

Mastership Status in Laser Dentistry

One-Year Certification Course, academic certificate
awarded by RWTH Aachen University, Germany

This Certification Course is a one-year clinical specialisation course in laser dentistry, in which the dentist participates beside his daily work in a dental clinic. The program will span a period of 1 year, in which 4 modules will be held, including the realisation of 5 clinical cases. Beside the time of presence at the teaching facilities an internet-based e-learning environment supports the participants in their home-work between the modules.



- The certificate „Mastership Status Laser Therapy in Dentistry“ is a Diploma, awarded by the university of excellence, RWTH Aachen University, Aachen - Germany
- The course director, Prof. Dr. Norbert Gutknecht, is the executive director of the World Federation of Laser Dentistry (WFLD), president of the German Society for Laser Dentistry (DGL) and president of WALED (World Academy for Laser Education in Dentistry)
- After successful graduation the participant can apply to upgrade in the 2-years module based Master of Science course „Lasers in Dentistry“ by RWTH Aachen University. Achievements will be recognised and the fellowship fees for the recognised modules will be deducted from the total MSc fees.

The official course language for this course is English.

Module Content:

Module I Lasers Physics and Safety (LSO) and Laser Construction and Handling of Diode and Erbium lasers 2 days*

Module II Erbium Lasers 4 days

Module III Diode Lasers 4 days

Module IV Oral and Written Exam 2 days**

*Days means presence days. The participants will be connected between the modules to the AALZ e-learning homework network and integrated into hands-on training programs

**The exam includes the presentation of 5 clinical cases and a written multiple choice test

The course will have a total amount of 390 hours workload and 96 presence hours

- Course Fees: 6500 Euro
- Registration Fees 1000 Euro (non refundable)
- 1 instalment of 3000 Euro (see contract)
- 1 instalment of 2500 Euro (see contract)
- Start: 16 September 2016

- Module 1: 16-17.09.2016 Venue: Aachen
- Module 2: 09-12.01.2017 Venue Aachen
- Module 3: 02-05.05.2017 Venue Aachen
- Module 4: 28-30.08.2017 = 2 days exams and 1 ceremony day
- Venue: Aachen - Germany

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COURSE CONTENT

MODULE I

LASER PHYSICS AND LASER SAFETY OFFICER COURSE

Laser Safety Officer Seminar
Physics of Lasers, History of Lasers, Laser Wavelengths, Photons, Laser-Tissue Interactions, Absorption and Emission of Photons, Biophysics, Absorption and Absorptions Spectra, Laws and Regulations, Transformation of Laws and Regulations in the Dental Office

Multiple Choice Test

LASER CONSTRUCTION AND HANDLING, LASER CLINICAL INDICATIONS OVERVIEW

Laser Construction
- Laser Function
- Operation Manuals and Guidelines
Laser Clinical Indications Overview



MODULE II

ERBIUM LASERS

Biophysical background:
Absorption and transmission in soft tissues;
Ablation mechanism, temperature and pulp reaction, preparation speed, cavity sterilisation, sense of pain during cavity preparation--> EBD Literature
Hands-on Training, Skill Training and Live Patient Demonstrations

CLINICAL INDICATIONS:

Periodontology:

- Non-surgical and Surgical Treatment

Soft Tissue Therapy:

- Frenectomy

- Gingivectomy, Gingivoplasty, Gingival Hyperplasia

- Incision/Excision

- Pericoronitis

Implantology:

- Implant Exposure

- Peri-implantitis Treatment





Cavity Preparation:

- Minimal Invasive Caries Removal:
- Fissure Sealing
- Cavity Preparation Methods for Composite Fillings and Ceramic Inlays
- Veneer Preparation
- Creation of Micro Retentive Sealings
- Removal of Old Fillings (Possibilities)

Endodontics:

- Cleaning and Disinfection of the Root Canal

Hard Tissue Surgery:

- Apicoectomy
- Sinus Lift
- Depigmentation of the Gingiva
- Bone Surgery: Bone Exostosis, Crown Lengthening,
- Osteotomy

MODULE III

DIODE LASERS

Biophysical background: Ablation mechanisms, transmission, absorption in the tissues, temperature and tissue reactions--> EBD Literature

Hands-on Training, Skill Training and Live Patient Demonstrations

CLINICAL INDICATIONS:

Endodontics:

- Root Canal Treatment

Periodontology:

- Non-surgical Treatment
- Thoroughing

Soft Tissue Therapy:

- Frenectomy
- Gingivectomy, Gingivoplasty, Gingival Hyperplasia
- Incisions (Abscess drainage)
- Exposure of Retained Teeth

Hard Tissue Therapy:

- Hypersensitive Teeth
- Oral Mucosa Diseases



MODULE IV

ORAL AND WRITTEN EXAM

PRESENTATION OF 5 CLINICAL CASES

OFFICIAL DELIVERY OF THE CERTIFICATES

