinic with maximum safety and professionalism.

We also have dentistry management software to keep track of students' and patients' progress.

We have 6 endodontic microscopes (Zeiss and Zumax)

Places in classrooms

2,355 places in the classrooms

88 places in the Clinic (dentistry booths)

192 places in gyms

120 places in IT classrooms

420 places in laboratories

415 m2 of laboratory facilities 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.

402 places for reading across the Library and three study rooms.

Basic information

Calendar

From September 2023 to July 2026 (except the month of August)

Schedule

Monday to Friday, mornings and afternoons

Pre-registration date

From January 2023

Fees

1r Course

23.052,00€*

2o Course

22.368,00€*

3rd Course

21.684,00€*

*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 the second and third years (2024-2025 and 2025-2026) has not yet been approved by the University's Board of Governors and is subject to an index-linked increase.

Places available

Participation in this programme is limited.

Accreditation

180 ECTS, Master's Degree in Advanced Aesthetic Restorative Dentistry and University Master's Degree in Aesthetic Restorative Dentistry.

Documentation required for pre-registration

- A filled-in pre-registration form
- 1 attested copy of the corresponding degree qualification (with an original stamp)*.
- 1 Academic Certificate of qualifications (original or attested photocopy)*.
- A photocopy of your national ID card (DNI) or passport.
- Payment of €90** and payment receipt sent by mail.(Except for former UIC Barcelona degree students).
- Copy of CV listing courses and conferences attended.
- 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 programme must provide a list of the qualifications they have obtained up until the date they register.

**Not reimbursable for administration fees.

Send to:

Paola Lago
Marta Utset
infodonto@uic.es

Faculty of Dentistry
Universitat Internacional de Catalunya
Hospital General Building
C/ Josep Trueta, s/n
08195 Sant Cugat del Vallès (Barcelona)