

ADVANCED DENTAL EDUCATION

The School of Dentistry offers advanced dental education programs in specialty and nonspecialty disciplines of dentistry. Postdoctoral certificates, Master of Science (M.S.), and Master of Science in Dentistry (M.S.D.) degrees are available. The purpose of these programs is to offer candidates an opportunity to integrate advanced clinical training with meaningful exposure to applied basic science and research. For additional information and to submit an online application, interested applicants should visit the School of Dentistry website (Graduate Programs).

Advanced dental education programs leading to a professional certificate with an option to also pursue the Master of Science (M.S.) degree or the Master of Science in Dentistry (M.S.D.) degree include:

- Endodontics
- Implant Dentistry
- Orthodontics and Dentofacial Orthopedics (M.S. degree only)
- Pediatric Dentistry
- Periodontics
- Prosthodontics

These programs are organized to comply with the standards of the Council on Dental Education of the American Dental Association, and the objectives and content meet the requirements of the respective specialty boards. In addition, the programs in endodontics, oral and maxillofacial surgery, orthodontics and dentofacial orthopedics, pediatric dentistry, periodontics, and prosthodontics are accredited by the Commission on Dental Accreditation, a specialized accrediting body recognized by the Council on Postsecondary Accreditation and the United States Department of Education.

<https://dentistry.llu.edu/admissions/advanced-dental-education-programs> (<https://dentistry.llu.edu/admissions/advanced-dental-education-programs/>)

Program learning outcomes

Graduate students and residents in advanced dental education programs are expected to:

1. Describe the didactic foundation of their discipline and master the clinical skills required to utilize that foundation.
2. Integrate advanced clinical training with meaningful exposure to the applied basic sciences.
3. Engage in a project involving advanced clinical training with meaningful exposure to research.
4. Integrate interdisciplinary treatment planning into their didactic and clinical activity.
5. Apply for and pursue board certification in their discipline through the appropriate sponsoring organization.
6. State the importance of developing a commitment to the University-wide student learning outcomes.

Residence

The required time in residence varies with each program. For the length of a program, refer to the information under each program description.

Stipends

Stipends are provided in the Oral and Maxillofacial Surgery and Pediatric Dentistry programs. For details, contact the program coordinator personally.

Tuition

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

Thesis

The student must complete a research project presented in thesis format and orally defend it according to the standards set by the Faculty of Graduate Studies. A written thesis, approved by the student's research committee, must be submitted to the Faculty of Graduate Studies in order to receive a satisfactory grade for the course.

Publishable paper

Students on the Master of Science in Dentistry degree track must submit a publishable paper no later than one year from the date they complete their certificate program. Candidates are admitted to only one master's degree track of their choice.

General requirements

For information about requirements and practices to which all graduate students are subject, the student should consult Section II of this CATALOG.

Admissions

Admission requirements for advanced dental education programs/postdoctoral programs

An appropriate degree from an accredited college or university is required for admission into the advanced dental education programs and postgraduate programs. A doctoral degree in dentistry (Doctor of Dental Surgery or Doctor of Dental Medicine) or the equivalent is required for admission to all programs. The applicant should have achieved a general grade point average of not less than 3.0 on a 4.0 scale, with no grade below 2.0. In addition to acceptable scholastic performance, the applicant must give evidence of personal and professional fitness for growth in the science and art of the intended dental discipline. For application deadlines, see the section on each individual program or refer to the chart on the following page.

After applicants are accepted into the advanced dental education programs in endodontics, pediatric dentistry, periodontics, prosthodontics, or the postdoctoral program in implant dentistry, they may apply to the Office of Admissions to earn an M.S.D. or M.S. degree (in addition to the advanced program certificate). Applicants for the Master of Science (M.S.) degree who meet or exceed the minimum entrance requirements may be accepted by the School of Dentistry in conjunction with the Faculty of Graduate Studies (FGS). The master's degree thesis must be completed, defended, and accepted in final form by both the graduate program and the Faculty of Graduate Studies. Students have up to five years from the date of acceptance of the certificate program to complete the requirements for the M.S. degree. All the M.S.D. requirements may be completed during the program but no later than one year from the candidate's anticipated program completion date.

