

Doctor of Clinical Dentistry

Proposal

This proposal is for the conversion of the current Master's degree in Dental Science (by coursework and minor thesis) to a doctorate by coursework. In order to meet national and international benchmarks for dental specialist training programs to be full time and of three years' duration, the School of Dental Science has been using in recent years a combination of a full time one-year postgraduate Diploma in Clinical Dentistry followed by a full time two-year Master of Dental Science degree. The current proposal is for a replacement of this three years of education and training with a full time three-year doctorate by coursework, which over the three years will include Coursework, clinical practice and research, with an increased amount of time devoted to research than in the previous combined program.

Students will have the opportunity to advance their skills and knowledge in a selected specialist discipline, to enhance professional knowledge and skills, and to engage with new and emerging fields of study. The program will facilitate and expand the advanced development of clinical, academic and research skills necessary for a graduate to further a career in academia, research or specialty practice.

Objectives

The Doctor of Clinical Dentistry will serve several purposes. It will provide students with the opportunity to advance their knowledge and skills in a selected specialist discipline, to enhance professional knowledge and skills, and to engage with new and emerging fields of study. The program is designed to facilitate the advanced development of clinical, academic and research skills necessary for a graduate to further a career in academia, research or specialty practice.

Endodontics: The postgraduate program in Endodontics will provide advanced study and training in all aspects of Endodontics, and aims to prepare graduates for specialty practice or teaching and research in a dental school.

Oral Pathology and Oral Medicine: The postgraduate program in Oral Pathology and Oral Medicine will provide advanced study, and training in oral pathology and oral medicine such that, at the end of the program, the candidate will have a detailed knowledge of the scientific basis of the pathology, and is experienced in diagnostic oral pathology and in the diagnosis and treatment of diseases of the oral mucosa and orofacial pain.

Orthodontics: The postgraduate program in Orthodontics will provide advanced study and training to allow the postgraduate student to acquire a thorough understanding of the science of craniofacial biology and its relevance to the development of normal and abnormal skull growth and occlusion, and to the prevention, interception and correction of dentofacial abnormalities by orthodontic means. The program aims to allow the postgraduate student to develop the ability for independent thought and the ability to solve problems using scientific principles,

Pediatric Dentistry: The postgraduate program in Pediatric Dentistry will provide advanced study and training in all areas of this specialty which addresses the oral health care of children: behaviour guidance, growth and development, interceptive orthodontics, diagnosis and treatment planning, prevention, trauma, restorative dentistry, pulp therapy, anaesthesia and sedation, oral surgery, and care of the medically compromised child.

Periodontics: The postgraduate program in Periodontics will provide advanced study and training in all aspects of Periodontology and Periodontics. The biology of the periodontal tissues, the biological

basis of periodontal diseases, their treatment, control and prevention and the inter-relationship between Periodontics and other areas of dentistry are covered at an advanced level.

Prosthodontics: The postgraduate program in Prosthodontics will provide advanced Study and training in all aspects of Prosthodontics, and prepares graduates for teaching and research and/or private practice.

Special Needs Dentistry: The postgraduate program in Special Needs Dentistry will provide advanced study and training in all aspects of Special Needs Dentistry, which addresses the oral health care of people adversely affected by intellectual disability, medical, physical, and/or psychiatric issues.

Specific learning outcomes expected of the graduate

On completion of the Doctor of Clinical Dentistry, the graduate should be able to:

- demonstrate special skills in the provision of clinical services applicable to the discipline;
- demonstrate a detailed understanding of the principles, current developments and research methods applicable to the specialty or discipline;
- conduct an original scientific investigation into a biological, clinical or community health problem; and
- communicate the results of scientific enquiry.

Generic learning outcomes expected of the graduate

The School of Dental Science expects the graduates of the Doctor of Clinical Dentistry to have acquired the following generic learning outcomes:

- an advanced understanding of the changing knowledge base in the specialist area;
- an ability to evaluate and synthesize the research and professional literature in the discipline;
- highly-developed problem-solving abilities in the discipline area, characterized by flexibility of approach;
- a superior capacity to articulate their knowledge and understanding in oral and written presentations;
- an advanced understanding of the international context and sensitivities of the specialist area;
- an ability to design, conduct and report original research;
- a capacity to manage competing demands on time, including self-directed project work;
- a profound respect for truth and intellectual integrity, and for the ethics of scholarship;
- the ability to offer leadership in the specialist area;
- the capacity to value and participate in projects which require team-work;
- an understanding of the significance and value of their knowledge to the wider community (including business and industry);
- a capacity to engage where appropriate with issues in contemporary society;

and where appropriate, to have acquired:

- advanced working skills in the application of computer systems and software and a receptiveness to the opportunities offered by new technologies;
- advanced skills and techniques applicable to the discipline;
- advanced competencies in areas of profession expertise and/or scholarship.

