

# IMPLANT DENTISTRY – CERTIFICATE (POST-D.D.S.), M.S.D., M.S.

The Implant Dentistry-Advanced Specialty Program leads to a certificate. Postdoctoral students may also obtain a Master of Science (M.S.) or a Master of Science in Dentistry (M.S.D.) degree. The program prepares students for the practice of implant dentistry and provides the foundation for the continued acquisition of knowledge and clinical skills in this demanding area.

Implant dentistry interfaces with the dental specialties of oral and maxillofacial surgery, prosthodontics, and periodontics. Students will be expected to achieve advanced knowledge and skills in certain aspects of these dental specialties, and to be proficient in implant prosthodontics and implant surgery. Program content prepares students for certification by the American Board of Oral Implantology/Implant Dentistry and, upon application, they may be qualified as an associate fellow of the American Academy of Implant Dentistry.

The program begins July 1. Required residence for the certificate is 36 months.

Following enrollment, students may apply for acceptance to either the M.S. or the M.S.D. degree track, in addition to the specialty certificate. The application should be submitted before the end of the first year and must be supported by the program director. Admission into the M.S. or the M.S.D. degree tracks may extend the length of study as students complete a research project and a thesis or a publishable paper. The additional time must be in residence.

## Program learning outcomes

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

1. Deliver comprehensive Implant Dentistry treatments.
2. Provide comprehensive treatment in problem-based patient situations that require surgical and prosthodontic dental implant solutions.
3. Identify and discuss concepts and guidelines in the implementation of clinical practice.
4. Achieve highest levels of patient treatment satisfaction.
5. Perform research and practice teaching.

### Program director

Jaime L. Lozada

### Faculty

Aladdin J. Al-Ardah

Joseph Y. Kan

Jaime L. Lozada

## Admissions

### Application process

All applicants must meet the admission requirements (<http://llucatalog.llu.edu/about-university/admission-policies-information/#admissionrequirements>) of Loma Linda University.

### Application deadline

Application for admission should be submitted by August 31 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 505	Patient Presentation Seminar (1)	10
IMPD 547	Implant Dentistry Grand Rounds (1)	10
IMPD 561	Dental Bioengineering	2
IMPD 585	Implant Prosthodontics (2)	10
IMPD 601	Literature Review in Implant Dentistry (2)	22
IMPD 604	Current Literature Review in Implant Dentistry (2)	20
IMPD 611	Introduction to Implant Dentistry	2
IMPD 612	Advanced Implant Dentistry	2
IMPD 631	Oral Implant Surgery (1)	11
IMPD 634	Diagnosis and Treatment Planning in Implant Dentistry (1)	10
IMPD 637	Peri-Implant Histopathology	1
IMPD 654	Practice Teaching in Implant Dentistry	3
IMPD 696	Scholarly Activity in Implant Dentistry	1
PERI 601	Periodontal Therapy (2)	4
PERI 624	Moderate Sedation in Periodontics	4
PROS 500	Prosthodontic Literature Review (2)	6
PROS 546	Occlusion and Morphology	2
PROS 547	Occlusion: Principles and Instrumentation	2
PROS 555	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

#### Interdisciplinary

GRDN 514	Introduction to Biomedical Research	4
GRDN 535	Clinical Oral Pathology	2
GRDN 609	Professional Ethics <sup>2</sup>	2
GRDN 622A	Biomedical Science	2
GRDN 622B	Biomedical Science	2
OMFS 604	Selected Topics in Oral and Maxillofacial Surgery (1)	4
OMFS 606	Applied Surgical Anatomy	1
REL_ 5__	Graduate-level Religion	3
ORPA 533	Radiology Topics for Graduate Dental Programs	2

**Total Units** **156**

#### Clinical <sup>1</sup>

IMPD 725	Clinical Practice in Implant Dentistry (4)	40
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IMPD 726	Clinical Practice in Periodontics in Implant Dentistry (2)	4
IMPD 727	Clinical Practice of Prosthodontics in Implant Dentistry (2)	20
<b>Total Units</b>		<b>64</b>

<sup>1</sup> Units for clinic practice courses do not count toward minimum number of didactic units required for the degree.