Admissions criteria for advanced dental education programs 2023

Program	Official Transcript(s) ¹	Cumulative G.P.A. ²	GRE ³	National Boards Part I ³	DAT	TOEFL ⁴	Letters of Recommendation
Endodontics ¹⁰ (27 mo./2 positions)	Required	3.0	Not required for certificate program	Required (only U.S.-trained applicants)	Not required	Required (internationally trained)	3
Implant Dentistry (36 mo./3 positions)	Required	3.0	Not required for certificate program	Not required	Not required	Required (internationally trained)	3
Oral and Maxillofacial Surgery ¹¹ (6 yrs./2 positions)	Required	3.0	Not required for certificate program	Required (all applicants) score of 86 or higher	Not Required	Required (internationally trained)	3
Orthodontics and Dentofacial Orthopedics ^{6, 7, 9} (27 mo./6 positions)	Required	3.0	Required	Required (all applicants)	Required (all applicants)	Required (internationally trained)	3
Pediatric Dentistry ^{10, 12} (24 mo./4 positions)	Required	3.0	Required for internationally trained applicants	Required (only U.S.-trained applicants)	Not required	Required (internationally trained)	3
Periodontics ⁸ (36 mo./3 positions)	Required	3.0	Not required for certificate program	Required (only U.S.-trained applicants)	Not required	Required (internationally trained)	3
Prosthodontics (36 mo./4 positions)	Required	3.0	Not required for certificate program	Required (only U.S.-trained applicants)	Not required	Required (internationally trained)	3

Application and program dates

Program	LLU Applications Open	LLU Applications Close	Admissions Committee Meets	Pass Applications Open	Pass Applications Close	Advanced Education Programs Start Date	Advanced Education Programs Ending Date
ENDN	5/2023	7/17/23	July	5/2023	2 weeks prior to deadline	July 1	Late September
IMPD	5/2023	9/31/2023	November	5/2023	2 weeks prior to deadline	July 1	June 30
OMFS	5/2023	11/15/2023	January	5/2023 Match participant	2 weeks prior to deadline	July 1	June 30
ORDN	5/2023	8/1/2023	November	5/2023	2 weeks prior to deadline	End of June	Late September
PEDN	5/2023	11/1/2023	November	5/2023 Match participant	2 weeks prior to deadline	July 1	June 30
PERI	5/2023	8/1/2023 (rolling admissions)	September	5/2023	2 weeks prior to deadline	July 1	June 30
PROS	5/2023	8/1/2023	September	5/2023	2 weeks prior to deadline	July 1	June 30

¹ *Transcripts.* Transcripts from all postsecondary schools from which credit was received, whether or not the work pertains to your LLU degree, are required to complete your application.

² *Grade Point Average (G.P.A.).* A cumulative G.P.A. of 3.0 (on a 4.0 scale) is required for admission.

³ *National Boards, INBDE or Part I.* Refers to Part I of the two-part U.S. National Board Examinations. Part II must also be submitted when available. All must be passing grades.

⁴ *English Language Skills.* Non-U.S. applicants for whom English is not their primary language and whose secondary education has been given outside the U.S. are required to take the TOEFL examination. To be competitive, a score of 100 or higher is strongly recommended on the internet-based exam. A minimum score of 20 is required in each area. TOEFL scores are valid for two years from the test date.

⁵ *Dental License.* All applicants for the Advanced Education Program in Oral & Maxillofacial Surgery program must have a Californian Dental License.

