The goal of the Master of Science degree program is to produce graduates who are clinically adept, well-grounded in research and the biological basis of dentistry and prepared to function at a high level of accomplishment in clinical practice and academic dentistry. The program is interdisciplinary. Faculty members are drawn from the College of Dentistry clinical and graduate faculty, and from departments throughout the University of Kentucky.

Only students of high academic standing will be accepted into this program, which requires didactic, clinical, and research training. All of these elements are integrated throughout the program. All students receive teaching experience in anticipation of full- or part-time academic involvement after graduation.

**Admission Requirements**

Students pursuing specialty training in Orthodontics, Periodontology, or Orofacial Pain are eligible for the Master of Science (M.S.) degree. Successful completion of the M.S. degree is prerequisite to awarding of a specialty certificate (specialty programs). Applicants to the specialty tracks must have a D.M.D./D.D.S. degree from an accredited United States or Canadian dental school or equivalent. Applicants to the specialty tracks (Periodontology, Orthodontics or Orofacial Pain) must have a D.M.D./D.D.S. degree from an accredited United States or Canadian dental school or equivalent. Admission to the Master of Science Program is based on high academic performance in dental school, professional recommendations and a personal interview.

Applicants must submit official scores to the specific program of interest for one of the following tests: the Graduate Record Exam (GRE), Part I of the National Dental Board, or Part II of the National Dental Board for the Master of Science Programs. Additional exams such as ADAT are now undergoing review and consideration. To determine which of these tests is recommended for your specialty track, please consult the student handbook or web site for that specific program. Applicants who are not native English speakers must score at least 550 (paper), 213 (computer) or 79 (internet) on the Test of English as a Foreign Language (TOEFL) or 6.5 on the International English Language Testing System (IELTS). To determine which of these tests is recommended for your specialty track, please consult the web site for that specific program.

**Degree Requirements**

Both Plan A (thesis option) and Plan B (non-thesis option, preferable) are currently available to students enrolled in the Master of Science degree program. Requirements for the Master of Science degree are: 1) satisfactory completion of program requirements; 2) 24 hours graduate credit (Plan A Thesis option) or 30 hours graduate credit (Plan B Non-thesis option), at least 13 hours of which must be from the core curriculum; 3) submission of an acceptable thesis based on an individual research project (Plan A) or completion of a manuscript based on the results from the individual research project for a peer-reviewed journal (Plan B); and 4) passage of a comprehensive oral examination and thesis defense (Plan A) or passage of a comprehensive oral examination (Plan B). Foreign language credit is not a requirement.

### Orthodontics

**Core Curriculum**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBI 650</td>
<td>Oral Biology for Postgraduate Students I</td>
<td>(2)</td>
</tr>
<tr>
<td>OBI 651</td>
<td>Oral Biology for Postgraduate Students II</td>
<td>(2)</td>
</tr>
<tr>
<td>CDS 660</td>
<td>Research Design, Methodology and Dissemination</td>
<td>(2)</td>
</tr>
</tbody>
</table>
CDS 670  Advances in Oral and Maxillofacial Pathology  (1)
CDS 680  Clinical Medicine for Postgraduate Dental Students  (2)
CDS 631  Diagnosis and Management of Temporomandibular Disorders  (1)

TOTAL  (10)

Additional Courses
CDS 611  Child Growth and Development, Part 1  (2)
OSG 651  Anatomic Relationships in Surgery  (1)
CDS 612  Child Growth and Development, Part II  (2)
ORT 610  Craniofacial Form  (2)
ORT 620  Oral Pharyngeal Function, Part I  (2)
ORT 621  Oral Pharyngeal Function, Part II  (2)
ORT 660  Orthodontic Diagnosis  (2)
ORT 661  Orthodontic Seminar-Clinic  (3)
ORT 662  Orthodontic Technique  (2)
ORT 664  Biomechanics  (2)
ORT 710  Management of Complex Orofacial Deformities  (1)
ORT 770  Orthodontics Seminar  (1)
ORT 790  Research in Orthodontics  (1-5)
PER 776  Periodontics Therapy Seminar  (1)

TOTAL  (24-29)

ORT 748  Master's Thesis Research  (0)
ORT 768  Residence Credit for Master's Degree  (1-6)

Periodontology

Core Curriculum
OBI 650  Oral Biology for Postgraduate Students I  (2)
OBI 651  Oral Biology for Postgraduate Students II  (2)
OPT 650  Oral Pathology I  (2)
OPT 651  Oral Pathology II  (2)
CDS 660  Research Design, Methodology and Dissemination  (2)
CDS 680  Clinical Medicine for Postgraduate Dental Students  (2)
CDS 631  Diagnosis and Management of Temporomandibular Disorders  (1)

TOTAL  (13)

Additional Courses
PER 661  Modern Concepts in Periodontics (3 semesters)  (6)
PER 770  Treatment Planning Seminar  (3 semesters)  (6)
PER 772  Periodontal Biology and Pathology (3 semesters)  (6)
PER 774  Periodontics Surgical Seminar (3 semesters)  (3)
PER 776  Periodontics Therapy Seminar (3 semesters)  (3)
PER 790  Research in Periodontics  (1-3)

TOTAL  (25-27)

ORT 748  Master's Thesis Research  (0)
ORT 768  Residence Credit for Master's Degree  (1-6)
**Orofacial Pain**

*Core Curriculum*
- OBI 650  Oral Biology for Postgraduate Students I  (2)
- OBI 651  Oral Biology for Postgraduate Students II  (2)
- CDS 660  Research Design, Methodology and Dissemination  (2)
- CDS 670  Advances in Oral and Maxillofacial Pathology  (1)
- CDS 680  Clinical Medicine for Postgraduate Dental Students  (2)
- CDS 631  Diagnosis and Management of Temporomandibular Disorders  (1)

**Additional Courses**
- OFP 634  Current Concepts in Temporomandibular Disorders  (3)
- OFP 636  Clinical Management of Temporomandibular Disorders  (3)
- OFP 700  Orofacial Pain Treatment Planning Seminar  (2)
- OFP 734  Current Concepts in Orofacial Pain  (3)
- OFP 736  Clinical Management of Orofacial Pain  (3)
- OFP 790  Research in Orofacial Pain  (1-6)

**TOTAL**  (10)

- ORT 748  Master’s Thesis Research  (0)
- ORT 768  Residence Credit for Master’s Degree  (1-6)

**Pediatric Dentistry**

*Core Curriculum*
- OBI 650  Oral Biology for Postgraduate Students I  (2)
- OBI 651  Oral Biology for Postgraduate Students II  (2)
- CDS 660  Research Design, Methodology and Dissemination  (2)
- CDS 670  Advances in Oral and Maxillofacial Pathology  (1)
- CDS 680  Clinical Medicine for Postgraduate Dental Students  (2)
- CDS 631  Diagnosis and Management of Temporomandibular Disorders  (1)

**Additional Courses**
- CDS 611  Growth and Development  (2)
- ORT 610  Craniofacial Form  (2)
- ORT 660  Orthodontic Diagnosis  (2)
- PDO 610  Pediatric Dentistry Seminar I  (2)
- PDO 790  Research in Pediatric Dentistry  (1-6)
- PDO 620  Pediatric Dentistry Seminar II  (2)
- PDO 630  Pediatric Dentistry Seminar III  (2)
- ORT 710  Management of Complex Orofacial Deformities  (2)

**TOTAL**  (15-17)

- ORT 748  Master’s Thesis Research  (0)
- ORT 768  Residence Credit for Master’s Degree  (1-6)