



UNIVERSITÀ DEGLI STUDI DI GENOVA

UNIVERSITY OF GENOA - ITALY

DEPARTMENT OF SURGICAL SCIENCES AND INTEGRATED DIAGNOSTICS

FULL-TIME MASTER COURSE IN IMPLANTOLOGY AND PROSTHODONTICS

The International Master in Implantology and Prosthodontics is designed to offer comprehensive training in all aspects of implantology, bone augmentation and digital / conventional implant prosthodontics.

This specialty comprises the diagnosis, management and treatment of missing and hopeless teeth using a combination of fixed implant supported prostheses. In addition to this, the clinician will also train in laboratory procedures as well as in the diagnosis of clinical cases. It provides a theoretical knowledge, alongside clinical teaching, attendance at live surgical interventions and supervised clinical practice, including diagnosis, treatment planning and treatment sessions.

The practitioner will be able to independently plan and implement therapy concepts for the treatment of patients requiring dental implant prosthetics. In addition, they will also have the skills required to select, analyze and fully integrate into their own practices a full range of treatments and knowledge in the field of dental implantology

This 24-month program provides an advanced level of education for dental practitioners who wish to remain at the cutting edge of contemporary dentistry. This program is aimed to train them to be able to meet and deliver with confidence the restorative needs of patients with high number of missing teeth and /or high aesthetic expectations by offering them lectures, seminars, case presentations, research and valuable clinical experiences that will explore thoroughly the most important and recent topics in dental implantology. Scientific documentation, as well as clinical applications and practical components will be presented by international experts of whom are at a specialist level, invited by the staff of the University of Genoa

Strong emphasis is placed on the clinical component, which focuses on the most modern approaches to dental implantology, including software and digital surgical planning for modern aesthetic treatment methods wherein a great portion of this program is dedicated to hands-on experience.

The master program is also structured to provide proficiency in scientific methodology and



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UNIVERSITY OF GENOA - ITALY

DEPARTMENT OF SURGICAL SCIENCES AND INTEGRATED DIAGNOSTICS

clinical expertise in mastering the most advanced techniques in smile design (including occlusion) and treatment planning. Areas covered will include basic implantology, soft tissues augmentation procedures, advanced and complex implant cases, single - multiple implant restorations and full mouth rehabilitations.

Upon successful completion of the International Master in Implantology and Prosthodontics program, participants will have a thorough understanding of modern concepts in aesthetic dentistry and will have exhibited clinical competence in the diagnosis and oral health care of patients desiring qualitative implant treatment. The participants will have the ability to successfully complete, diagnose and recommend a treatment plan that may include components of several oral health specialty areas in order to attain a maximum successful result.

All practical works will be carried out at the premises of the University of Genoa, where students will use state-of-the-art instruments and technology provided by the University as well as external companies. Similarly, the University of Genoa has signed collaboration agreements with a number of dental companies to carry out research studies because research is an integral part of the program. Participants must perform and complete original research projects and they must present their own thesis to fulfill the master requirements. This master program encourages its residents to present their research in renowned scientific meetings and to submit articles for publication.

This advanced program provides a learning environment to train new leaders in the discipline of Implantology for the future. Successful completion of the course shall confer the academic degree of "International Master in Implantology and Prosthodontics".

Educational Objectives

To provide postgraduate students with the confidence and ability to enhance their current clinical practice by incorporating the latest advances in technology and research.

Areas covered:

1. (i) diagnosis, prognosis and prevention of periodontal disease.
2. (ii) analysis, diagnosis, and indications for dental implants.
3. (iii) analysis, diagnosis and treatment of hard and soft tissues atrophies



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UNIVERSITY OF GENOA - ITALY

DEPARTMENT OF SURGICAL SCIENCES AND INTEGRATED DIAGNOSTICS

- To provide an innovative program which enhances current knowledge and clinical skills in new technologies in Implantology and Prosthodontics.
- To present sound academic theory and high quality practical training by world class mentors
- To deliver learning using the latest technology enabling students to access the course, while maintaining their commitment to their clinical practice.

The course is International in character with affiliations with European and American universities. The courses will be conducted in English and it's a full time master degree.

1. Admission Criteria

- Applicants must be able to satisfy the general admissions criteria of the university.
- Applicants must provide evidence of their primary dental qualification from a recognized institution.
- Applicants should have completed a preliminary fellowship course either in restorative dentistry, endodontics, periodontology, implants and laser
- Applicants will make payment as required of course fees as applied by the University of Genoa.

2. Faculty Principals:

Prof. Paolo Pera

Prof. Stefano Benedicenti (Director).

