Orthodontics, MS

Learning Outcomes

Individuals will be:
- credentialed to practice orthodontics and dentofacial orthopedics;
- proficient in the scientific method, demonstrated by successful defense of their MS thesis;
- proficient in biological and biomechanical principles of tooth movement as demonstrated by clinical treatment of orthodontic patients with malocclusions;
- proficient in diagnosis, treatment planning, and treatment delivery as demonstrated by clinical treatment of orthodontic patients with malocclusions;
- proficient in diagnosis, treatment planning, and treatment delivery as demonstrated by clinical treatment of craniofacial anomalies patients; and
- proficient in interdisciplinary interaction with other dental specialties such as oral surgery, pediatric dentistry, periodontics, and endodontics as demonstrated by opportunities to coordinate care of orthodontic and craniofacial anomalies patients.

Requirements

The Master of Science program in orthodontics requires 60 s.h. of graduate credit. Students must satisfactorily complete a thesis based on an original research project to qualify for the MS. They must maintain a cumulative grade-point average of at least 3.00 to earn the degree.

Students begin work on the two-year program in July.

The MS with a major in orthodontics requires the following work.

First Year, Summer

Course #  Title                  Hours
All of these:  
ORDN:5203 Advanced Orthodontic 1
               Technique
ORDN:5209 Orthodontic Practicum 2
ORDN:5217 Cephalometrics 3

First Year, Fall

Course #  Title                  Hours
All of these:  
ORDN:5201 Orthodontic Theory: Diagnosis 2
               and Treatment Plan
ORDN:5203 Advanced Orthodontic 1
               Technique
ORDN:5205 Facial Growth 2
ORDN:5209 Orthodontic Practicum 2
ORDN:5210 Orthodontic Seminar 2
ORDN:5221 Surgical Orthodontic Seminar 1
ORSC:5212 Statistical Methods for Dental 3
               Research

First Year, Spring

Course #  Title                  Hours
All of these:  
ORDN:5200 Control Theory and Craniofacial 1
               Morphogenetic Systems
ORDN:5202 Diagnosis and Treatment Planning 2
ORDN:5204 Biomechanics 1
ORDN:5209 Orthodontic Practicum 2
ORDN:5210 Orthodontic Seminar 2
ORDN:5220 Craniofacial Anatomy 1
ORDN:5221 Surgical Orthodontic Seminar 1
ORDN:5400 Dental Treatment of Maxillofacial Deformities 2
ORDN:6212 Research: Orthodontics 2

Second Year, Summer

Course #  Title                  Hours
Both of these:  
ORDN:5209 Orthodontic Practicum 3
ORDN:6212 Research: Orthodontics 2

Second Year, Fall

Course #  Title                  Hours
All of these:  
ORDN:5209 Orthodontic Practicum 2
ORDN:5210 Orthodontic Seminar 2
ORDN:5220 Craniofacial Anatomy 1
ORDN:5221 Surgical Orthodontic Seminar 1
ORDN:5400 Dental Treatment of Maxillofacial Deformities 2
ORDN:6211 Problems: Orthodontics 1
ORDN:6212 Research: Orthodontics 2
ORDN:6215 Orthodontic Journal Club 1

Second Year, Spring

Course #  Title                  Hours
All of these:  
ORDN:5209 Orthodontic Practicum 2
ORDN:5210 Orthodontic Seminar 2
ORDN:5221 Surgical Orthodontic Seminar 1
ORDN:5400 Dental Treatment of Maxillofacial Deformities 2
ORDN:6212 Research: Orthodontics 2
ORDN:6215 Orthodontic Journal Club 1

For more information, contact the Department of Orthodontics.

Admission

Applicants must have a DDS degree or equivalent and meet the admission requirements of the Graduate College. Application deadline is Aug. 1 for entry the following July 1. Applicants are required to travel to the University of Iowa for interviews with department faculty.