

**REGULATIONS FOR THE DEGREE OF  
MASTER OF DENTAL SURGERY IN IMPLANT DENTISTRY  
[MDS(ImplantDent)]**

These regulations apply to candidates admitted in 2017-2018 and thereafter.

*(See also General Regulations and Regulations for Taught Postgraduate Curricula)*

Any publication based on work approved for a higher degree should contain a reference to the effect that the work was submitted to The University of Hong Kong for the award of the degree.

The degree of Master of Dental Surgery in Implant Dentistry [MDS(ImplantDent)] is a postgraduate degree awarded following the satisfactory completion of a prescribed course of study and research/clinical applications related to dental practice.

**Admission requirements**

**D112** To be eligible for admission to the curriculum for the degree of Master of Dental Surgery in Implant Dentistry, a candidate shall

- (a) comply with the General Regulations and the Regulations for Taught Postgraduate Curricula;
- (b) hold the degree of Bachelor of Dental Surgery from this University, or a degree of other qualification of equivalent standard from another university or comparable institution accepted for this purpose;
- (c) for a candidate who is seeking admission on the basis of a qualification from a university or comparable institution outside Hong Kong of which the language of teaching and/or examination is not English, shall satisfy the University English language requirement applicable to higher degrees as prescribed under General Regulation G2(b); and
- (d) satisfy the examiners in a qualifying examination if required.

**Qualifying examination**

- D113** (a) A qualifying examination may be set to test a candidate's formal academic ability or his ability to complete the prescribed courses of study and practice. It shall consist of one or more written papers, or the equivalent, and may include a project report, practical examination and oral examinations.
- (b) A candidate who is required to satisfy the examiners in a qualifying examination shall not be permitted to register until he has satisfied the examiners in the examination.

**Advanced Standing**

- D114** (a) Advanced standing may be granted to candidates in recognition of studies completed successfully in this University or another university or comparable institution acceptable for this purpose.
- (b) A candidate may be granted advanced standing of not more than 20% of the total credits normally under a curriculum unless otherwise approved by the Senate.
- (c) Application for advanced standing shall be made prior to the commencement of the curriculum, and should be accompanied by copies of academic transcripts to support the application.
- (d) Courses granted advanced standing shall not normally be considered in determining the award of a mark of distinction.

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### **Award of degree**

**D115** To be eligible for the award of the degree of Master of Dental Surgery in Implant Dentistry, a candidate shall

- (a) comply with the General Regulations and the Regulations for Taught Postgraduate Curricula; and
  - (b) complete the curriculum, complete and present a written dissertation or project report or research paper in publication format, and satisfy the examiners in accordance with the regulations set out below.
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### **Period of study**

**D116** The curriculum shall normally extend over a period of thirty-two months of full-time study. Candidates shall not be permitted to extend their studies beyond the maximum period of registration of fifty-six months of full-time study, unless otherwise permitted or required by the Board of the Faculty.

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### **Completion of curriculum**

**D117** To complete the curriculum, a candidate shall

- (a) satisfy the requirements prescribed under TPG 6 of the Regulations for Taught Postgraduate Curriculum;
  - (b) follow instruction in the courses prescribed and complete satisfactorily all coursework requirements;
  - (c) satisfy the examiners in all examinations as may be required; and
  - (d) complete and submit a dissertation, project report or research paper in publication format which satisfies the examiners.
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### **Dissertation or project report or research paper**

**D118** The title of the dissertation or project report or research paper in publication format shall be submitted for approval not later than April 30 in the final academic year of study, and the dissertation or project report or research paper in publication format shall be submitted not later than August 1 in the same year; the candidate shall submit a statement that the dissertation or project report or research paper in publication format represents his/her own work undertaken after registration as a candidate for the degree. The examiners may prescribe an oral examination on the subject of the dissertation or project report or research paper in publication format.

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## **Assessment**

**D119** Assessments may be held in each year of study and may take the form of written papers; oral, practical, and clinical examinations; assessments of coursework; or a combination of these methods. Any assessment of the candidate's coursework during the course of study, including written assignments, shall be taken into account in determining the candidate's overall result.

**D120** A candidate who has failed to satisfy the examiners in any part of the assessments may be permitted to present himself/herself again for assessment at a time to be determined by the Board of Examiners; or he/she may be recommended for discontinuation of studies under the provisions of General Regulation G12.

**D121** A candidate who has presented a dissertation or project report or research paper in publication format which has failed to satisfy the examiners may be permitted to revise and re-present the dissertation or project report or research paper in publication format within a period to be determined by the Board of Examiners; or he/she may be recommended for discontinuation of studies under the provision of General Regulation G12.

