

Orthodontics, M.S.

Degree Offered

- Master of Science

Nature of the Program

The School of Dentistry and the Department of Orthodontics at West Virginia University offer a 34-month (three academic years) advanced education Master of Science program. The program models a private practice atmosphere with state-of-the-art clinical facilities. The curriculum is centered on daily clinical seminars and private instruction with each individual class. Also included are regularly scheduled orthognathic surgery conferences and seminars with other dental and medical specialists.

A stipend plus tuition waiver will be provided for graduate students in Orthodontics at the end of the second year for summer session and fall/spring semesters of the third year. Special fees are not covered by the tuition waiver. You must pay special fees each term/semester.

Inquiries concerning this program should be directed to the [Office of Admissions, Recruitment and Access](#). This program is accredited by the Commission on Dental Accreditation of the American Dental Association. Applications will be processed by the School of Dentistry. For details about the faculty, publications, and alumni information, please visit the Department website at Department of Orthodontics. (<https://dentistry.hsc.wvu.edu/departments/orthodontics/>)

Program Goals

The Advanced Education Program is designed to develop skilled practitioners who can easily transition into and manage a busy orthodontic practice. The goal of this program is to teach a variety of treatment mechanics that are scientifically valid and foster decision making skills based on treatment needed on a case-by-case basis. Clinical experiences are diverse, including cleft lip and palate and orthognathic surgery cases.

An original master's thesis project is required and is designed to obtain results suitable for publication in a reputable dental journal. The curriculum focuses on didactic and clinical materials to prepare residents for taking the American Board of Orthodontics (ABO) Examinations. Classes pertaining to the written board are given throughout the three-year program. It is a requirement for every third year resident to take and pass the written component of the ABO, and all residents are encouraged to complete the board certification process.

Program Curriculum

The 34-month Master in Science program in Orthodontics begins July 1. First-year residents begin an intensive Orthodontic Technique course on July 1 and begin seeing new patients in mid-July. In August, first year residents begin a full clinic schedule which includes morning and afternoon clinic sessions.

Didactic course work at the WVU Department of Orthodontics consists of faculty led, resident taught lectures and seminar sessions for an average of two hours each day. Seminar topics range from patient diagnosis and treatment planning to practice management and financial planning. In addition, evidence-based products and techniques are reviewed.

Clinical work simulates the private practice environment. There are three dental assistants and a patient service coordinator available in the clinic to aid residents during clinic sessions. All orthodontic records are computerized. Diagnosis and treatment planning can be completed entirely in the digital realm. Billing, scheduling, and record storage is accomplished using a commercial dental office management system. The orthodontic clinic is completely paperless to maximize clinical efficiency so residents are able to increase their patient experiences.

FACULTY

CHAIR

- Peter Ngan - D.M.D.
Harvard University

GRADUATE PROGRAM DIRECTOR

- Khaled AlSharif - B.D.S., M.S.
Riyadh Colleges of Dentistry and Pharmacy

PROFESSOR

- Chris A. Martin - D.D.S., M.S.
West Virginia University

Admissions for 2025-2026

The program's admission requirements are as follows:

- Must have passed National Board Dental Examination - Part 1 at the time of application and Part 2 upon entrance to the program or the Integrated Exam (INBDE).
- Must have earned a D.M.D./D.D.S. degree, or its equivalent.
- Must report GRE scores.
- Must be proficient in the English language (<https://graduateadmissions.wvu.edu/information-for/international-students/>) and provide a TOEFL score (if you are a foreign applicant).
- Must display evidence of scholastic and clinical achievement that would indicate the applicant's ability to progress in a program of this nature. A minimum grade point average of 3.0 is required.
- Must apply to the program through the Postdoctoral Application Support Service (PASS) (<https://adea.org/PASSapp/applicants/>) and have all application materials submitted by September 15.
- Must apply to National Matching Services (<https://natmatch.com/dentres/applicants/>) and obtain a MATCH number to be considered of admission to the program. Applicants participating in application to both Match and non-Match programs will not be considered for admission.
- Must complete and submit a WVU Graduate Application if invited for an interview.
- Must participate in an onsite interview.
- Must consent and pass a criminal background investigation prior to final acceptance.
- Must submit documentation of required immunizations. A complete list is available on the School of Dentistry website.
- Must become familiar with the West Virginia University School of Dentistry's policy and procedure for Bloodborne Pathogens and Infectious Diseases (<https://dentistry.hsc.wvu.edu/media/1380/wvu-school-of-dentistry-policy-on-dental-health-care-workers-and-patients-infected-with-bloodborne-diseases-2009.pdf>).
- Must meet federal and university standards regarding the Responsible Conduct of Research.
- Must be eligible for and obtain a West Virginia dental license or dental resident/intern permit prior to the first day of program orientation.