Prof. Armando Silvestrini Biavati

Prof. Maria Menini

Professor a.c Nicola De Angelis



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UNIVERSITY OF GENOA - ITALY
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Professor a.c. Massimo Frosecchi

Additional teaching faculty to be drawn from Internationally-accredited experts

Course Duration:

Two Years. September 2018- September 2020

Location:

Università degli Studi di Genova DEPARTMENT OF SURGICAL SCIENCES

16132 Genova (Italia) – Pad. 4 Largo Rosanna Benzi, 10 – tel. 010-3537309 fax 010-3537020
E- mail: info@jmservice.org benedicenti@unige.it

University of Genoa – D.I.S.C. - Department of Surgical and Diagnostic Sciences, San Martino Hospital pavilion 4, Largo R. Benzi 10, Genoa, Italy

Cost:

€ 30266,00 in three installments:

1. 10266,00 € (Euro) at the acceptance of the application form
2. 10000,00 € (Euro) as second installment before March 2019
3. 10000,00 € (Euro) as final installment before March 2020

CFU/ECTS Credits: 60

Credits are accrued during the course and are equivalent to 1500 verifiable hours of continuing education.

Information: E-mail: benedicenti@unige.it

Maximum number of participants: 40 Students Registration deadline: 30 July 2018

Course program and dates for 2018 – 2019-2020



UNIVERSITÀ DEGLI STUDI DI GENOVA

UNIVERSITY OF GENOA - ITALY

DEPARTMENT OF SURGICAL SCIENCES AND INTEGRATED DIAGNOSTICS

- The Master course will be conducted with English as the spoken language.
- The course shall continue as a mixture of on-campus lectures and practical sessions (San Martino Hospital, Pavillion 4, Genoa, Italy) and personal student study.
- The on-campus theoretical lessons shall be conducted as three individual weeks, each week running from Monday morning (start 09.00) to Saturday lunchtime (13.00) inclusive.
- Students shall be liable for hotel and flight expenses.
- The Practical sessions will take place at Dental School from September 2018 to September 2020.

2018 Dates for in-campus attendance for theoretical lessons.

- September 2018 Monday 24th to Saturday 29th

Each day shall run from 09.00 -17.00. Detailed programs for each period of lectures and practical session shall be made public in advance.

Dates 2019-2020: To be announced

Scientific Program

Unit 1

Topics

Foundations of dental implantology

- Overview of the development of dental implantology
- Anatomy and physiology
- Risk factors in implant dentistry
- Case analysis
- Periodontal aspects in implantology: implants in PCP and soft tissues evaluation
- Wound healing: bone, soft tissue; wound healing defects



UNIVERSITÀ DEGLI STUDI DI GENOVA

UNIVERSITY OF GENOA - ITALY

DEPARTMENT OF SURGICAL SCIENCES AND INTEGRATED DIAGNOSTICS

- Hard tissues grafting : indications, techniques bone replacement materials; membranes
- Patient evaluation: anamnesis, absolute/relative contraindications
- Tooth rehabilitation (endodontics/periodontics) or extraction

Oral diagnostics and treatment planning

- Indication; classification; guidelines
- Oral hygiene and pre-treatment (periodontal / tooth rehabilitation)
- Clinical bite and function analysis, occlusion, TMJ
- Picture diagnostics (x-rays, CT)
- 3-D bone analysis (standard, CT supported, digital surgical and prosthetical planning)
- Wax-up/set-up, involvement of dental laboratory

Methods of scientific work (I)

- Literature research via electronic media

Introduction to preparation of Master's thesis

Hands on

Aims: The first unit aims to provide the knowledge about the indications and the contra indications to the implant placement. Emphasis will be given to the periodontal disease as risk factor to the implant therapy. Surgical anatomy and bone / soft tissues biology will be covered throughout the unit, as well as all the diagnostic tools including 2D and 3D imaging and study.

Unit 2

Topics

- Standard positioning templates, computer assisted guided surgery

Preparation to the surgery:

- Required instruments and equipment
- Hygiene regulations and their implementation
- Dental unit , patient and team preparation
- Anesthetic and medications
- Postoperative treatment
- Immediate and early postoperative complications

Implant systems

- Implant design (macrostructure)
- Implant surfaces (microstructure)
- Dental implant abutment, indexed / non-indexed abutment
- Mechanical fixings: different abutments connections

Standard surgical procedures

- Flap design, transfer of implant position, flapless surgery
- Standard technique of implant site preparation



UNIVERSITÀ DEGLI STUDI DI GENOVA

UNIVERSITY OF GENOA - ITALY

DEPARTMENT OF SURGICAL SCIENCES AND INTEGRATED DIAGNOSTICS

- Alternative tools for the implant site preparation
- Healing periods, timing (early, late, immediate treatment records)
- Suturing technique

Methods of scientific work (I)

- Literature research via electronic media

Introduction to preparation of Master's thesis

Hands on

Aims: the unit aims to provide the knowledge on the general principles of the oral surgical environment to reduce the complication rate as well as to the pharmacology of the dental anesthetics. The section of dental implant materials will be also covered combined with the conventional and basic implant placement.

