

### Information

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### Presentation

#### Objective :

n partnership with European universities (France, Germany, Italy, Spain) offering teaching which enables useful knowledge to be updated for practitioners using lasers or those wishing to become practitioners using lasers.

#### Reasons :

The development of new odontology laser technologies requires theoretical and practical knowledge which is covered only briefly in the undergraduate context. This gap in teaching, which we hope is temporary, leaves practitioners wishing to use this technology at the mercy of commercial training providers with a financial interest in the area.

This obliges universities to offer refresher courses for practitioners who use lasers or who wish to use lasers.

The Masters teaching will be cover the basic knowledge required for correct clinical practice.

Our teaching programme is currently followed by seven European universities: Nice, Aachen, Rome, Parma, Barcelona, Timisoara, and Liège. Teaching is providing within the framework of a European Masters in 'Oral Laser

Applications' (EMDOLA).

On 6-7 May 2007, the European Commission recognised this inter-university European Masters (EMDOLA: European Master Degree in Oral Laser Applications) by awarding it a bronze medal for the new 'European education and life long learning' programme.

#### Teaching college :

Director : Pr. S. NAMMOUR

Teachers :

- ULg : Prs. E. ROMPEN, S. NAMOUR,
  - UFR Nice (France) : Pr. P. Mahler,
  - UFR Lyon (France) : Pr. T. SELLI (Lyon 1),
  - Pr. N. GUKNECHT (University of Aachen, Germany),
  - Pr. Antoni España et Dr Josep Arnabat (University of Barcelona, Spain),
  - Pr. M. LUOMANEN (University of Helsinki, Finland),
  - Pr. L. POWELL (University of Salt Lake City, USA),
  - Pr. H.S. Loh (University of Singapore, Singapore),
  - Pr. A. BRUGNERA J. (University of Sao Paolo, Brazil),
  - Pr. A. Sculean (University of Bern, Suisse)
  - Pr. U. Romeo, Dr R. Kornblit (University of Rome, Italy)
  - Pr. P Vescovi, Dr GF Semez; Dr E. Merigo (University of Parma, Italy)
  - Pr. R J. G. De Moor (Ghent University, Belgium)
  - Pr A. Peremans (Université de Namur, Belgique)
  - Prof Caterine Behets (UCL : Université Catholique de Louvain),
  - Maître N. Soldatos, Dr Th. Papadopoulos (medical expertise)
  - Dr Gaston Ciais (Nice)
  - Pr. Toni Zeinoun (University of Liban)
  - D. Heysseleer, Anthony De Dycker, Amaury Namour (University of Liege)
- Scientific collaborators : D. HEYSSELAER, Anthony De Dycker and Amaury NAMOUR

### Special conditions of access / students concerned

This course is aimed at holders of the Belgian second cycle degree in Dental Sciences (Masters), holders of the Belgian degree of Complementary Masters in Stomatology, or an equivalent foreign degree. Interested individuals should contact the head of the course to discuss their application (curriculum vitae, analysis of responses to the pre-set motivation questionnaire, basic

## Duration of the training

### -Teaching plan:

**Duration:** Two years (splitting may be authorised by the jury)

According to European standards, this entire course is considered as the equivalent to 120 ECTS (60 ECTS / year) spread over two academic years.

Structured into modules :

1. BLOC 1 :

Module 1 : Optics

Module 2 : Physics of lasers

Module 3 : Interaction laser-tissues

Module 4 : Laser Safety and Properties of lasers and their applications in dentistry

Module 5 : Lasers conservative dentistry and laser in caries prevention

Module 6 : Lasers and endodontics

Module 7 : Laser in Oral Surgery and periodontics and implantology

Module 8 : Low-Level Laser Therapy and jurisprudence and practice management

2. BLOC 2 :

Module 9 : Master Thesis

Module 10 : Clinical training

### -Organisation of teaching:

Length of course: 2 years.

