# REGULATIONS FOR THE DEGREE OF MASTER OF DENTAL SURGERY IN PROSTHODONTICS [MDS(Prostho)]

These regulations apply to candidates admitted in 2023-2024 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 Prosthodontics [MDS(Prostho)] 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**

**D227** To be eligible for admission to the curriculum for the degree of Master of Dental Surgery in Prosthodontics, 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**

- **D228** (a) A qualifying examination may be set to test a candidate's formal academic ability or his/her 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 has satisfied the examiners in the examination.

# Award of degree

**D229** To be eligible for the award of the degree of Master of Dental Surgery in Prosthodontics, 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**

**D230** 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.

# **Completion of curriculum**

**D231** 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.

# Dissertation or project report or research paper

D232 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.

### Assessments

**D233** 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.

**D234** Assessments may be held after each course and may take the form of written papers; oral, practical, and clinical examinations; assessments of coursework; or a combination of these methods.

**D235** 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 or she may be recommended for discontinuation of studies under the provisions of General Regulation G12.

**D236** A candidate who has presented a dissertation or project report or research paper that has failed to satisfy the examiners may be permitted to revise and re-present the written work within a period to be determined by the Board of Examiners; or he or she may be recommended for discontinuation of studies under the provision of General Regulation G12.

**D237** In accordance with TPG 5(c), a candidate who has exceeded the maximum period of registration specified in Regulation D230 shall be recommended for discontinuation of studies.

**D238** Failure to take any examination as scheduled normally shall result in automatic course failure. 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.

# **Grading system**

**D239** Individual courses shall be graded as "Pass" or "Fail".

### **Assessment results**

**D240** 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.

December 5, 2022

# SYLLABUSES FOR THE MASTER OF DENTAL SURGERY IN PROSTHODONTICS

### A. PREAMBLE

- 1. The objectives of the MDS(Prostho) 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 Prosthodontics.

- 2. Candidates must attend for clinical practice 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.

# B. SYLLABUSES FOR THE DEGREE OF MASTER OF DENTAL SURGERY IN PROSTHODONTICS

The Master of Dental Surgery in Prosthodontics is a course of study that is designed to enable practising dentists to acquire clinical training in prosthodontics as a contemporary component of comprehensive dental care.

The curriculum shall extend over a period of thirty-six months of full-time study, has a minimum of 270 credits of coursework. 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 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.

#### **Curriculum modules**

This curriculum is designed to provide dentists with comprehensive advanced training in prosthodontics. The coursework will enable students to acquire detailed knowledge of the principles and practice of prosthodontics, including study of the materials and technology commonly employed.

### **Curriculum structure**

The curriculum includes the following courses/components:

# A. Faculty Core Courses (15 credits)

These set of courses introduces the scientific method and aims to help the students develop advanced scientific skills, including competences required to critically evaluate research outcomes as well as design and execute biomedical research. Furthermore, these courses help the student to develop a thorough and current understanding of biomaterials and clinical dentistry of various disciplines.

#### 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)

# **B.** Discipline Specific Courses (75 credits)

These set of courses aims to help students comprehend the past and current concepts and practice of prosthodontics as well as develop the skills and compentences necessary for the diagnosis, treatment plan and management of complex prosthodontic cases using multidisciplinary approach.

#### Year 1

- DENT7406 Cross-disciplinary dental core (9 credits)
- DENT7402 Basic fixed prosthodontics (3 credits)
- DENT7419 Removable partial dentures (6 credits)
- DENT7403 Basic implant prosthodontics (3 credits)

### Year 2

- DENT7415 Intermediate fixed prosthodontics (6 credits)
- DENT7405 Complete dentures (6 credits)
- DENT7416 Intermediate implant prosthodontics (9 credits)
- DENT7429 Temporomandibular disorders (6 credits)

# Year 3

- DENT7400 Advanced fixed prosthodontics (6 credits)
- DENT7417 Maxillofacial prosthodontics (6 credits)
- DENT7401 Advanced implant prosthodontics (6 credits)
- DENT7418 Prosthodontics literature (9 credits)

