

# Orthodontics, MS

## Learning Outcomes

Individuals will be:

- credentialed to practice orthodontics and dentofacial orthopedics;
- proficient in the scientific method, demonstrated by the 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 in orthodontics requires 65 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 Graduate College program grade-point average of at least 3.00 to earn the degree.

Students begin the two-year program in July.

The MS in orthodontics requires the following coursework.

### First Year, Summer

Course #	Title	Hours
All of these:		
ORDN:5203	Principles of Biomechanics	2
ORDN:5209	Orthodontic Practicum	2
ORDN:5217	Cephalometrics and Lab Skills	3

### First Year, Fall

Course #	Title	Hours
All of these:		
ORDN:5203	Principles of Biomechanics	2
ORDN:5204	Applied Biomechanics	1
ORDN:5205	Facial Growth	2
ORDN:5209	Orthodontic Practicum	2
ORDN:5210	Orthodontic Seminar	2
ORDN:5211	Clinical Skills and Laboratory Techniques	1
ORSC:5212	Statistical Methods for Dental Research	3
ORDN:5220	Craniofacial Diagnosis, Treatment, and General Topics in Orthodontics	1
ORDN:5221	Surgical Orthodontic Seminar	1

### First Year, Spring

Course #	Title	Hours
All of these:		
ORDN:5200	Temporomandibular Joints and Advanced Topics in Orthodontics	1
ORDN:5202	Advanced Case Analysis	2
ORDN:5203	Principles of Biomechanics	1
ORDN:5204	Applied Biomechanics	1
ORDN:5209	Orthodontic Practicum	2
ORDN:5210	Orthodontic Seminar	2
ORDN:5220	Craniofacial Diagnosis, Treatment, and General Topics in Orthodontics	1
ORDN:5221	Surgical Orthodontic Seminar	1
ORDN:5400	Craniofacial Practicum	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:5204	Applied Biomechanics	1
ORDN:5209	Orthodontic Practicum	2
ORDN:5210	Orthodontic Seminar	2
ORDN:5220	Craniofacial Diagnosis, Treatment, and General Topics in Orthodontics	1
ORDN:5221	Surgical Orthodontic Seminar	1
ORDN:5400	Craniofacial Practicum	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:5204	Applied Biomechanics	1
ORDN:5209	Orthodontic Practicum	2
ORDN:5210	Orthodontic Seminar	2
ORDN:5220	Craniofacial Diagnosis, Treatment, and General Topics in Orthodontics	1
ORDN:5221	Surgical Orthodontic Seminar	1
ORDN:5400	Craniofacial Practicum	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. The 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.