**D122** In accordance with TPG 5(c), a candidate who has exceeded the maximum period of registration specified in Regulation D115 shall be recommended for discontinuation of studies.

**D123** Failure to take any examination as scheduled normally shall result in automatic course failure.

**D124** A candidate who is unable, through illness, to be present at an examination may apply in writing within 2 weeks of the examination for permission to be examined at some other time to be determined by the Board of Examiners.

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## **Grading system**

**D125** Individual courses shall be graded as "Pass" or "Fail".

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## **Assessment results**

**D126** Upon successful completion of the curriculum, candidates who have shown exceptional merit may be awarded a mark of distinction, and this mark shall be recorded in the candidates' degree diploma.

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August 18, 2017

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**SYLLABUSES FOR THE  
MASTER OF DENTAL SURGERY IN IMPLANT DENTISTRY**

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**A. PREAMBLE**

1. The objectives of the MDS(ImplantDent) curriculum are to enable candidates to achieve an advanced level of knowledge and competence in a branch of dental surgery by means of
  - (a) a prescribed curriculum of study (i.e., lectures, seminars, related written and practical and/or clinical work); and
  - (b) additionally, a supervised research project and the submission of a written project report, dissertation or research paper in publication format.

The prescribed curriculum of study will include certain core subjects to be taken by all candidates, but otherwise it will be designed, in accordance with the syllabuses, to take account of the needs of individual candidates. The supervised research projects will also be related to each candidate's curriculum of study in Implant Dentistry.

2. Candidates must attend for clinical practice in the Prince Philip Dental Hospital (or another approved hospital) for at least four sessions a week in such curriculum area or areas as are prescribed.
3. The methods and pattern of assessment and examination of each candidate will be determined by the Postgraduate Programme Directors concerned, having regard in each case to the nature and particular emphases of the candidate's course of work.

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**B. SYLLABUSES FOR THE DEGREE OF MASTER OF DENTAL SURGERY IN  
IMPLANT DENTISTRY**

The curriculum shall normally extend over a period of thirty-two months of full-time study and clinical practice related to the practice of Implant Dentistry, or the minimum of 270 credits. Candidates shall not be permitted to extend their studies beyond the maximum period of registration of fifty-six months of full-time study, unless otherwise permitted or required by the Board of the Faculty.

The Master of Dental Surgery in Implant Dentistry [MDS(ImplantDent)] is a course of study that is designed to enable dentists to acquire advanced competences in the field of implant dentistry, practiced as a contemporary component of comprehensive dental care. Students must attend the Prince Philip Dental Hospital (or another approved hospital) as prescribed by the Programme Director.

The curriculum includes lectures, tutorials, case conferences, clinical and laboratory work together with project assignments, training in research method and the conduct of a research project along with the preparation of a dissertation on this project.

## Course

All the components of the curriculum are compulsory. Emphasis is placed on the scientific basis of implant dentistry, as well as the evidence-based clinical practice.

## Curriculum structure

The curriculum consists of the following courses/ components:

### A. Faculty Core Courses (24 credits)

- DENT7505 Biomaterials I (3 credits)
- DENT7506 Biomaterials II (3 credits)
- DENT6023 Oral Epidemiology and clinical Research Methodology (3 credits)
- DENT6024 Introduction to statistical analysis in Dental Research (3 credits)
- DENT6025 Multivariable statistical analysis in dental research and use of statistical software (3 credits)
- DENT7030 Dissertation Writing for Master of Dental Surgery and Master of Science – An Induction Course (non-credit bearing)
- DENT7031 Insights into stem cells and tissue engineering in dentistry (3 credits)
- DENT7032 Diagnostic & Advanced Dental & Maxillofacial Imaging (3 credits)
- DENT7164 Comprehensive Decision Making with dental implants (3 credits)

### B. Discipline Specific Courses (63 credits)

These set of courses aims to help the students comprehend the past and current research outcomes and evidence base of implant dentistry, as well as develop the skills and competences necessary for the diagnosis, treatment plan and management of complex cases of oral rehabilitation with dental implants.

#### Year 1

- DENT7159 Implant Dentistry for Surgical Disciplines I (9 credits)
- DENT7157 Evaluating Scientific Research I (9 credits)
  - Current Scientific Literature in Implant Dentistry
  - Periodontology and Implant Dentistry “classical” literature
- DENT7154 Comprehensive Treatment Planning I (9 credits)

#### Year 2

- DENT7160 Implant Dentistry for Surgical Disciplines II (9 credits)
- DENT7158 Evaluating Scientific Research II (9 credits)
  - Current Scientific Literature in Implant Dentistry
  - Periodontology and Implant Dentistry “classical” literature
- DENT7155 Comprehensive Treatment Planning II (9 credits)

#### Year 3

- DENT7156 Comprehensive Treatment Planning III (9 credits)

### **C. Clinical Components (114 credits)**

Clinical education covers approximately half 45% of the curriculum and includes supervised clinical practice within Prince Philip Dental Hospital (PPDH) and other clinics, as well as multidisciplinary clinical activities. Furthermore, this includes the documentation of a case portfolio and presentation/discussion of clinical cases and treatments.

