

## **REGULATIONS FOR THE POSTGRADUATE DIPLOMA IN DENTAL MATERIALS SCIENCE (PDipDMS)**

*(See also General Regulations)*

The Postgraduate Diploma in Dental Materials Science (PDipDMS) is a postgraduate qualification awarded following the satisfactory completion of a prescribed course of study related to the use of materials in dental practice.

---

### **Admission requirements**

**D127** To be eligible for admission to the curriculum for the Postgraduate Diploma in Dental Materials Science, a candidate:

- (a) shall comply with the General Regulations;
  - (b) shall hold
    - (i) the degree of Bachelor of Dental Surgery or Bachelor of Science of this University; or
    - (ii) a degree or other qualification of equivalent first-degree standard from another university or comparable institution accepted for this purpose; and
  - (c) satisfy the examiners in a qualifying examination if required.
- 

**D128** A candidate who does not hold a Bachelor's degree of this University or a degree or other qualification of equivalent standard may in exceptional circumstances be permitted to register if the candidate can demonstrate adequate preparation for studies at this level and satisfies the examiners in a qualifying examination.

---

### **Qualifying examination**

- D129(a)** A qualifying examination may be set to test a candidate's formal academic ability or his or her ability to complete the prescribed courses of study. It shall consist of one or more written papers or the equivalent and may include any or all of a project report, practical examination or oral examination.
- (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 diploma**

**D130** To be eligible for the award of the Postgraduate Diploma in Dental Materials Science, a candidate shall

- (a) comply with the General Regulations; and
  - (b) complete the curriculum and satisfy the examiners in accordance with the regulations set out below.
- 

### **Curriculum**

**D131** The curriculum shall consist of a minimum of 100 hours of prescribed work normally extending over one academic year of part-time study.

- D132** To complete the curriculum a candidate shall
- (a) follow instruction in the courses prescribed and complete satisfactorily all coursework requirements; and
  - (b) satisfy the examiners in all examinations as may be required.
- 

### Examinations

**D133** 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.

---

**D134** Examinations may take the form of written papers, oral examinations, assessments of coursework, or a combination of these methods.

---

**D135** A candidate who has failed to satisfy the examiners in any part of the examinations may be permitted to present himself again for examination at a time to be determined by the Board of Examiners, with or without repeating any part of the curriculum; or he may be recommended for discontinuation of studies under the provisions of General Regulation G12.

---

**D136** Failure to take any examination as scheduled normally shall result in automatic course failure. A candidate who is unable, through his or her illness, to be present at an examination may apply in writing within two weeks of the examination for permission to be examined at some other time to be determined by the Board of Examiners.

---

### Examination results

**D137** At the conclusion of the examinations, the names of the successful candidates shall be published in alphabetical order.

---

## SYLLABUSES

---

### **DENT6020 Postgraduate Diploma in Dental Materials Science**

The course is designed to provide the student with a fundamental knowledge of the principles underlying the mechanical, physical and chemical properties; structures at molecular, microscopic and macroscopic levels; and aspects of the behaviour of each class of material used in dentistry in relation to their function, application handling and service. Included are:

- |                                      |  |
|--------------------------------------|--|
| - impression materials;              | - investment materials;                  |
| - model and die materials;           | - dental resin-based restoratives;       |
| - cements and lining materials;      | - dental alloys;                         |
| - dental amalgams;                   | - acrylic and other polymers;            |
| - porcelain;                         | - implant materials;                     |
| - metal-ceramic systems;             | - solders and fluxes;                    |
| - abrasives and polishing materials; | - waxes;                                 |
| - soft and hard tissues;             | - instruments, tools and other equipment |

and other relevant materials. In addition, and as appropriate, are included processes used in fabrication and finishing; interactions in the biological context of usage (e.g. toxic and other hazards); and the recognition of faults and their causation.

Emphasis is placed on the explicability of materials-related phenomena from structure-property relationships, in the context of clinical teaching, on the universality and applicability of the ideas to materials in general (as opposed to products), and on the means by which dental practitioners may make knowledge-based rational decisions concerning treatment.

At the end of the course the student should have a sound grasp of all relevant concepts, and be competent in justifying selection criteria and manipulation instructions for all classes of materials relevant to the practice of dentistry.