



Universita' 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: benedicenti@unige.it

International Master of Science in Advanced Aesthetics and Restorative Dentistry

The International Master of Science in Advanced Aesthetic & Restorative Dentistry is designed to offer comprehensive training in all aspects of aesthetic, contemporary restorative dentistry and implant prosthodontics.

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

Strong emphasis is placed on the clinical component with a focus on a broad spectrum of modern aesthetic treatment methods and a great portion of this program is dedicated to hands-on experience.

The program is also structured to provide proficiency in scientific methodology and clinical expertise in mastering the most advanced techniques in smile design (including occlusion) and treatment planning. Areas covered will include ceramic veneers, ceramic posterior restorations, all-ceramic systems, computer-generated ceramic restorations, composites (direct and indirect restorations), contemporary esthetic materials, periodontal esthetics, and esthetic considerations in implants as well as cosmetic uses of Laser, of Botulinum toxin A and facial fillers for aesthetic perioral enhancement.

Upon successful completion of the International Master of Science in Advanced Aesthetic & Restorative Dentistry program, participants will have a thorough understanding of modern concepts in aesthetic dentistry and exhibit clinical competence in the diagnosis and oral health care of patients desiring qualitative esthetic treatment. The participants will have the ability to successfully complete a smile analysis, diagnose and recommend a treatment plan that may include components of several oral health specialty areas in order to attain a maximum esthetic result.

All practical work 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.

Research is an integral part of the program. Participants must perform and complete original research projects. The participants are required to present a personal master thesis to fulfil the thesis requirements. The program encourages the 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 and specialty of Aesthetic & Restorative Dentistry for the future. Successful completion of the course shall confer the academic degree of “International MSc in Advanced Aesthetics and Restorative Dentistry”.

Educational Objectives

λ 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:

- (i) diagnosis, prognosis and prevention of dental disease.
- (ii) treatment, restoration, management of developmental defects and discoloration, and rehabilitation of severely damaged dentition using restorative techniques customized for the patient needs.
- (iii) Strong emphasis will be placed in accomplishing the above to meet the patient's biological, functional and esthetic wishes.

λ To provide an innovative programme which enhances current knowledge and clinical skills in new technologies in Aesthetic and Restorative Dentistry.

λ To present sound academic theory and high quality practical training by world class mentors

λ To deliver learning using the latest technology enabling students to access the course, whilst

maintaining their commitment to their clinical practice.



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The course is International in character with affiliations with European and American universities. The courses will be conducted in English.

Admission Criteria

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

Faculty Principals:

| | | | |
|---------------------------------|---------|-------------|-------------|
| Professor | Stefano | Benedicenti | (Director). |
| Professor | a.c. | Vasilios | Kaitsas |
| Professor a.c. Antonio Signore | | | |
| Professor a.c. Nicola Deangelis | | | |

Additional teaching faculty to be drawn from Internationally-accredited experts

Course Duration: Two Years. January 2016-December 2017

Location:

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: □

€ (Euros) 30.217,00 in three instalments:

- (i) € (Euro) 10.217,00 at the acceptance of the application form
- (ii) € (Euro) 10.000,00 as second instalment before July 2016
- (iii) € (Euro) 10.000,00 as final instalment before 28th June 2017.

CME Credits:

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

Information: E-mail: g.servadei@rosadeventi.com E-mail: benedicenti@unige.it

Maximum number of participants: 40 Students
Registration deadline: October 2015

Course program and dates for 2016 – 2016

- λ The MSc course will be conducted with English as the spoken language.
- λ 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 conducted at home and on-line.
- λ The on-campus meetings shall be conducted as three individual weeks, each week running from Monday morning (start 09.00) to Saturday lunchtime (13.00) inclusive.



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λ Students shall be liable for hotel and flight expenses.

