

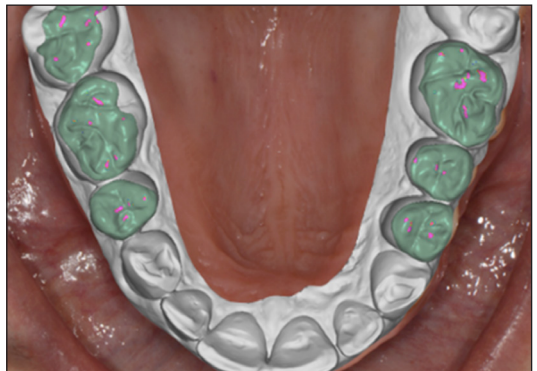
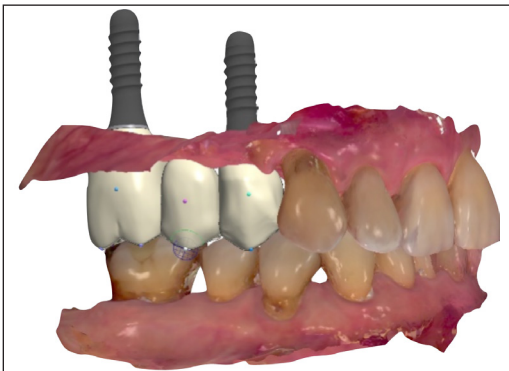
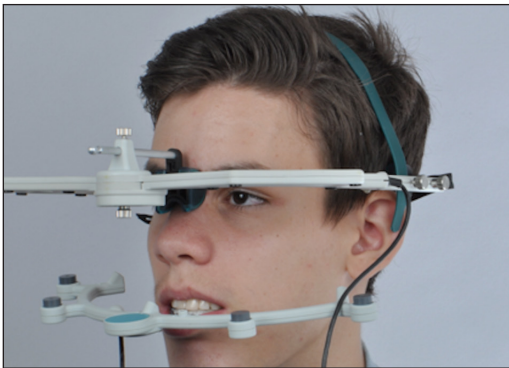
# MAS

Master of Advanced Studies  
Maîtrise universitaire d'études avancées

## Digital Dental Technologies

February 2020 to February 2022

Blended Learning



## Directing Committee

- **Prof. Dr Ivo Krejci**  
Co-director, Division of Cariology and Endodontology, CUMD  
Faculty of Medicine, University of Geneva
- **Prof. Dr Irena Sailer**  
Co-director, Division of Fixed Prosthodontics and Biomaterials, CUMD  
Faculty of Medicine, University of Geneva
- **Dr René Daher**  
Coordinator, CUMD  
Faculty of Medicine, University of Geneva

## Scientific Committee

- **Prof. François Duret**  
Expert in Digital Dental Technologies, France
- **MDT Vincent Fehmer**  
Expert in Dental CAD/CAM, CUMD  
Faculty of Medicine, University of Geneva
- **Prof. Amit Joshi**  
Expert in Digital Strategy, IMD Lausanne
- **Prof. Salvatore Cantale**  
Expert in Finances, IMD Lausanne

## Coordination

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

**T**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 up 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 successfully 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 finalisation 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.
- Practical 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.

## Module 1

### Session 1 |

#### **The digital practice**

10 – 13 February 2020

- Overview of technologies and applications
- Structure of the MAS, programme overview
- Business & legal aspects
- Practice organization
- Marketing
- Vision to the future

### Session 2 |

#### **Digital patient documentation and diagnostics**

29 June – 2 July 2020

- Treatment planning
- Intraoral 3D data acquisition systems and simple chairside restorations

## Module 2

### Session 3 |

#### **Digital dental monitoring and prevention**

August/September 2020

- Shade
- Augmented reality
- Digital aligning technologies

### Session 4 |

#### **CAD/CAM design and manufacturing**

11 – 14 January 2021

- Update finance
- Digital complements (sleep apnea, bruxism)

## Module 3

Session 5 |

### Labside solutions

3 – 6 May 2021

- Simple situations and complex cases
- Digital radiography, implant planning and guided surgery

Session 6 |

### Digital occlusion and function means

August/September 2021

- Erosion and loss of VDO
- Digital technologies in removable prosthodontics
- CAD/CAM bars

Session 7 |

### Exam

7 – 10 February 2022

- 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 Directing 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 Directing Committee to elaborate the decision.

### Application and Deadline

Online application must be submitted via the MAS website before November 15, 2019:

[www.unige.ch/formcont/cours/MAS-digital-dental-technologie](http://www.unige.ch/formcont/cours/MAS-digital-dental-technologie)

Applications after this date cannot be taken into consideration.

### Tuition Fee

CHF 43,500.-

### Time Schedule and Location

- 8:30-12:00 / 14:30-18:00. Breaks at 10:00 and 16:00
- Online lectures: 8:30-12:00
- On-campus: CUMD, University of Geneva  
Physical address: 19 rue Lombard – 1205 Geneva  
Mailing address: 1 rue Michel-Servet – 1211 Geneva 4
- Online learning

### Contact

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