Year 1, 2 and 3

- DENT7151, DENT7152 and DENT7153 Clinical Implant Dentistry I, II and III (30 credits, 45 credits and 39 credits)

### **D. Research Components (63 credits)**

Year 1 and 2

- DENT7162 and DENT7163 Research project I and II (9 credits and 18 credits)
  - Thematic /literature research projects within implant dentistry

Year 3

- DENT7161 Original research (36 credits)
  - This component involves the design, execution and dissemination of original research project by the student. Such a process typically includes an extensive systematic literature review within the given topic, design and execution of a research project and dissemination of the research outcomes in the form of a dissertation or a peer reviewed publication.

#### **DENT7150 Capstone Experience: Clinical Portfolio (6 credits)**

*Portfolio of clinical work - Complete Log of oral rehabilitation treatments*

## **Description of courses**

### **DENT7505 Biomaterials I (3 credits)**

This course aims to introduce the post-graduate students to the various types of dental materials and biomaterials. On completion of this course, a student should be able to critically appraise knowledge and reports from various metallic, polymeric and ceramic materials used in dentistry. The student should also be able to choose an appropriate method for assess and evaluate biomechanical, chemical and biological properties of dental materials.

Assessment: One 2-hour written paper; 100% Examination

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### **DENT7506 Biomaterials II (3 credits)**

The course Biomaterials II aims to introduce and guide the students to silicon chemistry and its vast amount of applications in dental materials and biomaterials. Moreover, the course explains various biomechanical features in dentistry. Dental ceramics and some novel synthetic materials for clinical use are described in details and introduced to the student to critically appraise them. The use of diverse dental cements with their indications will be explained for the student for critical selection in the clinic. On completion of this course, a student should be able to address biomechanics, adhesion and durability aspects in contemporary dentistry.

Assessment: One 2-hour written paper; 100% Examination

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### **DENT6023 Oral Epidemiology and clinical Research Methodology (3 credits)**

This course aims to introduce the students to the various types of epidemiological studies and how to conduct clinical trials. On completion of this course, a student should be able to critically appraise reports from oral epidemiological studies and the level of evidence generated. The student should also be able to choose an appropriate design for a clinical study on a specific topic of interest.

Assessment: One 2-hour written paper; 100% examination

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### **DENT6024 Introduction to statistical analysis in Dental Research (3 credits)**

This course aims to introduce the students to the basic statistical methods used in dental research; the interpretation of results of statistical analysis and the statistical content of published research papers. On completion of this course, a student should be able to address statistical issues when formulating a research project, and to appraise the basic statistical content of a published dental research paper.

Assessment: One 2-hour written paper; 100% examination

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**DENT6025 Multivariable statistical analysis in dental research and use of statistical software (3 credits)**

This course aims to introduce the students to the multivariable statistical methods used in dental research and to provide basic training to the students in using the software SPSS for Windows to analyze dental research data. On completion of this course, a student should be able to appraise the statistical contents of a published dental research paper, and be able to carry out basic analysis of the data collected in a dental research using the software SPSS for Windows.

Assessment: One 2-hour written paper; 100% examination

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**DENT7030 Dissertation Writing for Master of Dental Surgery and Master of Science – An Induction Course (non-credit bearing)**

This Induction Course of 7.5 hours aims to raise course participants' awareness of essential aspects of academic writing which contribute to overall communicative success in dissertations. Its ultimate aim is to provide a useful induction experience so that you will be able to approach your writing with more confidence and skill at key stages of your research. Specific objectives are listed as themes in the course schedule.

Assessment: No formal assessment

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**DENT7031 Insights into stem cells and tissue engineering in dentistry (3 credits)**

The faculty core course “Insights into stem cells and tissue engineering in dentistry” aims to enhance the students' knowledge about dental derived stem cells and their potential applications in dental and systemic diseases. Various topics will cover dental stem cells' isolation and characterization, materials and stem cells function, angiogenesis and microenvironment on tissue engineering, etc. On completion of this course, a student should be able to understand the role of stem cells, scaffold materials, local microenvironment (inflammation, infection, and hypoxia) and angiogenesis on tissue engineering.

