Master Degree in Implant Dentistry

Program Specification

University: Ahram Canadian University
Faculty: Faculty of Oral and Dental Medicine
Department: Multidisciplinary

Program Specification

(2023/2024)

A. Basic Information:

1- Program Title: Master Degree in Implant Dentistry.

2- Program Type: Single ☐ Double ☐ Multiple ■

3- Department (s) responsible for the Program:

- Prosthetic Dentistry (Fixed and Removable divisions)
- Oral and Maxillofacial Surgery
- Oral Medicine and Periodontology

} provide specialty courses.

- Oral Pathology, Oral Radiology and General Anatomy provide basic courses.

4 - Date of program approval: 26/1/2023

Program Director: Dr. Sherif Eid.

B. Professional information:

1. Program General Aims:

The program aims to enable the dental practitioners to apply knowledge, understanding and develop skills necessary to successfully plan, treat and maintain wide range of patients to be rehabilitated with dental implants. The program also emphasises on developing skills including time management, presentation skills and research.

2. Intended Learning Outcomes (ILOs):

A- Knowledge and Understanding:

By the end of the program graduates will be able to demonstrate the knowledge and understanding of:

A1. Surgical anatomy (including the more common variations) of the maxilla and the mandible.

A2. Healing processes that take place following tooth root damage, extraction and surgery.

A3. The fundamental biological processes involved in hard and soft tissue integration of dental implants.

A4. Medical conditions, lifestyle factors and local pathological processes that could preclude a patient from implant techniques or complicate surgery, restoration or maintenance of dental implants.

A5. The main implant variants and their indications and contraindications, including options for fixed and removable implant prostheses and interim restorations.

A6. The principles of occlusion and prosthodontically driven implant planning as aided by radiographic assessment and basic biomechanics.

A7. The principles of implant surgery with emphasis on indications and limitations of guided bone regeneration and soft tissue augmentation at implant sites.

A8. The principles of the clinical and laboratory techniques used in implant dentistry including the choice of materials used in record making and fabrication of implant restorations.

A9. The use of appropriate pharmaceutical agents, including the use of antibiotics, analgesics and agents used for anxiety management in the practice of implant dentistry.

A10. The long-term maintenance requirements of implants in the light of any pre-existing biological or mechanical risk factors.

A11. The principles of informed consent in implant dentistry and the requirements for adequate documentation and communication of implant plans, risks, procedures, costing, and alternatives to implants

A12. The evidence base dentistry in implant and non-implant treatment options used to replace teeth and the historical scientific context of contemporary implant dentistry.

A13. The challenges involved in introducing implant dentistry into a dental practice setting, including team development, processes, regulation, and fee setting.

B-Intellectual Skills

By the end of the program graduates will be able to:

B1. Synthesize the information gathered during history taking and examination to reach proper diagnosis with special consideration to prognosis of the remaining dentition.

B2. Propose overall treatment options and formulate detailed plans of treatment for dental implant(s), considering all options for tooth replacement in the context of the physical, psychological, functional, preventive, aesthetic, and financial requirements of the patient.

B3. Recognize situations where complex surgical or restorative procedures will be required, or where interface is required with other dental/medical disciplines.

B4. Modify the treatment plan as required in order to achieve as satisfactory a result as possible in the light of unexpected developments during implant treatment.

B5. Formulate a plan for long-term maintenance of implants in the light of any pre-existing biological or mechanical risk factors

B6. Review literature to find the best available evidence in diagnosis, treatment planning, techniques and material related to implant dentistry.

B7. Report scientific research using reporting guidelines that ensure an evidence -based research.

B8. Discuss scientific and clinical findings supported by current evidence.

C- Professional and Practical Skills

By the end of the program graduates will be able to:

C1. Complete and document a comprehensive clinical assessment, including thorough medical history, and request and interpret appropriate investigations in order to reach final diagnosis.

C2. Communicate effectively to the patient the treatment options and procedures involved in order to allow the patient to make a decision, and to obtain valid consent prior to implant treatment.

C3. Order fabrication of appropriate surgical templates.