# C. Clinical components (120 credits)

Clinical education includes supervised clinical practice 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

- DENT7407 Fixed prosthodontics I (12 credits)
- DENT7420 Removable prosthodontics I (12 credits)
- DENT7410 Implant prosthodontics I (6 credits)

### Year 2

- DENT7408 Fixed prosthodontics II (12 credits)
- DENT7421 Removable prosthodontics II (12 credits)
- DENT7411 Implant prosthodontics II (12 credits)
- DENT7413 Integrated prosthodontics I (9 credits)

### Year 3

- DENT7409 Fixed prosthodontics III (12 credits)
- DENT7422 Removable prosthodontics III (12 credits)
- DENT7412 Implant prosthodontics III (12 credits)
- DENT7414 Integrated prosthodontics II (9 credits)

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

This component involves the design and execution and dissemination of an original research project by the student including the submission of a dissertation or a research paper in a publication format.

### Year 1

• DENT7423 and DENT7424 Research 1A and 1B (9 credits each)

#### Year 2

• DENT7425 and DENT7426 Research 2A and 2B (9 credits each)

### Year 3

• DENT7427 and DENT7428 Research 3A and 3B (9 credits each)

# **DENT7404** Capstone Experience: Clinical Portfolio (6 credits)

A portfolio of clinical work

# **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

### **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

# 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

### 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

# 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

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

This Induction Course 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

# **DENT7406** Cross-disciplinary dental core (9 credits)

All students on a rotational basis present a wide range of cases under their care who require multidisciplinary teamwork on patient assessment and diagnosis, treatment planning and delivery of therapeutic procedures. This leads to active discussion of clinical topics arising. In addition, all students present a selection of representative or featured papers from the literature to do with other periodontally *related disciplines such as implant dentistry, orthodontics and prosthodontics*. These literature contributions are then collectively discussed.

Assessment: 100% in-class assessment

### **DENT7402** Basic fixed prosthodontics (3 credits)

This course aims to introduce the students to the basic principles of fixed prosthodontics. On completion of this course, a student should be able to assess patients requiring simple direct and indirect restorations and apply the knowledge to formulate appropriate treatment plan.

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

### **DENT7419 Removable partial dentures (6 credits)**

This course aims to introduce the students to the basic principles of removable partial dentures. On completion of this course, a student should be able to assess partially dentate patients requiring removable partial dentures and apply the knowledge to formulate appropriate treatment plan.

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

# **DENT7403 Basic implant prosthodontics (3 credits)**

This course aims to introduce the students to the basic principles of implant prosthodontics. On completion of this course, a student should be able to assess and apply the knowledge to formulate appropriate treatment plan for partially dentate patients requiring single implant-supported restorations in non-aesthetic zone.

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

# **DENT7415** Intermediate fixed prosthodontics (6 credits)

This course aims to provide the students more in-depth knowledge on fixed prosthodontics. On completion of this course, a student should be able to assess partially dentate cases requiring various types of tooth-supported fixed prostheses and apply the knowledge to formulate appropriate treatment plan.

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

### **DENT7405** Complete dentures (6 credits)

This course aims to introduce the students to the basic principles of complete dentures. On completion of this course, a student should have the knowledge of anatomical, physiological and psychological consequences of edentulism and be able to assess edentulous patients and apply the knowledge to formulate appropriate treatment plan.

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

# **DENT7416** Intermediate implant prosthodontics (9 credits)

This course aims to provide the students more in-depth knowledge on implant prosthodontics. On completion of this course, a student should be able to assess and apply the knowledge to formulate appropriate treatment plan for partially dentate patients requiring implant-supported fixed partial dentures in non-aesthetic zone.

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

# **DENT7429 Temporomandibular disorders (6 credits)**

This course aims to introduce the students to the basic principles of temporomandibular disorders. On completion of this course, a student should have the knowledge on the functional anatomy of human masticatory system, aetiology/classification/impact of temporomandibular disorders, various treatment modalities for temporomandibular disorders and be able to assess patients with temporomandibular joint disorders and apply the knowledge to formulate appropriate treatment plan using multidisciplinary approach.

