

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

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 Paediatric Dentistry [MDS(PaediatrDent)] is a postgraduate degree awarded following the satisfactory completion of a prescribed programme of study and research/clinical applications related to dental practice.

**Admission requirements**

**D181** To be eligible for admission to the curriculum for the degree of Master of Dental Surgery in Paediatric 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**

- D182** (a) A qualifying examination may be set to test a candidate's formal academic ability or his ability to complete the prescribed programme 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/she has satisfied the examiners in the examination.

**Award of degree**

**D183** To be eligible for the award of the degree of Master of Dental Surgery in Paediatric 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.

## **Period of study**

**D184** The curriculum shall normally extend over a period of thirty-six months of full-time study. Candidates shall not be permitted to extend their studies beyond the maximum period of registration of sixty months of full-time study, unless otherwise permitted or required by the Board of the Faculty.

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## **Completion of curriculum**

**D185** To complete the curriculum, a candidate shall

- (a) satisfy the requirements prescribed under TPG 6 of the Regulations for Taught Postgraduate Curricula;
- (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**

**D186** 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**

**D187** 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.

**D188** 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.

**D189** 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.

**D190** In accordance with TPG 5(c), a candidate who has exceeded the maximum period of registration specified in Regulation D184 shall be recommended for discontinuation of studies.

**D191** Failure to take any examination as scheduled normally shall result in automatic programme failure.

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**D192** 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**

**D193** Individual courses shall be graded as “Pass” or “Fail”.

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### **Assessment results**

**D194** 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 PAEDIATRIC DENTISTRY**

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### **A. PREAMBLE**

1. The objectives of the MDS(PaediatrDent) 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 course 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 course 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 programme of study in Paediatric 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 programme 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 programme of work.
4. On successful completion of the specialism, the student will:
  - (a) have a good understanding and knowledge in paediatric dentistry;
  - (b) be able to manage various kinds of advanced cases requiring the specialism care using a multidisciplinary approach;
  - (c) communicate effectively with patients, their families, relatives and carers, and with other health professionals involved in their care.
  - (d) be able to critically review dental and the specialism literature;
  - (e) be committed to continuing professional development and life-long learning.

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

The Master of Dental Surgery in Paediatric Dentistry [MDS(PaediatrDent)] is a programme of study that is designed to teach and develop the clinical, diagnostic, practical and management skills to enable graduates to provide high-quality, ethical, patient-centred and evidence-based treatment for their patients at a specialist level. Also to provide students with a broad scientific foundation of knowledge, research and critical skills to allow evaluation of research and commercial documents related to the practice of pediatric dentistry in the modern scientific era.

The curriculum shall extend over a period of thirty-six months of full-time study. Candidates shall not be permitted to extend their studies beyond the maximum period of registration of sixty months of full-time study, unless otherwise permitted or required by the Board of the Faculty. The prescribed course of study has a minimum of 5400 hours of course work. The course includes lectures, seminars, clinical and laboratory work, assignments, case reports and discussions, training in research methodology and the conduct of a research project along with the preparation of a dissertation on this project.

### **Curriculum structure**

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

The curriculum consists of the following courses/components:

#### **A. Faculty Core Courses (21 credits)**

Year 1

- 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)

#### **B. Discipline Specific Courses (66 credits)**

- DENT 7302 Didactic Paediatric Dentistry

#### **C. Clinical Component (129 credits)**

- DENT7301 Clinical Paediatric Dentistry (123 credits)
- DENT7300 Capstone Experience: Clinical Portfolio (6 credits)

#### **D. Research Component (54 credits)**

- DENT7303 Research Project

## **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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**DENT7301 Clinical Paediatric Dentistry (123 credits)**

The clinical component includes dedicated consultation clinics for the diagnosis and treatment planning of unfamiliar cases, and supervised clinical practice. It covers approximately 45% of the programme, may involve multidisciplinary clinical activities, and includes presentation/discussion of clinical cases and the production of a portfolio as capstone experience throughout the study.

Assessment: 100% Examination

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### **DENT7302 Didactic Paediatric Dentistry (66 credits)**

The didactic component of the programme will be based on the concept of providing dental care as part of the promotion of general health for the child. Biological science in relation to Paediatric Dentistry and will cover the followings:

- Behavior management
- Diagnosis and treatment planning
- Prevention and management of oral diseases
- Restorative paediatric dentistry
- Pulp therapy for primary and young permanent teeth
- Traumatic injuries to the teeth
- Dental anomalies
- Orthodontic diagnosis and treatment
- Oral pathology, oral medicine and oral surgery
- Medically compromised children
- Children with special needs
- Management of cleft lip and palate

Candidates will gain an understanding of paediatric dentistry in its public health aspects, appreciating also its relation to other branches of dentistry and medicine.

Assessment: 100% Examination

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### **DENT7303 Research project (54 credits)**

The research component is an essential part of the programme. The purpose of the research project is to familiarize and teach the candidates about research techniques and principles so that they are educated about research. A dissertation or project report or research paper shall result from the candidate's own research work to demonstrate the application of scientific method to a problem of relevance to the subject area.

Assessment: 100% Thesis

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### **DENT7300 Capstone Experience: Clinical Portfolio (6 credits)**

The Clinical Portfolio represents a culmination of student learning activities across Clinical Paediatric Dentistry. Sample tasks required in the portfolio include case presentations, written reports and self reflections.

Assessment: 100% Clinical Portfolio

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September 27, 2019