# PROSTHODONTICS — CERTIFICATE (POST-D.D.S.), M.S.D., M.S.

The School of Dentistry's Prosthodontics—Advanced Specialty
Program is designed to increase the knowledge base and clinical
and laboratory skills of the student in all areas of prosthodontics.
In addition to conventional fixed and removable prosthodontics,
this program offers considerable experience in implant placement,
prosthodontics, and aesthetic dentistry. It also provides an introduction
to maxillofacial prosthetics, and the diagnosis and treatment of patients
with temporomandibular dysfunction. Comprehensive interdisciplinary
treatment-planning seminars with students and faculty members of
other advanced dental education programs are designed to prepare
the student to interact with and coordinate the treatment of patients
requiring advanced prosthodontic care.

The program begins in July and requires 36 months in residence to complete certificate requirements.

Following enrollment into the program, students may also apply for acceptance to either the Master of Science (M.S.) or the Master of Science in Dentistry (M.S.D.) degree. The application 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. The additional time must also be in residence.

# **Program learning outcomes**

By the end of this program, the graduate should be able to:

- Demonstrate knowledge in the diagnosis, treatment planning, and treatment related to prosthodontic therapy.
- 2. Demonstrate competency for the full range of clinical procedures that are considered an integral part of prosthodontics.
- 3. Demonstrate research understanding and knowledge.
- Apply evidence-based information and participate in prosthodontic research.

Program link: www.llu.edu/dentistry/gradprograms/ (http://www.llu.edu/dentistry/gradprograms/)

#### Program director

Mathew T. Kattadiyil

## **Faculty**

Antoanela Garbacea

James Kang

Mathew T. Kattadiyil

Bethany Kronberg

Fernando Munguia

Ricardo Schwedhelm

Judith Strutz

Jui-Min Su

Montry Suprono

Chandur Wadhwani

Myron S. Winer

# **Admissions**

## **Application process**

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

All applicants to the advanced education in prosthodontics program must complete and submit an online application (llu.edu/central/apply (http://www.llu.edu/central/apply/)) directly to Loma Linda University. A PASS application (https://pass.liaisoncas.com/applicant-ux/#/login) is available, but not required.

# **Application deadline**

Application for admission should be submitted by August 15 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**

#### Certificate

#### Major

IMPD 561	Dental Bioengineering	
IMPD 611	Introduction to Implant Dentistry	
IMPD 612	Advanced Implant Dentistry	2
PROS 500	Prosthodontic Literature Review (2)	22
PROS 501	Removable Partial Prosthodontics Literature Review	2
PROS 502	Complete Denture Prosthodontics Literature Review	2
PROS 505	Patient Presentation Seminar (Prosthodontics, Implant, Perio) (1)	2
PROS 515	Practice Teaching in Prosthodontics	2
PROS 525	Dental Materials Science	2
PROS 527	Clinical Application of Dental Materials	2
PROS 546	Occlusion and Morphology	2
PROS 547	Occlusion: Principles and Instrumentation	2
PROS 555	Removable Partial Prosthodontics	2
PROS 556	TMJ Function and Dysfunction	1
PROS 557	Advanced Removable Partial Prosthodontics	2
PROS 565	Complete Denture Prosthodontics	2
PROS 566	Advanced Complete Denture Prosthodontics	2
PROS 575	Fixed Partial Prosthodontics	2
PROS 576	Advanced Fixed Partial Prosthodontics I (MC Aesthetics)	2
PROS 595	Maxillofacial Prosthetics	2
PROS 604	Literature Review in Implant Dentistry for Prosthodontists (2)	14

PROS 634	Diagnosis and Treatment Planning (2)		
PROS 637	Geriatric Dentistry	1	
PROS 696	Scholarly Activity in Prosthodontics		
Interdisciplinary			
GRDN 514	Introduction to Biomedical Research	4	
GRDN 535	Clinical Oral Pathology	2	
GRDN 601	Practice Management	2	
GRDN 609	Professional Ethics <sup>2</sup>	2	
GRDN 622A	Biomedical Science	2	
GRDN 622B	Biomedical Science	2	
REL_ 5	Graduate-level Religion	3	
ORPA 533	Radiology Topics for Graduate Dental Programs	2	
Total Units		112	
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Clinical <sup>1</sup>			
PROS 710	Clinical Practice of Prosthodontics (6)	66	
Total Units		66	

<sup>&</sup>lt;sup>1</sup> Units for clinic practice courses are in addition to the minimum didactic units required for the degree.

#### Normal time to complete the program

Three (3) years (36 months) - full-time enrollment required

#### M.S.D.

In addition to completing the requirements for the 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.

PROS 697A	Research	1
PROS 697B	Research	1
PROS 697C	Research	1

#### Normal time to complete the program

Three (3) years – full-time enrollment required (includes the time needed to complete the certificate program)

### M.S.

In addition to completing the requirements for the 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 (5) years from the start of the certificate program to complete the M.S. degree.

PROS 697A	Research	1
PROS 697B	Research	1
PROS 698	Thesis	2

#### Normal time to complete the program

Three (3) years — full-time enrollment required (includes the time needed to complete the certificate program)

#### **Courses**

#### PROS 500. Prosthodontic Literature Review. 2 Units.

Discusses assigned topics from classic and current prosthodontic and course-related literature, led by students and moderated by faculty member in charge. Repeated registrations required to fulfill the total units.