- ⁶ *International Dentist Program.* All graduates from non-ADA-accredited dental schools who apply to the Advanced Specialty Education Program in Orthodontics and Dentofacial Orthopedics must complete an accredited International Dentist Program.
- ⁷ *Orthodontics and Dentofacial Orthopedics.* This program requires applicants to meet the requirements for the certificate program and the Master of Science (M.S.) degree track. To be considered, applicants must take the GRE.
- ⁸ *Periodontics.* This program has a rolling admission process between May and September, which means it reserves the right to fill some but not all of its entering class prior to the September deadline.
- ⁹ *Orthodontics and Dentofacial Orthopedics.* The program reserves the right to admit selected students to the certificate program, which would require submission of a certificate application due by the regular application deadline.
- ¹⁰ *Endodontics and Pediatric Dentistry.* All applicants for the Endodontic and Pediatric Dentistry Program who have received their dental school training outside the U.S. or Canada must have a current dental license from their country and submit a notarized copy with their application.
- ¹¹ *National Board Medical Examination (NBME) Comprehensive Basic Science Examination.* Applicants for the Oral and Maxillofacial Surgery Program who take the National Board Dental Examination (NBDE) Part I after January 1, 2012—and, therefore, do not have a numerical score—must take the National Board Medical Examination (NBME) Comprehensive Basic Science Examination and have their official test results reported to Loma Linda University by the application deadline.
- ¹² *TOEFL Scores for Pediatric Dentistry.* The Pediatric Dentistry Program requires a minimum score of 20 in each area. To be competitive, a score of 100 or higher is strongly recommended on the internet-based exam. TOEFL scores are valid for two years from the test date.

Master of Science in Dentistry (M.S.D.) Degree, Advanced

Graduate students and residents enrolled in certain advanced education programs are eligible to apply for and be awarded a Master of Science in Dentistry (M.S.D.) degree, if they fulfill the following requirements.

Admission process

- The following minimum requirements have been established for admission to the M.S.D. degree program:
 - Admissions requirements
 - Cumulative grade point average (G.P.A.) of 3.0
 - Approval by the program director
 - Academic record of scholastic competence
 - Demonstrated professionalism and integrity
- A candidate for the M.S.D. degree must complete a Loma Linda University online Application for Admission and a Part I (Application for Admission for the Master of Science in Dentistry [M.S.D.] degree) form. The Part I form can be found in the advanced education section of Canvas. It must be accompanied by a research protocol approved by the candidate's research guidance committee (RGC) and reviewed by the School of Dentistry Research Committee.
- The Part I form must be signed by the applicant's program director and the research guidance committee (RGC) members.
- The completed Loma Linda University application, Part I form, and approved protocol are then reviewed for approval by the assistant dean of admissions to ensure all admissions requirements have been met.
- Accepted applicants will receive a letter of admission from the assistant dean of admissions. They must acknowledge acceptance of their admission electronically to the Office of Student Affairs and Admissions.

Master of Science (M.S.) Degree, Advanced

Graduate students and residents enrolled in certain advanced education programs are eligible to apply for and be awarded a Master of Science (M.S.) degree, if they fulfill all of the requirements stated below.

Admission process

- The following minimum requirements have been established for admission to the M.S. degree curriculum:
 - Admissions requirements

- Minimum cumulative grade point average (G.P.A.) of 3.0
- Approval by the program director
- Academic record of scholastic competence
- Demonstrated professionalism and integrity

- An applicant to the M.S. degree must complete a Loma Linda University online Application for Admission, as well as a Form A (Petition for Admission to Candidacy). The online application is open to students already enrolled in a certificate curriculum. Form A is found on Canvas and must be accompanied by a research protocol approved by the applicant's research guidance committee (RGC) and reviewed by the School of Dentistry Research Committee.
- Form A must be signed by the applicant's program director and research guidance committee (RGC) members.
- The completed Loma Linda University application, Form A, and the approved protocol are then reviewed for approval by the assistant dean of admissions to ensure that all admissions requirements have been met.
- Accepted applicants will receive a letter of admission from the assistant dean of admissions. The prospective student must acknowledge acceptance of their admission electronically to the Office of Student Affairs and Admissions.

