

D.R. 224 del 3 agosto 2022

L'UNIVERSITÀ MEDICA INTERNAZIONALE DI ROMA UNICAMILLUS

Organizza il Master in

DIGITAL DENTISTRY

(A.A. 2022/2023)

Titolo	DIGITAL DENTISTRY
Direttore	Prof. Carlo Mangano
Obiettivi	The introduction in dentistry of tools such as intraoral, desktop and facial scanners, digital condylographs, and cone beam computed tomography (CBCT) now makes it possible to acquire all 3D patient data. These data, automatically reprocessed by artificial intelligence software, make it possible to obtain a virtual 3D model of the patient. The "virtual patient" is an essential tool for diagnosis, assisted by artificial intelligence, and for the planning of surgical, prosthetic and orthodontic treatments. The software, together with modern virtual and augmented reality systems (holography), allow you to plan the treatment in 3D and discuss it, even remotely, with the dental laboratory; moreover, they represent key tools for communicating with the patient. Finally, tools such as milling machines, 3D printers and laser sintering units allow the creation of fixed and removable prosthetic restorations (also supported by implants), models and surgical templates, bite splints, aligners, which are used in the clinic. Digital technologies transform dentistry, increasing diagnostic accuracy and the appropriateness of therapies. The procedures become "minimally invasive" and "biologically-inspired": ceramic materials are used, which guarantee exceptional biological and aesthetic performance, and the patient is increasingly at the center of the treatment, thanks to the use of "custom-made solutions." Designed and manufactured for the specific anatomical-functional needs of the case.
Articolazione e	Master Start Date: MAY 2023
metodologia del	
corso	Location: Theoretical lectures, hands-on and the internship will take place at Istituto Stomatologico Toscano
	Language: English
	Final Certification and Formative Credits:

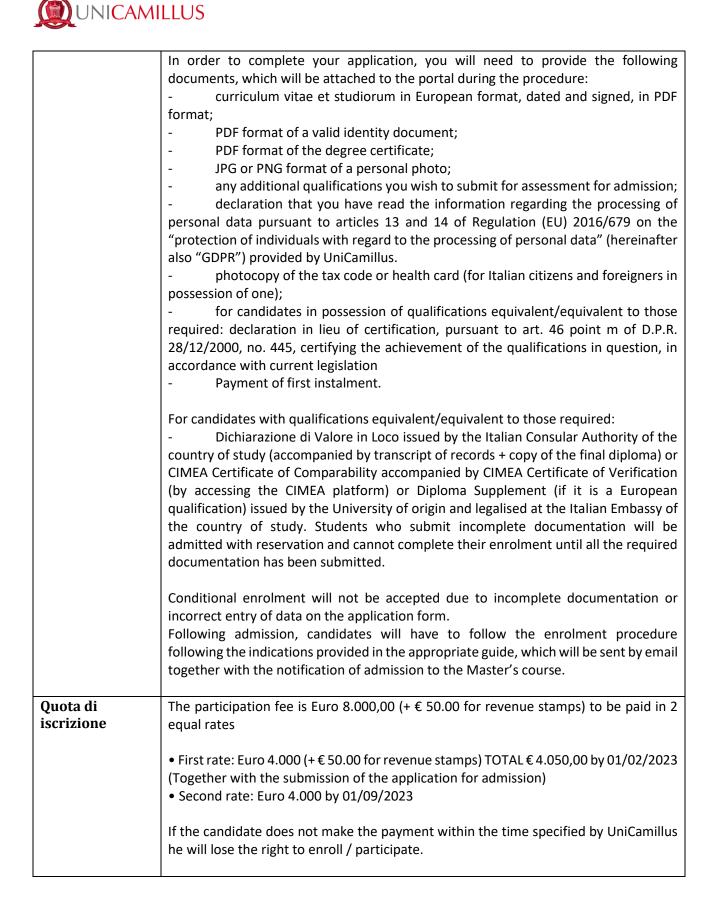


	All candidates who have completed the planned training and passes the final exam will receive a second level Master's Degree in Digital Dentistry with the assignment
	of 60 credits(CFU)
	Duration:
	The Master's program lasts 12 months and includes a total time of 1.500 hours,
	divided into:
	• practical activity and lectures and seminars
	•internship (750 hours);
	• study and individual preparation activities including the preparation of the
D	final exam.
Programma didattico	DISCIPLINA
didattico	Module 1: 3D Data Acquiring
	May 2023
	• Digital cameras, how to use them and which ones are best for dentistry.
	 Goals, which ones to use in the studio. Lighting sources and types of flashes, which ones to use
	 Lighting sources and types of flashes, which ones to use. Hands on
	 Hands on 3D radiology: the Cone Beam (CBCT), fundamental principles and clinical
	applications.
	CBCT and artificial intelligence software: from assisted diagnosis to the virtual
	patient
	General principles of the optical impression.
	Characteristics of the main scanners on the market.
	Accuracy and precision.
	Scanning technique in fixed prosthesis.
	 Scan bodies and scanning techniques in implant prosthesis.
	• Optical impression taking in different clinical conditions and with different intraoral
	scanners + Hands on
	Face scanner + Hands on
	• Digital condylography: fundamental principles and clinical applications + Hands on
	 Augmented virtual reality: fundamental principles and clinical applications +
	Hands on
	Modulo 2 Digital Prosthodontics
	September 2023
	• Fixed prosthetic restoration of natural teeth in the digital age: from intraoral
	scanning to clinical application, passing through the laboratory phases
	 The new ceramic materials: mechanical, aesthetic properties and biological behavior
	• Fixed prosthetic restoration on implants in the digital age: from single crown to full arch
	New solutions for chairside prosthetic restoration. Fundamental principles and
	clinical applications + HANDS-ON
	• Digital smile design (DSD): fundamental principles and clinical applications +
	HANDS-ON



	 CAM milling and software: fundamental principles and solutions on the market + HANDS-ON 3D printing of resins and ceramics: fundamental principles and clinical applications 3D printing: HANDS-ON 3D printing of metals (laser sintering): fundamental principles and clinical applications. Root-form, subperiosteal, maxillofacial dental implants Subperiosteal implants in the treatment of severe atrophies Module 3 and 4: Digital Guided Surgery January 2024 / March 2024 Static guided implant surgery: from the collection of information to the formulation of the diagnosis and treatment plan Static guided implant surgery: from the manufacture of surgical guides to clinical execution + HANDS-ON Guided implant surgery in complex cases + HANDS-ON Guided implant surgery for zygomatic implantology: fundamental principles and clinical application Guided zygomatic surgery: HANDS-ON
	 -Dynamic guided implant surgery: fundamental principles and clinical application Dynamic guided implant surgery: HANDS-ON Guided bone regeneration with custom-made scaffolds: material biology, fundamental principles and clinical applications + HANDS-ON Custom-made meshes in bone regeneration + HANDS-ON
	TOTALE CFU 60
Destinatari e Requisiti di ammissione	 One of the following degree titles are required to be admitted to the Professional Master Program (or near graduation by the Master enrolment deadline): Master's degree and / or specialist degree in dentistry and dental prosthesis; Master's degree and/ or specialist degree in medicine and surgery with specialization in Dentistry or qualification for the practice of dentistry; Master's degree in Medicine and Surgery Other candidates who can also apply: Candidates in possession of an Academic Degree equivalent to those listed above obtained in a foreign University. Candidates in possession of an Academic Degree obtained abroad and equivalent in duration and content to those listed above. The University reserves the right to admit candidates with different qualifications but relevant to the Master's course
Modalità di iscrizione	The application must be submitted via the GOMP student portal following instructions given in the GUIDE by by 1st february 2023.

UniCamillus – Saint Camillus International University of Health Sciences – Via di Sant'Alessandro 8 - 00131 Roma www.unicamillus.org info@unicamillus.org PEC: unicamillus@pec.it Tel. +39 06 40 06 40 Codice Fiscale 97962900581



F.to Il Rettore Giovan Crisostamo Profita