2016 Dates for in-campus attendance.

λ February 2016 Monday 22nd – Saturday 27th

λ June 2016 Monday 20th – Saturday 25th

λ October 2016 Monday 3rd – Saturday 8th

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

Dates 2017: To be announced

Scientific Program

Unit 1: The Foundations of advanced Restorative and Aesthetic Dentistry □

Topics:

- Anatomy and foundational occlusion
- Basic disease processes
- Current concepts in diagnosis, radiology and clinical photography.
- Smile design and treatment planning
- Photo-polymerization
- Foundations of material science: adhesive-systems and composite materials
- Laser technology in aesthetic and restorative dentistry
- Operatory microscope
- Ultrasound devices for restorative dentistry
- Literature review
- Hands on

Aims

This first unit aims to provide the necessary foundations for contemporary clinical practice and includes relevant clinical anatomy, disease etiology and pathogenesis, current concepts in diagnosis including the use of new technology. It also covers a foundation course in occlusion, dental material science and the latest in radiology and imaging. A selective literature review of theoretical and clinical articles will be studied and assessed.

Unit 2: Anterior Aesthetic

Topics:

- The colour of natural teeth
- Anatomical layering technique
- Finishing and polishing technique
- Direct composite restorations in anterior dentition
- Bleaching of vital and non-vital teeth



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- Foundations of all-ceramic systems
- Indications and preparation technique of veneers and crowns
- Temporisation and adhesive luting procedures for veneers and crowns
- Literature review
- Hands on

Aims

This unit aims to provide current theoretical and clinical advances in anterior aesthetics, as well as a comparative evaluation of the various techniques and modalities available including: bleaching, composites, veneers, and crowns. A selective literature review of theoretical and clinical articles will be studied and assessed.

Unit 3: Posterior Aesthetics Topics:

- Indications and preparation technique for Inlays, Onlays, Overlays and Crowns
- Temporisation and adhesive luting procedures for Inlays, Onlays, Overlays and Crowns
- CAD-CAM technology
- Restorative procedures of endodontic treated teeth
- Literature review
- Hands on

Aims:

A thorough discussion of current techniques, materials and clinical advances in posterior aesthetics, which includes a comparative evaluation of the various techniques and modalities available including; composite restorations, inlays, onlays, crowns and aesthetic approaches for the restoration of endodontically treated teeth.

Unit 4: Interdisciplinary treatment and clinical research methods

Topics:

- Planning of complex treatment procedures
- Diagnostic tools
- simple orthodontics
- current concepts in endodontics
- Managing the multidisciplinary treatment
- Evidence Based Practice
- Study Design
- Literature review
- Hands on

Aims:

This unit covers treatment planning of the complex aesthetic case. It includes current concepts in endodontics moving up to simple orthodontics and aims to provide an understanding of the role of being part of an interdisciplinary team to ensure comprehensive aesthetic restorative care to patients.

The unit aims also to develop the student's competence in the design of clinical research projects. It will provide an understanding of the data collection process in clinically related research projects. It will also enable the student to



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perform a simple analysis and interpretation of data collected by a clinical research project. Upon completion of this unit the candidate will have a basic understanding of research methods and will be able to conduct or lead a basic clinically related research project.

Unit 5: Surgical management and implant placement in esthetic sites

Topics:

- crown lengthening procedures
- root coverage procedures and biotype
- soft tissues augmentations procedures
- prosthetical driven implant placement
- hard and soft tissues preservation surrounding dental implants
- soft tissues conditioning
- CAD-CAM abutments for long terms tissues preservation
- Literature review
- Hands on

Aims:

this unit is designed to train dentists in Advanced Periodontology and Implant placement in esthetic areas, by equipping them with knowledge that are evidence-based, so that they will be able to plan, initiate and carry out the best treatment plan for their patients.

Unit 6: Cosmetic uses of Laser, of Botulinum toxin A and facial fillers for aesthetic perioral enhancement

Topics:

- facial anatomy, features and aging facial changes
- effective aesthetic treatment planning
- Overview of current application of pulsed light (IPL) and laser light
- Botulinum Toxins for aesthetic and therapeutic use and their applications
- properties of the various facial fillers for individual aesthetic enhancement
- "best practice" standards for injection techniques
- literature review
- hands on

Aims:

This unit covers a thorough understanding of facial anatomy to allow safe and effective aesthetic treatments including the proportions and dimensions that create beauty, the aging facial changes in both female and males to develop an expert aesthetic sense for optimal treatment planning. It also covers the pharmacology of the various Botulinum Toxin, the properties of facial fillers and the appropriate injection techniques for effective treatment. Moreover this topic will cover laser procedures in esthetic dentistry and medicine.

