Master of Advanced Studies Maîtrise universitaire d'études avancées

Digital Dental Technologies

October 2024 to October 2026





FACULTY OF MEDICINE University Clinics of Dental Medicine | CUMD



Steering Committee

Prof. Dr Irena Sailer

Co-director, Division of Fixed Prosthodontics and Biomaterials, CUMD Faculty of Medicine, University of Geneva

- Prof. Dr Julian Leprince
 Co-director, Division of Cariology and Endodontology, CUMD
 Faculty of Medicine, University of Geneva
- Dr René Daher
 Coordinator, CUMD
 Faculty of Medicine, University of Geneva

Scientific Committee

- Prof. Ivo Krejci
 Co-founder of the programme and
 Expert in Digital Dental Technologies
- Prof. Daniel Wismeijer
 Expert in Digital Dental Technologies, The Netherlands
- MDT Vincent Fehmer
 Expert in Dental CAD/CAM, CUMD
 Faculty of Medicine, University of Geneva

Coordination

Dr René Daher
 Coordinator, CUMD
 Faculty of Medicine, University of Geneva

his programme offers a cutting edge clinical, practical and theoretical training in the field of digital dental technology. It is based on the cumulative expertise and research work of university professors and industry innovators who pioneered or actively participated in the development and implementation of digital dental technologies that are currently changing the profession.

The MAS in Digital Dental Technologies aims to deepen theoretical, clinical and practical knowledge in all aspects of digital transformation of dentistry. It also aims to reach excellence for the candidates who successfully complete the programme.

The addressed topics range from digital dental and medical findings, diagnosis, monitoring, photography, prevention, marketing, finance and management over single tooth restorations to multidisciplinary treatments including surgery, implantology, orthodontics, fixed and removable prosthodontics as well. This training is the one and only of its kind in Switzerland and most probably in the world that offers a diversified and thorough insight into all aspects of modern digital dentistry.

The programme of the MAS in Digital Dental Technologies is made up of on-campus theoretical and practical trainings and of distance learning modules. It spreads over 2 years on a 50% part-time basis and it includes intermediary and final exams that allow for the validation of 60 ECTS credit points. All lectures are given in English.

Audience

Being a 2-year 50% part-time on-the-job training, this international English language programme targets not only dentists practicing in Switzerland, but anywhere around the world.

Objectives

- Acquire sufficient knowledge to financially manage and sucessfully promote a digital dental office.
- Master the use of digital dental technologies, from 3D optical impression to digital manufacturing (planning of treatments, communication, execution and finalization of treatments).
- Benefit from digital dental technologies for dental and medical findings, monitoring, treatment planning and its 3D virtual visualization, esthetic simulation and guided implant surgery.
- Learn about digital procedures for the creation of orthodontic aligners, removable prostheses and accessory appliances like night guards and sleep apnea devices.

Learning Methods

- On-campus practical and theoretical learning.
- Distance learning via online courses, journal clubs and discussions with clinical supervisors.
- Clinical cases to be documented and presented.

Learning Outcomes

- Use different solutions for producing fixed and removable dental prostheses in a CAD/CAM workflow.
- Understand the principles of orthodontic aligners and be able to use them.
- Prepare complete patient documentation (photography and 3D scans).
- Understand and use modern digital diagnostic techniques (IR-transillumination, IR-reflection, fluorescence, AI-assisted image interpretation).
- Use marketing strategies to successfully manage a modern digital dental office.

Assessment

Oral exam at the end of each module. MCQ test at the end of seminars and journal clubs. Training and examination of clinical cases are evaluated through a well-established documentation procedure. Thorough documentation of a selected clinical case, that may lead to a publication in a dental journal.

Diploma Awarded

Participants who pass the assessment requirements and successfully complete all 3 modules will be awarded the Master of Advanced Studies (MAS) in Digital Dental Technologies / Maîtrise d'études avancées (MAS) en technologies dentaires numériques, by the Faculty of Medicine of the University of Geneva.

Programme

Module 1

Session 1

The digital practice

- Structure of the MAS
- Overview of technologies and applications
- Business & Marketing aspects
- Practice organization
- Vision to the future
- Photography and initial documentation

Session 2

Acquisition and treatment planning

- Dynamic acquisition
- Aesthetic treatment planning and augmented reality
- Simple chairside restorations
- Digital aligning technologies

Module 2

Session 3

Guided surgery and 3D printing

- Introduction to 3D printing
- Implant planning
- Implant supported restorations and advanced CAD/CAM restorations

Session 4

Full rehabilitations

- Severely worn dentition and VDO increase
- Digital technologies in removable prosthodontics

Module 3

Session 5

Digital complements

- Digital complements (sleep apnea, bruxism)
- Advanced 3D printing
- Guided endodontics



Exam

Final exams and case presentations



Practical Information

Admission Criteria

Holders of the Swiss Federal Diploma in dental medicine or any foreign diploma judged equivalent. Admission to the MAS is determined by the Steering Committee, based on a thorough examination of the application files which were received within the specified time frame. The candidate must present all required documents and proofs that allows the Steering Committee to elaborate the decision.

Online Application:

www.unige.ch/formcont/en/courses/digital-dental-technologies

Deadline: June 16, 2024

Applications after this date cannot be taken into consideration.

Tuition Fee

CHF 47,000.-

(CHF 20,000.- at admission, CHF 13,500.- after 6 months, CHF 13,500.- after the first year) Please contact us for more details about specific registration discounts for groups of 2 or more participants.

Time Schedule

- 6 on-campus practical four-day sessions. Three sessions per year | 8:30-17:00, including breaks.
- Weekly online four-hour courses and clinical case discussions
- Weekly online one-on-one case discussion with the clinical supervisors.

Centre for Continuing and Distance Education | CCDE

Contact

Dr René Daher | rene.daher@unige.ch | +41 (0)22 379 40 62 digitaldentaltechnologies (instagram)



University of Geneva | CH-1211 Geneva 4 Tel: +41 (0)22 379 78 33 | info-formcont@unige.ch

www.unige.ch/formcont