Academic policies

Grading system for advanced education programs

The following information outlines the grading systems for all postdoctoral students/residents enrolled in advanced education programs in the School of Dentistry. Each course taught in the school has been approved for either a letter grade or an S/U grade, and deviations from this are not allowed other than MS (marginally satisfactory) grades as specified below.

Grades and grade points for postdoctoral students/residents

A	4.0	Outstanding performance
A-	3.7	Very good performance
B+	3.3	Good performance.
B	3.0	Satisfactory performance.
B-	2.7	Minimum passing grade without remediation; Cumulative G.P.A. must be 3.0 or higher to avoid academic probation.
C+	2.3	Remediation required and cumulative G.P.A. must be 3.0 or higher to avoid academic probation.

C	2.0	Remediation required and cumulative G.P.A. must be 3.0 or higher to avoid academic probation.
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Postdoctoral students/residents who receive one or more of the following grades in any quarter will be placed on academic probation and must retake the course(s) for which these grades were received.

C-	1.7	Unsatisfactory; Course must be retaken. Cumulative G.P.A. must be 3.0 or higher to avoid academic probation.
D	0.0	Failure; course must be retaken.
F	0.0	Failure; Course must be retaken; Academic probation required.
S	none	Satisfactory performance; Equivalent of a B grade or better.
MS	none	Marginally satisfactory; minimum passing grade; equivalent to a B- grade; Multiple MS grades may result in academic probation.
U	none	Unsatisfactory; The U grade is not computed in the G.P.A. The Course must be repeated to count toward a certificate and/or degree.

University policy states that "a student may repeat a course only once, and no more than two courses may be repeated in a student's degree program."

Academic criteria for academic advancement and program completion

Process to remediate a course

1. A detailed written plan must be developed by the course director/program director outlining how deficiencies will be remediated and reassessed.
2. The plan must be approved by the Office of Academic Affairs.
3. The postdoctoral student/resident is required to register for Advanced Dental Education Remediation (GRDN 700) with the subtitle of the course that is being remediated.
4. Remediation must be accomplished during the academic quarter immediately following the quarter in which the unsatisfactory grade was received.
5. Successful remediation of a course will not result in a grade change for the course.
6. Failure to successfully remediate a course will result in the need for the postgraduate student/resident to repeat the course while on academic probation.
7. The postdoctoral student/resident may exercise the option to retake the course which may result in a grade change for the course.

Process to repeat a course

1. The postdoctoral student/resident will be placed on academic probation.
2. The postdoctoral student/resident must register for the course to be repeated at the earliest opportunity.
3. The postdoctoral student/resident must receive a minimum grade of B- to continue in the advanced dental education program.

Academic disciplinary policy for advanced education programs

Academic probation

Academic probation for postdoctoral students/residents will be for a minimum of one academic quarter following the quarter in which the unsatisfactory performance was noted. Probationary status will be

reviewed on a quarterly basis until successful remediation has been recorded. Such action must be confirmed by memorandum to the student.

Under the following conditions, a postdoctoral student/resident will be sent an advisory letter from the Office of Academic Affairs regarding the potential for placement on academic probation.

1. Term G.P.A. below 3.0 (B)
2. One or more courses with a grade of C+ or lower
3. More than one course with a grade of MS.

A postdoctoral student/resident will be placed on academic probation if they meet one or more of the following conditions:

1. Cumulative G.P.A. below 3.0.
2. One or more courses with a grade of C, or lower.
3. Failing or unsatisfactory grades in any course(s) required for the specialty certificate, Master of Science (M.S.) degree, or Master of Science in Dentistry (M.S.D.) degree programs.
4. Total of three or more MS grades.