Entry requirements

This course proposal does not include any changes to entry requirements from those previously in place for the MDSc degree. All applicants to the Doctor of Dentistry program must hold an

undergraduate degree in dentistry with very good academic results and have also completed at least two years full-time, continuous clinical work experience. Completion of professional development courses, postgraduate diplomas and a strong record in research publications would be highly regarded.

Course/program structure

The Doctor of Clinical Dentistry will be available in seven disciplines, each being a clinical specialty: Endodontics, Oral Pathology and Medicine, Orthodontics, Pediatric Dentistry, Periodontics, Prosthodontics and Special Needs Dentistry. Specific details of each discipline are described below. As in the current combined full time, three-year program, approximately 50% of the time will be devoted to clinical training and experience, and the remainder to coursework (20%) and research (30%). Postgraduate students will continue to be required to participate in the teaching programs of the School at an appropriate level as part of their training. This will normally consist of preclinical and clinical supervision of undergraduate students, for one session per week per semester, throughout the doctoral program.

Full time or part time course availability

The course will be available only as a full time course (and as such is unchanged from the current MDS course).

Availability of New Course to Fee-Paying Overseas Students

The proposed course will be fully available to fee-paying overseas students. It is likely that the course will be very attractive to overseas students and their home institutions and particularly those seeking education and training in preparation for dental clinical specialisation,

Availability of New Course to Fee-Paying Australian Students

The proposed course will be fully available to fee-paying Australian students. It is likely that the course will be very attractive to Australian students and particularly those seeking education and training in preparation for dental clinical specialisation.

Course description

The full time course will comprise approximately 50% of the time spent in clinical practice, 20% in coursework and 30% in research. This distribution accords with international best practice for masters' degrees leading to clinical specialization in Dentistry.

The full time structure of the course will comprise a total of 300 points, distributed as 100 points per year as shown below:

Clinical Practice Subjects	150 points
Coursework	50 points
Thesis/Research Proposal	100 points

Year 1: -	Points	Year/semester
Research Design Course	15	Year (Y)
Research Proposal	15	Year
Coursework (Principles of Specialty)	20	Year
Clinical Practice Subject (Clinical Practice in Specialty)	50	Year
Year 2:		
Minor Thesis	30	Year
Coursework (Advanced Seminars in Specialty)	20	Year

Clinical Practice Subject (Advanced Clinical Practice in Specialty)	50	Year
Year 3:		
Minor Thesis	40	Year
Coursework (Advanced Seminars in Specialty)	10	Year
Clinical Practice Subject (Advanced Clinical Practice in Specialty)	50	Year

Year 1: Research Design Course (previously 511-811 Common Core)

In the first year, all students will attend a research design subject (one lecture per week for two semesters). This subject, currently entitled "Tools for Research, Writing and Publishing", introduces students to critical analysis of literature, planning a research protocol and writing a thesis. This subject is intended to assist students to develop the necessary analytical and writing skills that are needed for thesis preparation and publication. Assessment consists of one written assignment per semester, each worth 50% of the final mark for the course. The assignments are open-book in style, and address current issues in information collection, critical analysis of current literature and research design (50%).

Year 1: Research Proposal (New course; not a previously designated course)

In the first year, students will select a research topic and complete a literature review, leading to the development of the research proposal which should be submitted for review by the end of second semester.

Years 2 and 3: Minor Thesis (previously 511-614 Minor Thesis)

The completion of a piece of original research and the submission of a research thesis of up to 25,000 words is required. The thesis represents approximately nine months of fulltime effort including project development, conduct of the experimental work, data analysis and thesis writing.

As a general guideline, the thesis is expected to be of sufficient standard and content to be potentially publishable in a peer-reviewed journal. In some instances a manuscript will already have been submitted to a journal, or the thesis may be in a format that will require very little change before such submission. In other instances a more traditional thesis format may be used. For either format, a more substantial literature review than is normally encountered in a published paper is included, either as a separate section of the thesis or as a separate manuscript for publication. It is recognised that not all research projects work out as well as might be hoped, often for reasons beyond the control of the candidate. Hence the guideline of potentially publishable work will be interpreted generously in some instances, and the thesis viewed as representing an appropriate level of effort. The thesis will be examined by two examiners, who are requested to read the thesis critically with regard to rationale, experimental design, data analysis and validity of conclusions, as well as citation and interpretation of literature, writing style and grammar, punctuation, etc. Candidates required to resubmit their higher degree thesis for a second examination must enrol for the period of the re-write.