The mission of the 27-month Endodontics-Advanced Specialty Program is to prepare endodontists who are proficient in the art of treating teeth requiring root canal therapy, who possess an in-depth biological knowledge related to the science of endodontics, and who have participated in endodontic research and teaching.

Program learning outcomes

By the end of the Loma Linda University School of Dentistry Advanced Education Program in Endodontics, graduates should be able to:

1. Demonstrate the knowledge required for diagnosing and treatment planning for various pulpal and periapical conditions and possess skills to treat—alone or in concert with other dental and medical practitioners—various pulpal and periapical conditions.
2. Diagnose and treat patients who would benefit from implant dentistry treatment, and who are skilled in the surgical placement and restoration of implants when such care is indicated (36-month program).
3. Demonstrate knowledge in biomedical sciences related to endodontics and health sciences.
4. Participate in endodontic research and teaching.
5. Be prepared for careers in clinical practice.

The programs begin in July and require 27 or 36 months in residence, depending on the specialty training pursued.

Following enrollment into the program, students may apply for acceptance to either the Master of Science (M.S.) or the Master of Science in Dentistry (M.S.D.) degree track, in addition to the specialty certificate. The application should be submitted at the beginning of the second year and must be supported by the program director. Admission into the M.S. or the M.S.D. degree track may extend the length of study, and the additional time must be in residence.

Graduates in both the certificate and graduate degree curricula are qualified for certification by the American Board of Endodontics.

Program link: https://dentistry.llu.edu/admissions/advanced-dental-education-programs/ (https://dentistry.llu.edu/admissions/advanced-dental-education-programs/)

Program director
Tory Silvestrin

Faculty
Shelley Aronson
Richard J Gray
Tory Silvestrin

Emeritus faculty
Leif Bakland

Admissions

Application process
The Endodontics, Advanced Program participates in the Postdoctoral Application Support Service (PASS) of the American Dental Education Association, which allows applicants to apply to multiple participating institutions.

PASS applicants for the advanced education program in endodontics must also complete and submit a separate online application (llu.edu/central/apply/) directly to Loma Linda University.

This program also will accept direct applications for individuals who are not applying to other institutions through PASS.

Application deadline
Application for admission should be submitted by July 17 of the year prior to the summer of intended enrollment.

Tuition

Tuition, fees, and other cost-of-attendance items are located on the Find a Program (https://llu.edu/academics/programs/) webpage.

Program requirements

<table>
<thead>
<tr>
<th>Major</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENDN 534</td>
<td>Endodontic Treatment Conference (1-2)</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>ENDN 601</td>
<td>Principles of Endodontics (2)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>ENDN 604</td>
<td>Literature Seminar in Endodontics (2)</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>ENDN 654</td>
<td>Practice Teaching in Endodontics (1)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ENDN 657</td>
<td>Written/Oral Board Review Course for the American Board of Endodontics</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ENDN 697A</td>
<td>Research</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ENDN 697B</td>
<td>Research</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Interdisciplinary</td>
<td>GRDN 514</td>
<td>Introduction to Biomedical Research</td>
<td>4</td>
</tr>
<tr>
<td>GRDN 535</td>
<td>Clinical Oral Pathology</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>GRDN 601</td>
<td>Practice Management</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>GRDN 609</td>
<td>Professional Ethics 2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>GRDN 622A</td>
<td>Biomedical Science</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>GRDN 622B</td>
<td>Biomedical Science</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>IMPD 611</td>
<td>Introduction to Implant Dentistry</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ORPA 533</td>
<td>Radiology Topics for Graduate Dental Programs</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PERI 624</td>
<td>Moderate Sedation in Periodontics</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>REL 5</td>
<td>Graduate-level Religion</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td></td>
<td><strong>77</strong></td>
</tr>
</tbody>
</table>

| Clinical 1             | ENDN 725     | Clinical Practice in Endodontics (1-8)               | **72** |
| **Total Units**        |            |                                                   | **72** |

1 Units for clinic practice courses are totaled separately from the didactic units required for the degree.
2 Fulfills service learning requirement.
Normal time to complete the program
2.3 years (nine [9] academic quarters) — full-time enrollment required

M.S.D.
In addition to completing the requirements for the 27 or 36-month certificate as listed above, students must also complete the following courses and fulfill the general requirements (http://llucatalog.llu.edu/dentistry/graduate/#generaldegreerequirementstext) for the degree. Students may take up to one year following the completion of the certificate program to complete the M.S.D. degree.