#### PROS 501. Removable Partial Prosthodontics Literature Review. 2 Units.

Discusses assigned topics from classic removable partial denture literature, led by students and moderated by faculty member in charge.

## PROS 502. Complete Denture Prosthodontics Literature Review. 2 Units.

Discusses assigned topics from classic complete-denture literature, led by students and moderated by faculty member in charge.

# PROS 505. Patient Presentation Seminar (Prosthodontics, Implant, Perio). 2 Units.

Presents patient treatment. Discusses alternate methods of rehabilitation, as well as related literature. Repeated registrations required to fulfill the total units.

#### PROS 515. Practice Teaching in Prosthodontics. 1,2 Unit.

Teaching experience in the areas of fixed and removable prosthodontics. Repeated registration required to fulfill the total units.

#### PROS 525. Dental Materials Science. 2 Units.

Elements of materials science. Properties of structural solids, metals, ceramics, and polymers related to their structure—using basic laws and principles from physics, chemistry, and engineering science.

#### PROS 527. Clinical Application of Dental Materials. 2 Units.

Discusses clinical application and manipulation of dental materials. Identifies and explains specific clinical problems and behavior based on the acquired knowledge of basic properties.

#### PROS 546. Occlusion and Morphology. 2 Units.

Lecture, seminar, and laboratory course that includes waxing techniques and axial and occlusal morphology of natural teeth. Concepts of occlusal function and dysfunction related to prosthodontic therapy.

#### PROS 547. Occlusion: Principles and Instrumentation. 2 Units.

Continues PROS 546—emphasizing occlusal equilibration, jaw movements, determinants of occlusion, and articulators commonly used.

#### PROS 555. Removable Partial Prosthodontics. 2 Units.

Lecture, seminar, and laboratory course covering principles, concepts, and techniques used to design and fabricate removable partial dentures.

#### PROS 556. TMJ Function and Dysfunction. 1 Unit.

Provides students with information about the function and dysfunction of the temporomandibular joint and associated structures. Prepares students to obtain history, perform clinical examination, recognize disorders, and prescribe treatment. Introduces students to diagnosis and treatment of sleep apnea, as well as neuropathic and neurovascular pain. Students complete a term paper on a related topic.

#### PROS 557. Advanced Removable Partial Prosthodontics. 2 Units.

Advanced clinical and laboratory procedures, emphasizing intracoronal attachments, rotational path, and alternate removable partial-denture design.

#### PROS 565. Complete Denture Prosthodontics. 2 Units.

Clinical and laboratory procedures for the fabrication of complete dentures, including setting and balancing denture teeth.

#### PROS 566. Advanced Complete Denture Prosthodontics. 2 Units.

Lecture and clinical course, with seminar covering the treatment of immediate denture and overdenture, and treatment of difficult and unusual complete denture situations.

<sup>&</sup>lt;sup>2</sup> Fulfills service learning requirement.

#### PROS 575. Fixed Partial Prosthodontics. 2 Units.

Tooth preparation for and fabrication of extracoronal restorations and fixed prostheses, including partial coverage gold crowns, complete coverage gold crowns, pinledge retainers, metal-ceramic crowns, metal-ceramic pontics, and sanitary pontics.

# PROS 576. Advanced Fixed Partial Prosthodontics I (MC Aesthetics). 2 Units.

Clinical and laboratory procedures, emphasizing advanced metal-ceramic restorations.

#### PROS 595. Maxillofacial Prosthetics. 2 Units.

Design and fabrication of obturators for partial maxillectomy patients, both edentulous and dentulous. Introduces fabrication of extraoral prostheses.

# PROS 604. Literature Review in Implant Dentistry for Prosthodontists. 2 Units.

Gives the postdoctoral student a deeper understanding of the research and literature currently available on the restoration of implants. Emphasizes biomechanics of implant restorations. Repeated registrations required to fulfill the total units.

#### PROS 634. Diagnosis and Treatment Planning. 2 Units.

Didactic and clinical aspects of diagnosis and treatment planning for patients with complex dental problems. Repeated registrations required to fulfill the total units.

#### PROS 637. Geriatric Dentistry. 1 Unit.

Lectures selected to enhance the knowledge base in the expanding area of elder care. Problems of chronic diseases combined with multiple drug regimens that complicate care for this population.

#### PROS 696. Scholarly Activity in Prosthodontics. 1 Unit.

Selected didactic, clinical, and/or laboratory activity developed by the program director or a designated program faculty member. Primarily designed for students to fulfill the certificate requirements for scholarly activity/research in prosthodontics. Multiple registrations may be needed to complete these activities.

#### PROS 697A. Research. 1 Unit.

Student identifies a research project, prepares a proposal, and obtains approval for the protocol. Multiple registrations may be needed to complete these research activities.

#### PROS 697B. Research. 1 Unit.

Conducting the actual research project, including the data collection. Multiple registrations may be needed to complete these research activities.

#### PROS 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.

#### PROS 698. Thesis. 2 Units.

#### PROS 710. Clinical Practice of Prosthodontics. 6 Units.

Advanced clinical practice in the treatment of individuals with fixed, removable, maxillofacial, or implant prostheses. A minimum of 180 clock hours per quarter. Repeated registrations required to fulfill total units.