Unit 3

Topics

Advanced surgical techniques

- Bone augmentation using synthetic, xenogenous, allogenuous materials
- Bone augmentation using oral autogenous bone (block, particulate)
- Membranes, membrane techniques
- Sinus augmentation, one-sided/two-sided
- Treatment options of severely reabsorbed maxilla and mandible
- Soft tissue management
- Pedicle flap soft tissue transplants
- Free connective tissue transplants
- Free epithelial/connectival transplants
- Vestibulum reconstruction

Methods of scientific work (I)

- Literature research via electronic media

Introduction to preparation of Master's thesis

Hands on

Aims: the unit aims to provide the foundations on the advanced surgical procedures required for the implant placement in case of bone atrophy. A wide description of the surgical techniques as well as of all the biomaterials available will be given.

Unit 4

Topics



UNIVERSITÀ DEGLI STUDI DI GENOVA

UNIVERSITY OF GENOA - ITALY

DEPARTMENT OF SURGICAL SCIENCES AND INTEGRATED DIAGNOSTICS

Aftercare (postoperative treatment) / management of complications

- Documentation and recall
- Statistics: success and survival rates, failure rates
- Mucositis and peri-implantitis: diagnosis and treatment
- Laser therapy for the management

Methods of scientific work (I)

- Literature research via electronic media

Introduction to preparation of Master's thesis

Hands on

Topics: the unit aims to provide all the foundations to the long term survival rate and success rate of dental implants. The most modern approaches with laser for the treatment of the mucositis and the periimplantitis will be discussed and analyzed.

Unit 5

Topics

Basic prosthetic treatments

- Temporary treatments
- Techniques for the forming of emergence profiles
- Taking of impressions / registration / fabrication of models / articulator
- Prosthetic workflow with conventional and digital tools
- Choice of abutment and individualization
- Abutment transfer model-mouth
- Occlusal anatomy and transfer of load
- Dental laboratory workflow and solution analysis
- Materials selection

Methods of scientific work (II)

- Assessment of scientific theory using evidence classes
- Data collection, statistics

Construction of scientific studies

Hands on

Aims: the unit aims to give the foundations on the prosthetic tools starting from the basic impression technique . Importance will be given to creation of the emergence profile which ensures the long term stability of the implant restoration. A laboratory technical session will be also given to understand the workflow of the different restorations.

Unit 6



UNIVERSITÀ DEGLI STUDI DI GENOVA

UNIVERSITY OF GENOA - ITALY

DEPARTMENT OF SURGICAL SCIENCES AND INTEGRATED DIAGNOSTICS

Topics

Advanced and complex cases

- Immediate loading and immediate restorations
- Aesthetic area management- DSD
- Full arch rehabilitations
- Materials selection

Methods of scientific work (II)

- Assessment of scientific theory using evidence classes
- Data collection, statistics

Construction of scientific studies

Hands on

Topics: the unit will cover the most modern technologies for the aesthetic smile design and the concepts of functional and not-functional immediate loading restorations for full mouth rehabilitations.

Unit 7 Clinical case presentation

Topics:

Detailed guidelines for case presentation and photography will be provided. Photographic documentation and written descriptions of clinical cases will be submitted online, using a pre-formatted template file for assessment purposes.

Minimum requirements - images will include before, after and significant steps during the treatment to portray the use of the chosen technique.

Aim:

The outreach of the degree is determined as a qualified level of competence in both theoretical and practical aspects of implant dentistry. The Master diploma level shall be the submission of 5 (five) case studies in a chosen treatment. A formatted template shall enable a standardised approach to clinical case submission. Additional to this unit shall be a guide to photographic techniques and MS PowerPoint techniques (Mac equivalent). Submission of clinical cases shall be in hard copy and digitised formats.



UNIVERSITÀ DEGLI STUDI DI GENOVA

UNIVERSITY OF GENOA - ITALY

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Unit 8 Thesis 5 CFU

Aim: The dissertation is the final element of the Master course. Each student shall be required to submit a 15,000 word thesis. A member of the faculty shall be assigned to the candidate, depending on the chosen area of the thesis. This mentor shall be responsible for guiding the student through thesis development, writing and presentation process (as per university current guidelines).