ENDN 697C Research

M.S.
In addition to completing the requirements for the 27- or 36-month certificate as listed above, students must also complete the following courses and fulfill the general requirements (http://llucatalog.llu.edu/dentistry/graduate/#generaldegreerequirementstext) for the degree. Students have five years from the start of the certificate program to complete the M.S. degree.

ENDN 698 Thesis

Normal time to complete the program
2.3 years (nine [9] academic quarters) — full-time enrollment required (includes the time needed to complete the certificate program)

Courses
ENDN 534. Endodontic Treatment Conference. 1-2 Units.
Evaluates and discusses diagnosis, treatment planning, prognosis, and outcome of endodontic treatment cases. Repeated registrations required to fulfill the total units.

ENDN 601. Principles of Endodontics. 2 Units.
Comprehensive study of various aspects of endodontics. Repeated registrations required to fulfill the total units.

ENDN 604. Literature Seminar in Endodontics. 2 Units.
Reviews literature pertaining to the principles and practice of endodontics. Repeated registrations required to fulfill the total units.

ENDN 654. Practice Teaching in Endodontics. 1 Unit.
Provides supervised teaching in the endodontic preclinical laboratory and predoctoral clinic. Requires repeated registrations to fulfill total units. Teaching occurs in ENDN 725, ENDN 831, ENDN 832, ENDN 834, and/or ENDN 835.

ENDN 657. Written/Oral Board Review Course for the American Board of Endodontics. 2 Units.
Weekly lecture series that exposes advanced specialty students to the crucial content and format of the American Board of Endodontics (ABE) examination. Assists students with preparing for and taking the required written portion of the examination prior to completion of the endodontics program, and exposes them to the oral examination that is part of the board certification process for the endodontics profession.

ENDN 697A. Research. 1 Unit.
Student identifies a research project, prepares a protocol, and obtains approval for the protocol. Multiple registrations may be needed to complete these research activities.

ENDN 697B. Research. 1 Unit.
Conducting the actual research project, including the data collection. Multiple registrations may be needed to complete these research activities.

ENDN 697C. Research. 1 Unit.
Student completes research project, holds a public presentation of research, and submits a publishable paper to their research guidance committee (RGC) for approval. Multiple registrations may be needed to complete the publishable paper.

ENDN 698. Thesis. 1 Unit.

ENDN 725. Clinical Practice in Endodontics. 1-8 Units.
Provides practice and experience in all aspects of endodontics. Emphasizes obtaining experience in treating complex endodontic cases. Repeated registrations required to fulfill total units.

ENDN 726. Clinical Practice of Implant Dentistry in Endodontics. 1,2 Unit.
Clinical experience in the diagnosis and treatment of patients who may benefit from implant dentistry therapy. Repeated registrations required to complete total units.

ENDN 831. Endodontics I. 1 Unit.
Didactic course provides foundational knowledge to prepare the student to manage patients with diseases of pulpal origin.

ENDN 832. Endodontics II. 2 Units.
Preliminary laboratory course that introduces basic skills necessary to perform endodontic treatment on permanent teeth with uncomplicated root canal systems. IDP students complete 2 units over the D3 spring and summer quarters before a final grade is given.

ENDN 834. Endodontics III. 1 Unit.
Didactic course that contains essential information on various topics in endodontics and elevates the students’ diagnostic and treatment-planning skills.

ENDN 835. Endodontics IV. 1 Unit.
Secondary laboratory course that reinforces prior basic skills taught in ENDN 832, and introduces additional skills necessary to perform endodontic treatment on uncomplicated permanent teeth using advances in technology.