C4. Select and administer the appropriate form of anaesthesia and manage patient anxiety.

C5. Maintain infection control and follow an appropriate aseptic surgical protocol.

C6. Extract safely failing teeth with minimal trauma using appropriate instruments.

C7. Carry out and document safe and effective implant surgery according to a predetermined plan, including simultaneous minor soft tissue augmentation and manipulation to optimize peri-implant soft tissue conditions

C8. Perform the techniques involved in harvesting bone from oral sites for minor augmentation during implant placement, and carry out guided bone regeneration, including the use of bone substitutes and barrier membranes

C9. Manage the more common intra-operative and post-operative complications and provide postoperative care and advice

C10. Carry out and document all restorative procedures involved in provision of implant supported restorations, including provision and adjustment of interim restorations and effective communication with the dental laboratory

C11. Plan and instigate an appropriate maintenance and re-evaluation program

D- General and Transferable Skills

By the end of the program graduates will be able to:

D1. Maintain good clinical records documenting continuous progress.

D2. Undertake effective oral communication with patients, nursing staff, supervisors and peers.

D3. Appreciate the value of informed consent to treatment.

D4. Source and critically appraise the scientific literature.

D5. Present scientific data to his/ her colleagues within preset time.

3. Program External References for standards (Benchmarks):

4. Curriculum Structure and Contents:

a- Program duration: three years' Program / 6 semesters / 90 weeks

b- Program structure:

The courses are divided into:

- Basic and specialized courses (78 credit points)
- Elective courses granted 2 credit points

c- Program Levels and courses:

Semester 1

Course Code	Course title	Prerequisite	Didactic Hours	Practical Hours	Total Credit Hours
MS0011	Anatomy of Head & Neck	-	1	2	2
MS0112	Fundamentals of Oral Surgery	-	2	2	3
MS0214	Oral and Maxillofacial Radiology	-	1	2	2
MS1113	Oral and Maxillofacial Pathology	-	2	2	3
MS1411	Basic Implantology	-	1	0	1
MS1412	Literature Review in implantology I	-	2	0	2
RC001	Introduction to evidence-based dentistry	-	1	0	1
Total			10	8	14

Semester 2

Course Code	Course title	Prerequisite	Didactic Hours	Practical Hours	Total Credit Hours
MS0024	Applied Anatomy	MS0011	1	2	2
MS0325	Fundamentals of Occlusion	-	1	0	1
MS0326	Fundamentals of Fixed Prosthodontics	-	1	2	2
MS0327	Fundamentals of Removable Prosthodontics	-	1	2	2
MS1421	Literature Review in Implantology II	-	2	0	2
MS1422	Case Presentation and Treatment Plan Seminar I	-	1	0	1
MS1423	Implantology Clinic I	MS1411	-	4	2
RC002	Biostatistics	-	1	0	1
RC004	Scientific writing	-	1	0	1
Total			9	10	14

Semester 3

Course Code	Course title	Prerequisite	Didactic Hours	Practical Hours	Total Credit Hours
MS0138	Basic Implant Surgery	MS0112	1	2	2
MS0335	Basic Implant Prosthodontics	MS0326 MS0327	1	2	2
MS0537	Esthetic Implant Dentistry	-	1	6	4
MS1431	Case Presentation and Treatment Plan Seminar II	-	1	0	1
MS1432	Implantology Clinic II	-	0	6	3
RC003	Research Methodology	RC001 RC002	1	0	1
Total			5	16	13

Semester 4

Course Code	Course title	Prerequisite	Didactic Hours	Practical Hours	Total Credit Hours
MS0146	Advanced Implant Surgery	MS0138	1	4	3
MS0346	Advanced Implant Prosthodontics	MS0335	1	4	3
MS0347	Digital Implant Dentistry	MS0138 MS0335	1	4	3
MS1441	Case Presentation and Treatment Plan Seminar III	-	1	0	1
MS1442	Implantology Clinic III	-	0	8	4
RC005	Research Ethics	-	1	0	1
Total			5	20	15