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

# **DENT7400** Advanced fixed prosthodontics (6 credits)

This course aims to introduce the students to the advanced principles of fixed prosthodontics. On completion of this course, a student should be able to assess and apply the knowledge to formulate appropriate treatment plan patients requiring complex fixed prosthodontic treatment such as severe tooth wear cases and hypodontia cases where full mouth rehabilitation using reorganized approach is needed.

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

### **DENT7417 Maxillofacial prosthodontics (6 credits)**

This course aims to introduce the students to the basic principles of maxillofacial prosthodontics. On completion of this course, a student should have the knowledge on the aetiology, classification, impact and various treatment modalities of head and neck tumours and be able to assess patients with head and neck tumour and apply the knowledge to formulate appropriate treatment plan using multidisciplinary approach.

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

### **DENT7401** Advanced implant prosthodontics (6 credits)

This course aims to introduce the students to the advanced principles of implant prosthodontics. On completion of this course, a student should be able to assess and apply the knowledge to formulate appropriate treatment plan for complex partially dentate and edentulous patients requiring implant-supported prostheses using multidisciplinary approach.

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

# **DENT7418 Prosthodontics literature (9 credits)**

This course aims to introduce the students to the current literature in prosthodontics. On completion of this course, a student should have the up-to-date knowledge on the principles and practice of various aspects of prosthodontics, including the new development of materials and technology.

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

### **DENT7407 Fixed prosthodontics I (12 credits)**

This course aims to introduce the students to the basic clinical practice of fixed prosthodontics. On completion of this course, a student should be able to to provide appropriate clinical treatment for patients using simple direct and indirect restorations including crowns, inlays, onlays and veneers.

Assessment: One 2-hour written paper; 30% coursework and 70% examination

### **DENT7420 Removable prosthodontics I (12 credits)**

This course aims to introduce the students to the basic clinical practice of removable prosthodontics. On completion of this course, a student should be able to to provide appropriate clinical treatment for partially dentate patients using various types of simple removable partial dentures including tooth-borne partial dentures, tooth and tissue-borne partial dentures and transitional dentures.

Assessment: One 2-hour written paper; 30% coursework and 70% examination

# **DENT7410 Implant prosthodontics I (6 credits)**

This course aims to introduce the students to the basic clinical practice of implant prosthodontics. On completion of this course, a student should be able to provide appropriate clinical treatment for partially dentate patients requiring single implant-supported restorations in non-aesthetic zone.

Assessment: One 2-hour written paper; 30% coursework and 70% examination

# **DENT7408 Fixed prosthodontics II (12 credits)**

This course aims to introduce the students to the more in-depth clinical practice of fixed prosthodontics. On completion of this course, a student should be able to to provide appropriate clinical treatment for partially dentate patients using various tooth-supported fixed prostheses including conventional bridges and resin-bonded bridges.

Assessment: One 2-hour written paper; 30% coursework and 70% examination

### **DENT7421 Removable prosthodontics II (12 credits)**

This course aims to introduce the students to more in-depth clinical practice of removable prosthodontics. On completion of this course, a student should be able to provide appropriate clinical treatment using various types of removable prostheses and techniques including conventional complete dentures, partial overdenture, partial denture with attachments/surveyed crowns.

Assessment: One 2-hour written paper; 30% coursework and 70% examination

### **DENT7411 Implant prosthodontics II (12 credits)**

This course aims to introduce the students to more in-depth clinical practice of implant prosthodontics. On completion of this course, a student should be able to provide appropriate clinical treatment for partially dentate patients requiring multiple implants for implant-supported bridges.

Assessment: One 2-hour written paper; 30% coursework and 70% examination

# **DENT7413 Integrated prosthodontics I (9 credits)**

This course aims to introduce the students to the basic integrated clinical practice of prosthodontics. On completion of this course, a student should be able to provide appropriate clinical treatment for partially dentate patients requiring comprehensive treatment of fixed, removable and implant prostheses as well as patients requiring conservative treatment for temporomandibular disorders.