Unit 7 Clinical case presentation



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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 esthetic dentistry. The Master diploma level shall be the submission of 5 (five) case studies in a chosen esthetic 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.

Unit 8 Thesis 5 CFU

Aim: The dissertation is the final element of the MSc 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).



CLINICAL REQUIREMENTS FOR MASTER OF SCIENCE IN ESTHETIC 2016-2017

Restorative modules - Hands on sessions

More than one-third of the program is dedicated to hands-on experience with in-depth opportunities for the participant to gain confidence and skill with contemporary direct and indirect techniques in aesthetic and restorative dentistry.

The practical sessions will be based on the latest state-of-the-art for aesthetic in anterior and posterior dentition, providing predictable tooth preparations and outcomes, using a variety of new materials and procedures.

The practical sessions will comprise

- Shade selection
- Anatomical layering technique
- Direct composite veneer in anterior dentition (class IV)
- Direct composite posterior dentition (class II)
- Finishing and polishing technique
- Learning the process of doing mock-ups for the patient
- Preparation technique for Veneer, Inlays, Onlays, Overlays and metal free Crowns, including impression, temporisation and luting procedures
- adhesive cementation of a glass fibre post and build-up
- digital impression and CAD CAM technologies

Implant and periodontal modules

During the modules dedicated to these topics the student will improve their confidence with the basic surgical procedure, to lead up to most difficult and strategical cases.

In details each student will do:

- crown lengthening procedures
- root coverage with different flap approaches
- implant placement
- immediate implant placement
- temporary crowns for immediate loading
- soft tissues conditioning and grafting procedures
- Impressions: pick up technique, and customised pick up
- Digital impression
- CAD CAM restorations

PROGRAM OF THE 1ST MODULE 2017

Day 1 Monday, 02/13:

Prof.Dr. Myron Nevins - USA. Associate Professor of Periodontology at the Harvard School of Dental Medicine, Clinical Professor of Periodontology at the Temple University School of Dentistry, Adjunct Professor of Periodontics at the University of North Carolina.

Crown lengthening according to modern concepts in periodontology.

Day 2 Tuesday, 14/02:

Prof. Vassilios Kaitsas - Greece. Visiting Professor University of Thessaloniki, Assistant Professor University of Genova.

Morphology and wax modeling on scale 1: 1 of the front teeth. Hands-on

Day 3 Wednesday, 02/15:

Prof. Vassilios Kaitsas

Morphology and wax modeling on scale 1: 1 of the front teeth. Hands-on

Day 4 Thursday, 2/16:

Prof. Dr. Gaetano Paolone - Italy Adjunct Professor in Restorative Dentistry, Vita-Salute San Raffaele University, Milan.

Aesthetic concepts for direct restorations of frontal teeth. Color selection and layering of composites shades and contact point management. Hands-on.

Day 5 Friday, 2/17:

Prof. Vassilios Kaitsas and Prof. ac. Dr. Antonio Signore

Direct restorations of posterior teeth. Hands-on.

Day 6 Saturday, 18/02:

Eliades Georgios – Greece Professor and Director, Department of Biomaterials, University of Athens School of Dentistry, Greece.

Material's science for metal-free restorations. Indications and use.

PROGRAM OF THE 2ND MODULE 2017 (03-08 July 2017)

Day 1 - Monday, 03/7: Signore and Solimei

Molinelli: Diagnosis and treatment plan proposal with digital smile software

Day 2 - Tuesday, 04/7: Signore and Solimei

Rondoni: New materials and strategies in prosthetic dentistry with digital lab workflow

Day 3 - Wednesday, 05/7: Signore, Solimei

Hands on

Day 4 - Thursday, 06/7: Kaitsas and Robello

Hands on

Day 5 - Friday, 07/7: Kaitsas and Robello

Clinical case presentations

Day 6 - Saturday, 08/7

Joseph Sabbagh: management of failures in adhesive restorative dentistry