Level of academic probation

The level of academic probation indicates the seriousness of the cumulative academic deficiency. However, depending on the seriousness or nature of the academic deficiency, a postdoctoral student/resident may be considered for academic leave of absence or discontinuation at any level of probation.

Level I

First term on academic probation.

Level II

Second term on academic probation, consecutive or nonconsecutive.

EXCEPTION: Continued academic probation due to failing grade in a course that cannot be repeated until a later term.

Level III

Third term on academic probation, consecutive or nonconsecutive. If a student/resident is unable to remove academic probationary status within the following term, they will be considered for academic discontinuation.

EXCEPTION: Continued academic probation due to failing grade in a course that cannot be repeated until a later term.

Level IV

If a student/resident meets criteria for academic probation for a fourth term, consecutive or nonconsecutive, they will be considered for academic discontinuation.

Restrictions for a postdoctoral student/resident on academic probation

A student/resident on academic probation:

1. May not serve as an officer for any class, school, or extracurricular organization.
2. May not take elective courses.
3. May not participate in elective off-campus, service learning, or mission activities.
4. Remains on academic probation until all terms of the probation sanctions have been fulfilled, unless the postdoctoral student/resident is discontinued.

Remedial action (remediation)

A postdoctoral student/resident who is not performing up to expectations (academic and professional) may receive the following:

1. Restriction of clinical privileges by the program director.
2. Academic probation (Level I to III) – upon recommendation of the Program Director by the Associate Dean of Academic Affairs.
3. Professional Standards (Behavioral) probation (Level I to III) – (See Professional Standards Review Process in *Loma Linda University Student Handbook*).
4. Clinical probation (Level I to III) – upon recommendation of the Program Director by the Associate Dean of Academic Affairs.
5. Discontinuation – upon recommendation of the Program Director to the Associate Dean of Academic Affairs. Discontinuation must be approved by the Dean.

Probation

All recommendations to the Associate Dean of Academic Affairs for probation must be supported by well-documented evidence of repeated counseling and other internal measures designed to point out deficiencies and take corrective action through a detailed remediation program. A remediation program must be specific in design, implemented, and monitored for any postdoctoral student/resident who is not performing up to a program's stated standards. It is important to have documentary evidence on record by multiple faculty members with detailed accounts of dates, times, explanations or counseling, discussions, and corrective measures. Written statements from support staff should also be included if they have direct contact or knowledge of a matter involving a postdoctoral student/resident.

Postdoctoral students/residents may be placed on academic probation, professional standards (behavioral) probation, and/or clinical probation.

Probation begins at Level I and may progress to Level III. Postdoctoral students/residents should be placed on probation for the academic quarter immediately following the quarter in which the unsatisfactory performance was documented. Probationary status will be reviewed on a quarterly basis until successful remediation has been documented. This information will be conveyed to the postdoctoral student/resident verbally and in writing.

Continuation

Postdoctoral students/residents who are not progressing as expected may be continued in their year group for as long as necessary before being promoted to the next year or discontinued. To exercise this option, the Associate Dean of Academic Affairs will inform University Records of the decision to continue a postdoctoral student/resident and state the anticipated length of that continuation. Program directors make the determination to recommend continuing or discontinuing a postdoctoral student/resident and when the postdoctoral student/resident has completed their program. Recommendation for continuation will be submitted to the Associate Dean of Academic Affairs for review and approval.

Discontinuation

Postdoctoral students/residents who do not achieve required measurable improvement by the end of the prescribed remediation and counseling periods may be recommended for discontinuation by their Program Director to the Associate Dean of Academic Affairs for review. Recommendation to discontinue a postdoctoral student/resident will be submitted by the Associate Dean of Academic Affairs, in writing, to the Dean for review and action.