Assessment: One 2-hour written paper; 30% coursework and 70% examination

# **DENT7409 Fixed prosthodontics III (12 credits)**

This course aims to introduce the students to advanced clinical practice of fixed prosthodontics. On completion of this course, a student should be able to manage complex prosthodontic cases such as severe generalized tooth wear, localized tooth wear with dentoalveolar compensation and provide appropriate clinical treatment with the use of full mouth rehabilitation using the reorganized or Dahl approach.

Assessment: One 2-hour written paper; 30% coursework and 70% examination

### **DENT7422 Removable prosthodontics III (12 credits)**

This course aims to introduce the students to advanced clinical practice of removable prosthodontics. On completion of this course, a student should be able to manage complex partially dentate and edentulous patients including severely resorbed ridges, flabby ridges and combination syndrome and provide appropriate clinical treatment with the use of various techniques including partial denture using rotational pathway of insertion, partial denture using the reorganized apporach, complete overdentures and the application of neutral zone technique, copy denture technique and lingualized occlusal concept.

Assessment: One 2-hour written paper; 30% coursework and 70% examination

# **DENT7412 Implant prosthodontics III (12 credits)**

This course aims to introduce the students to advanced clinical practice of implant prosthodontics. On completion of this course, a student should be able to manage complex implant cases requiring implant-supported overdentures, full mouth implant rehabilitation, implants in aesthetic zone, immediate loading of dental implants, ridge augmentation and the conservative treatment of technical and biological failures of implant prostheses.

Assessment: One 2-hour written paper; 30% coursework and 70% examination

### **DENT7414 Integrated prosthodontics II (9 credits)**

This course aims to introduce the students to the advanced integrated clinical practice of prosthodontics. On completion of this course, a student, using the multidisciplinary approach, should be able to provide appropriate clinical prosthodontic treatment for complex cases such as hypodontia, osteotomy, jaw reconstruction, maxillofacial defects and patients after treatment for head and neck cancers.

Assessment: One 2-hour written paper; 30% coursework and 70% examination

# **DENT7423 Research 1A (9 credits)**

This course aims to introduce the students to various research topics on prosthodontics. On completion of this course, a student should be able to identify a potential research topic for study.

Assessment: 100% continuous assessment

### **DENT7424 Research 1B (9 credits)**

This course aims to introduce the students to search and review the literature on prosthodontics. On completion of this course, a student should be able to complete a comprehensive review of a potential research topic for study.

Assessment: 100% continuous assessment

### **DENT7425 Research 2A (9 credits)**

This course aims to introduce the students to the design of experiments on prosthodontics. On completion of this course, a student should be able to submit an appropriate protocol of a potential research topic for study.

Assessment: 100% continuous assessment

### **DENT7426 Research 2B (9 credits)**

This course aims to introduce the students to the preliminary data collection using the methods proposed. On completion of this course, a student should be able to complete a pilot study and refine the protocol of a potential research topic for study.

Assessment: 100% continuous assessment

# **DENT7427 Research 3A (9 credits)**

This course aims to introduce the students to the implementation of the experiment including data collection and analysis. On completion of this course, a student should be able to complete the data collection and statistical analysis of a potential research topic for study.

Assessment: 100% continuous assessment

# **DENT7428 Research 3B (9 credits)**

This course aims to introduce the students to the dissertation writing on the experiment proposed. On completion of this course, a student should be able to submit a dissertation in a publication format which is ready for submission to an international peer-reviewed journal.

Assessment: 100% oral examination

# **DENT7404** Capstone Experience: Clinical Portfolio (6 credits)

This course aims to introduce the students to the documentation of clinical cases treated during the study. On completion of this course, a student should be able to submit a portfolio including an array of clinical cases that can demonstrate the breadth and depth of the clinical experience.

Assessment: 50% portfolio and 50% examination