Assessment: Coursework (60%) and Examination (40%)

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**DENT7032 Diagnostic & Advanced Dental & Maxillofacial Imaging (3 credits)**

This course will introduce students to the art and science of diagnostic imaging in dental medicine, and will also cover advanced imaging modalities in dento-maxillofacial radiology (DMFR). The course will focus on three-dimensional (3D) imaging using cone beam computed tomography (CBCT), and its use and limitations for various disciplines in dental medicine including periodontology, orthodontics, paedodontics, prosthodontics, and oral and maxillofacial surgery.

Assessment: Coursework (100%)

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### **DENT7164 Comprehensive Decision Making with dental implants (3 credits)**

The course aims to help students develop the competences necessary for the diagnosis, prognosis, risk assessment and treatment plan of oral rehabilitation cases with dental implants. The course will utilize online interactive pedagogy and actual patient treatments in order to teach the principles of restorative driven treatment planning, direct students to evidence-based treatment pathways and encourage them to reflect on the implications of their decisions on the long term treatment outcomes.

Coursework / Examination ratio: 80 % Coursework, 20 % Examination

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### **DENT7159 Implant Dentistry for Surgical Disciplines I (9 credits)**

The course will provide a clinically relevant overview of implant dentistry and all related basic, biological and clinical sciences. The course define the role of implant dentistry as part of modern comprehensive care and will elaborate all stages of implant treatment, from patient assessment, treatment planning, implant surgical and restorative procedures, maintenance and management of complications.

Assessment: One 2-hour written paper; 20% case based reflective assessment, 20% presentation and 60% examination

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### **DENT7157 Evaluating Scientific Research I (9 credits)**

The course will introduce the main principles of conducting and evaluating scientific research in the field of Implant Dentistry and related science disciplines.

Assessment: One 2-hour written paper; 50 % continuous assessment and 50 % examination

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### **DENT7154 Comprehensive Treatment Planning I (9 credits)**

The course will offer a overview of the principles of comprehensive treatment planning with dental implants. The course will evolve around actual patient cases which will be discussed, analysed and treatment planned as based on current evidence and best practices.

Assessment: 100% oral examination

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### **DENT7160 Implant Dentistry for Surgical Disciplines II (9 credits)**

The course will provide a clinically relevant overview of implant dentistry and all related basic, biological and clinical sciences. The course define the role of implant dentistry as part of modern comprehensive care and will elaborate all stages of implant treatment, from patient assessment, treatment planning, implant surgical and restorative procedures, maintenance and management of complications.

Assessment: One 2-hour written paper; 20% case based reflective assessment, 20% presentation and 60% examination

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### **DENT7158 Evaluating Scientific Research II (9 credits)**

The course will introduce the main principles of conducting and evaluating scientific research in the field of Implant Dentistry and related science disciplines.

Assessment: One 2-hour written paper; 50 % continuous assessment and 50 % examination

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### **DENT7155 Comprehensive Treatment Planning II (9 credits)**

The course will offer a overview of the principles of comprehensive treatment planning with dental implants. The course will evolve around actual patient cases which will be discussed, analysed and treatment planned as based on current evidence and best practices.

Assessment: 100% oral examination

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### **DENT7156 Comprehensive Treatment Planning III (9 credits)**

The course will offer a overview of the principles of comprehensive treatment planning with dental implants. The course will evolve around actual patient cases which will be discussed, analysed and treatment planned as based on current evidence and best practices.

Assessment: 100% oral examination

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### **DENT7151 Clinical Implant Dentistry I (30 credits)**

The course will address the clinical practice of implant dentistry within modern comprehensive dental care.

Assessment: 80% portfolio and 20% presentation

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### **DENT7152 Clinical Implant Dentistry II (45 credits)**

The course will address the clinical practice of implant dentistry within modern comprehensive dental care.]

Assessment: 80 % portfolio and 20% presentation

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### **DENT7153 Clinical Implant Dentistry III (39 credits)**

The course will address the clinical practice of implant dentistry within modern comprehensive dental care.

Assessment: 80 % portfolio and 20% presentation

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**DENT7162 Research Project I (9 credits)**

Design of an original research project. Focus will be given in scientific methodology and sound principles of research.

Assessment: 100% dissertation

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**DENT7163 Research Project II (18 credits)**

Design, execution of an original research project. Focus will be given in methodological and design aspects, statistics and fieldwork of different types of research.

Assessment: 100% dissertation

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**DENT7161 Original Research (36 credits)**

Design, execution and report of an original research project. Focus will be given in correct research results interpretation and dissemination of findings.

Assessment: 100% dissertation

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**DENT7150 Capstone Experience: Clinical Portfolio (6 credits)**

Design, execution and maintenance of complex treatments with dental implants in a wide spectrum of patients and indications. Proper documentation of treatments and evidence based decision making.

Assessment: Portfolio assessment 50% Oral Examination 50%.

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September 27, 2019