Semester 5

Course Code	Course title	Prerequisite	Didactic Hours	Practical Hours	Total Credit Hours
MS1451	Case Presentation and Treatment Plan Seminar IV	-	2	0	2
MS1452	Implantology Clinic IV	-	0	16	8
MS1453	Journal Club I	-	1	0	1
Total			3	16	11

Semester 6

Course Code	Course title	Prerequisite	Didactic Hours	Practical Hours	Total Credit Hours
MS1461	Case Presentation and Treatment Plan Seminar V	-	2	0	2
MS1462	Implantology Clinic V	-	0	16	8
MS1463	Journal Club II	-	1	0	1
Total			3	16	11

List of Elective Courses (EC)

Course Code	Course title	Didactic Hours	Practical Hours	Total Credit Hours
EC001	Clinical Epidemiology	1	2	2
EC002	International Publication Strategy	1	0	1
EC003	Basics of Dental Photography	1	2	2
EC004	Medical Management of Dental Patient	1	0	1
EC005	Educational Programs Development in Dentistry	1	0	1
EC006	Scientific Conferences Management	1	0	1
EC007	Research Project Writing	1	0	1
EC008	Dental Practice Management	1	0	1
EC009	Foundation of Human Disease and Health	1	0	1
EC0010	Bioinformatics	1	0	1
EC0011	Infection Control in Dental Practice	1	2	2
EC0012	Dental Ethics and Professionalism	1	0	1
EC0013	Dental Laser Applications	1	2	2
EC0014	Artificial Intelligence in Dentistry	1	0	1
EC0015	Electron microscope	1	0	1
EC0016	Tissue and cell culture	1	0	1
EC0017	Experimental animal research	1	0	1

5. Program Admission Requirements:

The applicant should have:

a. Bachelor's degree in "Oral and Dental Medicine and Surgery" from any Egyptian University or equivalent degree and recognized by the Supreme Council of Universities.

b. General grade “good”.

c. One year of training (internship) or its equivalent for international students.

d. Approval of the student’s employer is required for his enrolment in obtaining a master’s degree, as well as for the branch of specialization. The employer’s approval is also required for the student to devote the necessary full-time capacity throughout the period of study.

e. Passing grade of 450 Test of English as a Foreign Language (TOEFL) or 7 International English Language Testing System (IELTS).

f. Approval is obtained from the relevant department council.

g. Pay all tuition fees before enrolment.

6. Regulations for Progression and Program Completion:

Duration to obtain the master’s degree

- The duration of study to obtain a master's degree is six semesters, and the student may not enroll for more than six years.
- The faculty Council may extend enrollment for exceptional circumstances for a maximum of one year.

Students are awarded the Master’s degree after:

- Successfully completing a minimum of 120 credit points (6 semesters).
- Passing grade for all courses (60%).
- Approval of the logbook that documents all the practical/clinical requirements. Provided that more than one faculty member is responsible for supervising and signing cases.
- The practical requirements booklet must be discussed by a committee formed by the department council that includes three faculty members. The committee can recommend accepting or rejecting the practical requirements booklet in its report, and its report is presented to the department council and then the college council. The student has the right to reapply for discussion of the practical requirements booklet. After six months in the event that the committee does not accept the practical requirements booklet, taking into consideration the legal period in the regulations for obtaining the academic degree.
- Defense of the thesis after a minimum of one academic year from the approval date of the research project by the Faculty Council. The Thesis stands for a total of 40 credit points.

- Publishing a research extract from the scientific thesis in a journal approved by the permanent scientific committees. In the case of international publication in an indexed journal, a letter of acceptance for publication may be submitted.

8- - Students assessment:

Methods of assessments:	Intended learning outcomes
1. Written exam	**a1-a13** **b1-b8**
2. Oral exam	**b1-b8**
3. Clinical exam	**c1-c11** **d1-d5**
4. Logbook	**c1-c11**
5. Continuous assessment (course assessment)	**a1-a13** **b1-b8** **c1-c11** **d1-d5**

Program Director	Vice Dean for Postgraduate Studies and research	Faculty Dean
Dr Sherif Eid	Prof. Sahar Abd Elhalim	Prof. Azza Ezz Elarab