Date of start of course: September in the first year.

End of course: June of the second academic year.

Theory teaching.

Clinical education.

Pre-clinical practical work,

Clinical training,

Research paper: Papers to be submitted at the beginning of June of the second year. Viva voce during the last week before the end of June of the second year (public viva voce).

Total hours of training: (120 ECTS).

### -Capacity

Currently between four and twelve students.

BLOC 1 :

**Theory classes:** series of seminars over three consecutive days. Structured in modules with the possibility of interuniversity exchanges

- **Pre-clinical practical work:** in vitro (on extracted teeth) and animal heads

- **Programming and bibliographical research relating to the master's thesis**

**Ongoing assessment of knowledge during the first year.**

BLOC 2 :

- **Clinical training**

- **Conducting and finalising research work and submission of theses.**

**Thesis defence** (in front of a jury).

**Conditions for awarding of the diploma:** passing exams and acceptance of the thesis

**Supplementary Masters options :**

Doctoral Thesis: relating to the use of laser (for students who have obtained the Masters) or in partnership with other dental and medical disciplines.

## Courses programme

### Compulsory courses (B1 : 60Cr, B2 : 60Cr)

MCER0061-1	Module 1 : Optics (english language) - COLLÉGIALITÉ	B1	-	-	-	3
MCER0062-1	Module 2 : Physics of lasers (english language) - COLLÉGIALITÉ	B1	-	-	-	2
MCER0063-1	Module 3 : Interaction laser-tissues (english language) - COLLÉGIALITÉ	B1	-	-	-	5
MCER0064-1	Module 4 : Laser Safety and Properties of lasers and their applications in dentistry (english language) - COLLÉGIALITÉ	B1	-	-	-	3
MCER0065-1	Module 5 : Lasers conservative dentistry and laser in caries prevention	B1	-	-	-	15

(english language) - COLLÉGIALITÉ

MCER0066-1	<i>Module 6 : Lasers and endodontics</i> (english language) - COLLÉGIALITÉ	B1	-	-	-	<b>12</b>
MCER0067-1	<i>Module 7 : Laser in oral surgery and periodontics and implantology</i> (english language) - COLLÉGIALITÉ	B1	-	-	-	<b>15</b>
MCER0068-1	<i>Module 8 : Low-level laser therapy and jurisprudence and practice management</i> (english language) - COLLÉGIALITÉ	B1	-	-	-	<b>5</b>
MTFE9002-1	<i>Module 9 : Master thesis</i> (english language) - COLLÉGIALITÉ	B2	-	-	-	<b>35</b>
MSTG9010-1	<i>Module 10 : Clinical training</i> (english language) - COLLÉGIALITÉ	B2	-	-	-	<b>25</b>

#### Assessment

- \* Theory teaching: continuous assessment in the form of short questions and answers and/or multiple choice questions. Eleven tests each graded out of 20, i.e. a total of 220 points reduced down to 20 (divided by 11 i.e. a coefficient of 1);
- \* Practical teaching, tutorials, clinical: continuous assessment graded out of 20 (coefficient 1);
- \* Final thesis: Defence of applied research thesis on a given subject (before a jury). Grade out of 40 (coefficient 2). The thesis must be defended in June in the second academic year, in the presence of a jury. The defence is public.
- \* Clinical module is graded out of 20 (coefficient 1).

The overall Masters grade is made up of the arithmetic sum of the four tests.

Any candidate receiving at least 50 out of 100 can be admitted.

The tests are judged by a jury made up of at least four members appointed by the CUC Director and chosen from the teaching staff. The Director may also call upon external specialists who are experts in the field.

#### Registration

After the list of accepted candidates has been accepted and sent by the Director of the Masters.

Where : ULg lifelong learning unit

Documents to be presented : authorization to enrol issued by the Dean (sent to accepted applicants).

Registration fees : 3,625 EUR per student per academic year.