Major Code: 8018

Degree Requirements

- Fulfill University requirements for graduate study.
- Complete 34 months (three academic years) of consecutive full-time advanced study and clinical training at the School of Dentistry.
- Complete an approved master's thesis based on original research completed during the course of study in an area related to Orthodontics.
- Pass the Mock ABO clinical examination which includes a written and an oral examination.
- Pass the written component of the ABO examination.
- Complete all didactic and clinical work in the required curriculum successfully.
- Demonstrate satisfactory clinical competency in orthodontics.
- Complete a minimum of 89 credit hours, including 63 hours of orthodontic courses and a minimum of 5 hours of selected basic science subjects, 6 hours of teaching practicum, and 15 hours of research/thesis.
- Achieve a 3.0 GPA or an overall competence in the student's field. A minimum grade of B must be earned in all work attempted in the master's program. A grade of C or below in two courses will require a faculty review of the student's progress. A third C or below will result in suspension from the program.

CURRICULUM REQUIREMENTS

Code	Title	Hours
Biomedical Sciences Courses		
DENT 601	Advanced Oral Microbiology	1
DENT 602	Special Studies in Oral Pathology	2
PALM 716	Craniofacial Growth and Maturation	1
PCOL 765	Advanced Biomedical Sciences: Applied Pharmacology	1
Orthodontic Courses		
ORTH 616	Biomechanics	2
Orthodontic Technique		4
ORTH 617	Orthodontic Technique	
ORTH 618	Orthodontic Materials	1
Orthodontic Diagnosis		12

ORTH 619	Orthodontic Diagnosis	
ORTH 620	Cephalometrics	1
Orthodontic Mechanics		8
ORTH 621	Orthodontic Mechanics (Repeated)	
ORTH 623	Growth and Development	2
ORTH 625	Orthodontic Seminar	1
Orthodontic Clinic		22
ORTH 626	Orthodontic Clinic (Repeated)	
Surgical Orthodontics		2
ORTH 627	Surgical Orthodontics (Repeated)	
Early Orthodontic Treatment		1
ORTH 628	Early Orthodontic Treatment (Repeated; only offered in odd years)	
Orthodontic Patient Management		2
ORTH 629	Orthodontic Patient Management (Repeated)	
ORTH 630	Craniofacial Anomalies	1
Journal Club		2
ORTH 631	Journal Club	
ORTH 632	Dentofacial Orthopedics	1
Orthodontics-Periodontics Seminar		1
ORTH 633	Orthodontics-Periodontics Seminar (Repeated; only offered in even years)	
Teaching Practicum		
ORTH 690	Teaching Practicum (Repeated)	6
Research/Thesis		
DENT 686	Applied Statistics in Dentistry	3
DENT 687	Research Methods	1
ORTH 697	Research (Research)	11
Master's Thesis		
Oral Examination		
Demonstrate clinical competency in orthodontics		
Total Hours		89

SUGGESTED PLAN OF STUDY

First Semester	Hours
ORTH 617	2
ORTH 618	1
ORTH 619	3
ORTH 621	2
ORTH 625	1
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	9
Second Semester	Hours
DENT 602	2
ORTH 616	2
ORTH 617	2
ORTH 619	1
ORTH 621	1
ORTH 626	1
ORTH 632	1
DENT 686	3
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	13
Third Semester	Hours
DENT 601	1
DENT 687	1

ORTH 619	2
ORTH 620	1
ORTH 621	1
ORTH 623	2
ORTH 626	3

 11

Fourth Semester
Hours

PALM 716	1
ORTH 619	2
ORTH 626	4
ORTH 631	1
ORTH 697	1

 9

Fifth Semester
Hours

PCOL 765	1
ORTH 619	1
ORTH 621	1
ORTH 626	3
ORTH 627	1
ORTH 628	1
ORTH 697	1

 9

Sixth Semester
Hours

ORTH 619	1
ORTH 621	1
ORTH 626	5
ORTH 697	2

 9

Seventh Semester
Hours

ORTH 626	3
ORTH 631	1
ORTH 690	2
ORTH 697	3

 9

Eighth Semester
Hours

ORTH 619	1
ORTH 621	1
ORTH 626	2
ORTH 629	1
ORTH 690	2
ORTH 697	2
ORTH 628	1

 10

Ninth Semester
Hours

ORTH 619	1
ORTH 621	1
ORTH 626	1
ORTH 627	1
ORTH 629	1
ORTH 630	1
ORTH 690	2

ORTH 697

2

10

Total credit hours: 89

Major Learning Outcomes

ORTHODONTICS

- Provide the education and training necessary for graduate dentists to practice in their specialty.
- Provide the education and training necessary for a specialist to achieve Board Certification.