<sup>2</sup> Fulfills service learning requirement.

### 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.

IMPD 697A	Research	1
IMPD 697B	Research	1
IMPD 697C	Research	1

### Normal time to complete the program

Three (3) years (36 months) — 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 years from the start of the certificate program to complete the M.S. degree.

IMPD 697A	Research	1
IMPD 697B	Research	1
IMPD 698	Thesis	1

### Normal time to complete the program

Three (3) years (36 months) — full-time enrollment required (includes the time needed to complete the certificate program)

## Courses

#### IMPD 505. Patient Presentation Seminar. 1 Unit.

Presents implant patient treatment, discusses alternate methods of rehabilitation and related literature. Repeated registrations required to fulfill the total units.

#### IMPD 547. Implant Dentistry Grand Rounds. 1 Unit.

Weekly review of surgeries scheduled for the upcoming week in order to facilitate successful outcomes. Includes analysis of challenges, latest recommendations, techniques for minimizing postoperative side effects, and implementation of strategic surgical procedures.

#### IMPD 561. Dental Bioengineering. 2 Units.

Studies the structures and properties of dental implant materials and implant prosthodontic superstructures.

#### IMPD 585. Implant Prosthodontics. 2 Units.

Gives the graduate student in implant dentistry in-depth didactic and clinical instruction in techniques and procedures related to the rehabilitation of patients with prosthodontic devices supported by dental implants. Advanced clinical and laboratory procedures, emphasizing implant restorations for completely and partially edentulous patients. Emphasizes attachments and superstructure design. Repeated registrations required to fulfill the total units.

#### IMPD 601. Literature Review in Implant Dentistry. 2 Units.

Reviews historical and/or fundamental implant dentistry literature. Repeated registrations required to fulfill the total units.

#### IMPD 604. Current Literature Review in Implant Dentistry. 2 Units.

Gives the postdoctoral students in implant dentistry a deeper understanding of the research and literature currently available. Repeated registrations required to fulfill the total units.

#### IMPD 611. Introduction to Implant Dentistry. 2 Units.

Overview of the clinical science of implant dentistry, including etiology, therapy, clinical methods, and record keeping.

#### IMPD 612. Advanced Implant Dentistry. 2 Units.

Provides postdoctoral students with the knowledge and techniques of advanced prosthodontic and implant procedures—notably those involved in sinus graft surgery, surgical repairs of implant defects, and the principles involved in immediate loading of implants.

#### IMPD 631. Oral Implant Surgery. 1 Unit.

Instruction in basic and advanced implant surgery principles. Repeated registrations required to fulfill the total units.

#### IMPD 634. Diagnosis and Treatment Planning in Implant Dentistry. 1 Unit.

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

#### IMPD 637. Peri-Implant Histopathology. 1 Unit.

Gives the postdoctoral student in implant dentistry a better understanding of the implant interface and biological changes that take place in the tissues surrounding dental implants following their placement.

#### IMPD 654. Practice Teaching in Implant Dentistry. 1-3 Units.

Teaching experience in implant prosthodontics and implant surgery.

#### IMPD 696. Scholarly Activity in Implant Dentistry. 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 implant dentistry. Multiple registrations may be needed to complete these activities.

#### IMPD 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. This is a required course for the Master of Science (M.S.) and Master of Science in Dentistry (M.S.D.) degrees.

#### IMPD 697B. Research. 1 Unit.

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

**IMPD 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.

**IMPD 698. Thesis. 1-8 Units.****IMPD 725. Clinical Practice in Implant Dentistry. 4 Units.**

Experience in the clinical diagnosis and treatment of patients who may benefit from implant dentistry therapy. Repeated registrations required to fulfill total clock hours. A minimum of 120 clock hours per quarter. Repeated registrations required to fulfill total units.

**IMPD 726. Clinical Practice in Periodontics in Implant Dentistry. 2 Units.**

Clinical experience in the diagnosis and treatment of periodontal diseases. Repeated registrations required to fulfill total units. A minimum of sixty clock hours per quarter. Repeated registrations required to fulfill total units.

**IMPD 727. Clinical Practice of Prosthodontics in Implant Dentistry. 2 Units.**

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