# DENTISTRY, MASTER OF SCIENCE IN (M.S.D.) WITH A CONCENTRATION IN ENDODONTICS

### **Program goal**

The advanced dental specialty education program in endodontics offers the resident a comprehensive 24-month course of study in clinical and didactic endodontics. The program is designed to educate qualified individuals to pursue careers as practicing clinical dental specialists in endodontics. The program meets the educational requirements for limitation of practice to the specialty of endodontics and prepares the student for examination by the American Board of Endodontics.

Students completing the program earn a specialty Certificate in Endodontics and a Master of Science in Dentistry degree. The program conforms to the Standards for Advanced Specialty Education in Endodontics and carries a full approval status from the Commission on Dental Accreditation of the American Dental Association.

## Student learning outcomes

Graduates of this program will:

- Be able to formulate and conduct a research project relevant to their discipline
- 2. Practice evidence-based advanced level dentistry
- Demonstrate the ability to communicate with patients, colleagues in general dentistry, dental specialties, medicine and other health care practitioners
- 4. Demonstrate advanced clinical skills in the provision of ethical and informed patient care
- 5. Be proficient in the delivery of state-of-the-art endodontic care including
  - a. Diagnosis, treatment planning and prognosis of pulpal and periradicular disease
  - b. Provision of nonsurgical endodontics, retreatment and surgical endodontics
  - c. Outcome assessment
  - d. Diagnostic imaging technologies
  - e. Management of medically compromised patients
  - f. Emergency management of endodontic conditions
  - g. Management of orofacial pain and dental anxiety
  - h. Use of magnification technologies
  - i. Use of emerging techniques of endodontic treatment
  - j. Management of traumatic dental injuries

## VCU Graduate Bulletin, VCU Graduate School and general academic policies and regulations for all graduate students in all graduate programs

The VCU Graduate Bulletin website documents the official admission and academic rules and regulations that govern graduate education for all graduate programs at the university. These policies are established by the

graduate faculty of the university through their elected representatives to the University Graduate Council.

It is the responsibility of all graduate students, both on- and offcampus, to be familiar with the VCU Graduate Bulletin as well as the Graduate School website (http://www.graduate.vcu.edu/) and academic regulations in individual school and department publications and on program websites. However, in all cases, the official policies and procedures of the University Graduate Council, as published on the VCU Graduate Bulletin and Graduate School websites, take precedence over individual program policies and guidelines.

Visit the academic regulations section for additional information on academic regulations for graduate students. (https://bulletin.vcu.edu/academic-regs/)

# Degree candidacy requirements

A graduate student admitted to a program or concentration requiring a final research project, work of art, thesis or dissertation, must qualify for continuing master's or doctoral status according to the degree candidacy requirements of the student's graduate program. Admission to degree candidacy, if applicable, is a formal statement by the graduate student's faculty regarding the student's academic achievements and the student's readiness to proceed to the final research phase of the degree program.

Graduate students and program directors should refer to the following degree candidacy policy as published in the VCU Graduate Bulletin for complete information and instructions.

Visit the academic regulations section for additional information on degree candidacy requirements. (https://bulletin.vcu.edu/academic-regs/grad/candidacy/)

# **Graduation requirements**

As graduate students approach the end of their academic programs and the final semester of matriculation, they must make formal application to graduate. No degrees will be conferred until the application to graduate has been finalized.

Graduate students and program directors should refer to the following graduation requirements as published in the Graduate Bulletin for a complete list of instructions and a graduation checklist.

Visit the academic regulations section for additional information on graduation requirements. (https://bulletin.vcu.edu/academic-regs/grad/ graduation-info/)

# **Other information**

For a current copy of the program handbook, contact the VCU School of Dentistry's Department of Endodontics.

Apply online today. (https://www.vcu.edu/admissions/apply/graduate/)

# **Admission requirements**

Degree:	Semester(s) of entry:	Deadline dates:	Test requirements:
M.S.D.	Fall (Jul 1 start date)	Aug 15	National Dental Boards, parts I and II or Integrated National Board

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### **Special requirements**

 Applicants from countries where English is not the primary and official language must complete the TOEFL with a minimum score of 100.

