

Master of Science in Oral Implantology

Module Descriptions

Basic Theory I

This module lays the foundation for all topics related to oral implantology on an already advanced level. It has an underlying focus on diagnostics, implant planning and advanced suture techniques. The identification of technical requirements and the discussion of the advantages and disadvantages of various implant materials are also central to the module. To ensure a high quality of your work in the module patient treatment cases, you will also be able to freshen up your dental photography skills. You will additionally learn about scientific writing, basic statistics as well as literature research, including critical reflection on existing literature and its objective evaluation.

Basic Theory II

This module focuses on implant systems, their specific design features (macro-/microstructure), abutment connections and prosthetic components. Surgical Procedures such as flap design, bone quality assessment or osteotomy techniques will be addressed and manually trained in extensive hands-on workshops. The same is true for prosthetic procedures such as temporary treatments or impression-taking. Furthermore, you will be introduced to advanced statistics as well as clinical study design and you learn how to identify and deal with errors in scientific publications.

Surgical Techniques

The module deals with advanced surgical techniques. You will be particularly familiarized with augmentation and membrane techniques, nerve transposition, various transplants (extra-oral bone transplants, pedicle flap soft-tissue transplants, free connective tissue transplants) and different approaches to soft-tissue management. How to professionally cope with complications, including mucositis and periimplantitis, will also be intensely discussed. In-depth exposure through lectures, seminars and hands-on courses allows you to grasp the significance of selecting and combining different therapy options for achieving excellent treatment results.

Implant Prosthetics

Within this module, permanent implants (single tooth replacement, treatment with multiple single crowns, bridge supplies, restorative materials) as well as removable implants (retention elements, intraoral bonding, structure of prosthetic bases) will be critically discussed. Immediate restoration of single tooth implants is one of the major topics being covered. Further important pillars of the module are complication management and the coordination of therapeutic teams – which is an often underestimated challenge with a great impact on your treatment outcome. During this module you will therefore learn how to implement an effective communication/report structure to ensure a secure realization of your treatment plan.

Hospitalation

You must attend a total of 4 implant surgeries performed by highly experienced surgeons. Through work shadowing, this module provides you with insights into the practical implementation of techniques taught in the MOI program. You will be able to attend surgeries performed at any affiliated dental office or clinic worldwide.

Supervision

Within this module you will have to perform a total of 3 implant treatments under the supervision of an accredited tutor of Goethe University. 2 out of 3 surgeries can be completed during the Human Cadaver Course in Vienna during your 3rd semester.

Patient Treatment Cases

Within this module you have to treat a total of 20 patients in your home country, having your tutor by your side to support you every step of the way through our eLearning platform. The following indications must be met and documented:

- a. Standard surgical treatment with prosthetic treatment of a single tooth in the aesthetic zone (2 cases)
- b. Standard surgical treatment with a fixed bridge treatment with 3-4 units (2 cases)
- c. Standard surgical treatment with a fixed bridge or removable denture in a severely reduced dentition or edentulous jaw (4 cases)
- d. Complex surgical treatment with a fixed bridge or removable denture in a severely reduced dentition or edentulous jaw (1 case)
- e. Complex surgical treatment with prosthetic treatment of a fixed bridge with 3-4 units (1 case)
- f. Complex surgical treatment with the prosthetic treatment of a single tooth in the aesthetic zone (1 case)
- g. Standard OR complex surgical techniques with prosthetic treatment of choice (aesthetic zone, fixed bridge with 3-4 units, removable denture) (9 cases)

This module has to be completed by the end of your second academic year.

Master Thesis

Each student is required to submit a master's thesis by the end of the second academic year. You are free to choose your research objective within the field of oral implantology, e.g. a literature review or a clinical trial. Students who achieve outstanding results in their master theses and want to push their academic career, will be supported in their publication efforts by the medical writer of the department.