Programs

- Endodontics – post-D.D.S. Certificate, M.S.D., M.S. (<http://llucatalog.llu.edu/dentistry/endodontics/>)
- Implant Dentistry – post-D.D.S. Certificate, M.S.D., M.S. (<http://llucatalog.llu.edu/dentistry/implant-dentistry/>)
- Oral and Maxillofacial Surgery – post-D.D.S. Certificate (<http://llucatalog.llu.edu/dentistry/oral-maxillofacial-surgery/>)
- Orthodontics and Dentofacial Orthopedics – post-D.D.S. Certificate, M.S. (<http://llucatalog.llu.edu/dentistry/orthodontics-dentofacial-orthopedics/>)
- Pediatric Dentistry – post-D.D.S. Certificate, M.S.D., M.S. (<http://llucatalog.llu.edu/dentistry/pediatric/>)
- Periodontics – post-D.D.S. Certificate, M.S.D., M.S. (<http://llucatalog.llu.edu/dentistry/periodontics/>)
- Prosthodontics – post-D.D.S. Certificate, M.S.D., M.S. (<http://llucatalog.llu.edu/dentistry/prosthodontics/>)

General degree requirements

Master of Science in Dentistry (M.S.D.) Degree, Advanced

Graduate students and residents enrolled in certain advanced education certificate programs are eligible to apply for and be awarded a Master of Science in Dentistry (M.S.D.) degree, if they fulfill the following requirements.

Degree requirements

1. Students must perform scholarly activities as defined by the program director. Programs may differ in how this requirement is met in order to afford directors the opportunity to align such activity with the experience, background, and interest of each student and of the program faculty. Goals must be worthy and achievable. The nature of the scholarly activity will be defined in Part II (Statement of Completion for the Master of Science in Dentistry [M.S.D.] degree) of the degree application form as submission of a formatted, publishable manuscript.
2. Students must successfully complete all the course requirements of the certificate curriculum, with additional units in research for the master's degree curriculum (see individual program descriptions at llu.edu/dentistry/gradprograms (<http://www.llu.edu/dentistry/gradprograms/>)). Candidates complete sections I and II of Part II form to indicate their anticipated degree completion dates.
3. A publishable paper and public presentation of the research are required. The manuscript must be in a format approved by the respective program director.
4. Students who do not complete the publishable paper while completing the curriculum will have one year from their anticipated program end date to fulfill this requirement.
5. After conducting an internal degree audit, the program director completes and signs the Part III form (Statement of Completion) to verify that all requirements for the M.S.D. degree have been met.
6. The Associate Dean of Academic Affairs performs a final degree audit before signing the Part III form, signifying approval to award the Master of Science in Dentistry (M.S.D.) degree.

The M.S.D. degree is not offered by the advanced education program in orthodontics and dentofacial orthopedics.

Master of Science (M.S.) Degree, Advanced

Graduate students and residents enrolled in certain advanced education programs are eligible to apply for and be awarded a Master of Science (M.S.) degree, if they fulfill all of the requirements stated below.

Degree requirements

1. Applicants must undertake scholarly activities/research as defined by each program director. Programs may differ on how this requirement is met in order to afford directors the opportunity to align such activity with the experience, background, and interest of each student. Goals must be worthy and achievable.
2. Students must successfully complete all course requirements of the certificate curriculum, with additional units in research for the master's degree (see individual program descriptions online).
3. A thesis and a public thesis defense are required. The thesis must be in a format approved by the thesis editor in the Faculty of Graduate Studies (FGS).
4. Students who do not complete the thesis during their program will have five years from the beginning of the certificate program to fulfill this requirement for the master's degree.
5. After conducting a degree audit, the program director completes and signs Form D, Statement of Completion of Requirements for Degree, verifying that all requirements for the M.S. degree have been met.
6. After a final degree audit, the Associate Dean of Academic Affairs signs Form D, indicating approval of the award of the Master of Science (M.S.) degree. Form D is then submitted to the Faculty of Graduate Studies (FGS) for final approval and degree issuance.