In addition to the general admission requirements of the VCU Graduate School (https://bulletin.vcu.edu/graduate/study/admission-graduatestudy/admission-requirements/), the following requirements represent the minimum acceptable standards for admission:

- Graduation from an accredited university or its equivalent, with a Doctor of Dental Surgery or Doctor of Medicine in Dentistry or the international equivalent
- For international students, an external credential evaluation of all international transcripts to complete the application (WES, ECE, and AACRAO are some of the recommended NACES-approved providers.)
- 3. One "dean's letter" from the academic institution from which the individual received the dental degree that gives class rank, GPA and overall academic recommendation
- Two letters of recommendation from individuals who are in a position to judge the applicant's ability to engage in graduate study and pursue advanced dental training
- A written letter of professional intent or biographical statement that reflects the candidate's desire to pursue the specialty and the intent upon receipt of the degree and certificate
- 6. A resume or curriculum vitae
- 7. An administrative application fee made payable to the Department of Endodontics, School of Dentistry (See website for details. This fee is in addition to the application fee that has to be paid with the submission of the graduate application. One year of an AEGD, GPR or the private practice equivalent is preferred but not required.)

Admission to the advanced dental specialty program in endodontics is through American Dental Education Association Postdoctoral Application Support Service. PASS historically opens to receive applications mid-May of the year prior to the year for which the candidate wishes to enroll and is open until Aug. 15. Please refer to the VCU School of Dentistry website, Department of Endodontics postgraduate information or ADEA PASS for specific yearly dates of the application period.

Candidates are required to interview in person. Invitations to interview followed by an invitation to accept a position in the residency are extended by the program director in the fall at the close of the application period. For example, the candidate will submit an application through ADEA PASS during the application period (May through August). An invitation will be extended to interview with the advanced dental specialty program in endodontics admission committee in August or September. The candidate will be informed of selection or nonselection by Nov. 15. The resident will start the clinical program the following June and the academic program the following September.

Admission to the Master of Science in Dentistry degree program is made after the candidate has accepted a residency position in the advanced dental specialty program in endodontics.

#### Degree requirements

All course work must be completed within the 24-month timeframe for the program. Any extension of the 24-months is at the discretion

of the program director. Extensions are approved only in extenuating circumstances.

In addition to general VCU Graduate School graduation requirements (https://bulletin.vcu.edu/academic-regs/grad/graduation-info/), a cumulative GPA of 3.0 must be maintained. Residents must receive a minimum grade of B for all required courses. A student with a grade of C in a required course may be required to repeat the course. A second grade of C in a required course may result in dismissal from the program. At the discretion of the program director, a resident retaking a required course may still be eligible to take the comprehensive written and oral examinations and to start the thesis research process prior to successful completion of the repeat of the course.

In the last semester of the second year the resident will take a written and an oral comprehensive examination designed to evaluate the resident's ability to integrate the didactic and clinical course material, demonstrate critical-thinking skills and demonstrate command of evidence-based endodontics. Both the written and oral examinations must be successfully completed to receive the specialty Certificate in Endodontics.

The Certificate of Endodontics, conferred by the School of Dentistry, is only conferred upon completion and awarding of the Master of Science in Dentistry.

The residents must formulate, complete and defend a research project. The resident will prepare a manuscript in a thesis format or in the publishable format of a refereed journal. The project must be completed, defended and presented in a research forum in order for the resident to qualify for receipt of the Master of Science in Dentistry.

### Curriculum requirements

Course	Title	Hours
Core courses		
DENS 550	Update in Practice Administration	1
DENS 580	Biostatistics and Research Design in Dentistry (two credits taken twice)	2
DENS 660	Interdisciplinary Care Conference (0.5 credits earned twice) <sup>1</sup>	0.5
DENS 680	Graduate Dental Clinic (four credits taken four times)	4
DENS 699	Thesis Guidance (two credits taken four times)	2
DENS 700	Basic Sciences and Graduate Dentistry	3
ORPT 750	Advanced Oral Diagnostic Sciences (0.5 credits taken twice)	0.5
Concentration course	25	
ENDO 522	Introduction: Specialty of Endodontics	2
ENDO 530	Advanced Oral Pathology	1
ENDO 532	Management of Medical Emergencies in the Dental Office (one credit taken twice)	1
ENDO 560	Endodontic Therapy Lectures	3.5
ENDO 650	Endodontic Topic Literature Review (3.5 credits taken four times)	3.5
ENDO 652	Endodontic Clinical Seminars (1.5 credits taken four times)	1.5

ENDO 654	Endodontic Management of the Medically Compromised Patient (one credit taken twice)	1
ENDO 656	Endodontic Current Literature Review (one credit taken four times)	1
ENDO 680	Clinical Endodontics (one credit taken four times)	1
Total Hours		72.5

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Students register for .5 credits for both fall and spring semesters for both years of the program. They receive a continuing grade in the fall semester and a pass/fail grade at the end of the spring semester for the entire year. Students take the class four times for .5 credits each time, but they are only graded for two .5 credit classes.

# The minimum total of graduate credit hours required for this degree is 72.5.

Students who complete the requirements for this degree will receive a Master of Science in Dentistry.

# Plan of study

The following illustrates how the course requirements are met during the 24 months of the program. No additional class work or course work is required other than the courses listed below.

#### Year one

Fall semester	r	Hours
DENS 580	Biostatistics and Research Design in Dentistry	2
DENS 660	Interdisciplinary Care Conference (no credits earned in fall; continuing course) <sup>1</sup>	0.5
DENS 680	Graduate Dental Clinic	4
DENS 699	Thesis Guidance	2
ENDO 522	Introduction: Specialty of Endodontics	2
ENDO 532	Management of Medical Emergencies in the Dental Office	1
ENDO 560	Endodontic Therapy Lectures	3.5
ENDO 650	Endodontic Topic Literature Review	3.5
ENDO 652	Endodontic Clinical Seminars	1.5
ENDO 656	Endodontic Current Literature Review	1
ENDO 680	Clinical Endodontics	1
ORPT 750	Advanced Oral Diagnostic Sciences	0.5
	Term Hours:	22
Spring semes	ster	
DENS 580	Biostatistics and Research Design in Dentistry	2
DENS 660	Interdisciplinary Care Conference <sup>1</sup>	0.5
DENS 680	Graduate Dental Clinic	4
DENS 699	Thesis Guidance	2
DENS 700	Basic Sciences and Graduate Dentistry	3
ENDO 650	Endodontic Topic Literature Review	3.5
ENDO 652	Endodontic Clinical Seminars	1.5
ENDO 654	Endodontic Management of the Medically Compromised Patient	1

	Total Hours:	72.5
	Term Hours:	15.5
ENDO 680	Clinical Endodontics	1
ENDO 656	Endodontic Current Literature Review	1
ENDO 654	Endodontic Management of the Medically Compromised Patient	1
ENDO 652	Endodontic Clinical Seminars	1.5
ENDO 650	Endodontic Topic Literature Review	3.5
ENDO 530	Advanced Oral Pathology	1
DENS 699	Thesis Guidance	2
DENS 680	Graduate Dental Clinic	4
DENS 660	Interdisciplinary Care Conference <sup>1</sup>	0.5
Spring seme		15
	Term Hours:	15
ENDO 680	Clinical Endodontics	1
ENDO 652 ENDO 656	Endodontic Current Literature Review	1.5
ENDO 650 ENDO 652	Endodontic Topic Literature Review Endodontic Clinical Seminars	3.5 1.5
ENDO 532	Management of Medical Emergencies in the Dental Office	1
DENS 699	Thesis Guidance	2
DENS 680	Graduate Dental Clinic	4
DENS 660	Interdisciplinary Care Conference (no credits earned in fall; continuing course) <sup>1</sup>	0.5
DENS 550	Update in Practice Administration	1
Fall semeste	r	
Year two		20
01111730	Term Hours:	20
ORPT 750	Advanced Oral Diagnostic Sciences	0.5
ENDO 680	Clinical Endodontics	1
ENDO 656	Endodontic Current Literature Review	1

Students register for .5 credits for both fall and spring semesters for both years of the program. They receive a continuing grade in the fall semester and a pass/fail grade at the end of the spring semester for the entire year. Students take the class four times for .5 credits each time, but they are only graded for two .5 credit classes.

The minimum total of graduate credit hours required for this degree is 72.5.

#### Contact

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#### Additional contact

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**Program website:** endodontics.vcu.edu/postgrad (http:// www.endodontics.vcu.edu/postgrad/)